



Document Title

**Summary of the fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5 (62.5+625 g/L)**

Data Requirement(s)

Regulation (EC) No 1107/2009 & Regulation (EU) No 284/2013

Document MCP

Section 9: Fate and behaviour in the environment

According to the Guidance Document SANCO/10181/2013 for applicants on preparing dossiers for the approval of a chemical active substance

Date

2020-08-07

Author(s)

[Redacted]

Battelle UK Ltd

on behalf of

Bayer AG

Crop Science Division

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Version history

Date [yyyy-mm-dd]	Data points containing amendments or additions ¹ and brief description	Document identifier and version number

¹ It is suggested that applicants adopt a similar approach to showing revisions and version history as outlined in SANCO/10180/2013 Chapter 4, 'How to revise an Assessment Report'.

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CP 9 FATE AND BEHAVIOUR IN THE ENVIRONMENT

Fluopicolide (AE C638206) was included in Annex I to Council Directive 91/414/EEC in 2010 (Commission Directive 2010/15/EU, Entry into Force on June 1, 2010). The expiration of approval of fluopicolide is May 31, 2023 (Commission Implementing Regulation (EU) 2017/1529). The Supplementary Dossier contains only data which were not submitted at the time of the Annex I inclusion of fluopicolide under Council Directive 91/414/EEC and which were therefore not evaluated during the first EU review. All data which were already submitted by Bayer AG (former Bayer CropScience) for the Annex I inclusion under Council Directive 91/414/EEC are contained in the Draft Assessment Report (DAR) and its Addenda, and are included in the Baseline Dossier provided by Bayer AG.

The formulation Fluopicolide + Propamocarb-hydrochloride SC 687.5 (62.5+625 g/L), abbreviation FLC+PCH SC 687.5, is a suspension concentrate formulation (SC) containing 62.5 g/L of fluopicolide. This formulation is registered throughout Europe under trade names such as Infinito and Volare. Fluopicolide + Propamocarb-hydrochloride SC 687.5 (62.5+625 g/L) was already a representative formulation of Bayer AG for the Annex I inclusion of fluopicolide under Council Directive 91/414/EEC.

Fluopicolide is a fungicidal active substance developed by Bayer. It is the only active substance in Europe representing a class of chemistry (pyridinylmethyl-benzamides) with a unique mode of action via delocalization of a spectrin-like protein in the Oomycetes fungi.

Fluopicolide has a long track record of safe use in a large number of targeted crops within horticulture, e.g. cucumbers, lettuce and in arable crops (e.g. potato).

Fluopicolide is active against a wide range of Oomycete fungi, the causal agents of devastating plant diseases of economic importance in EU-27 such as potato late blight (*Phytophthora infestans*) or downy mildew diseases in a broad range of crops.

It provides effective, long lasting protection at low application rates against Oomycetes diseases at different stage of development of the fungi, giving flexibility of use to the farmer.

Fluopicolide can be formulated with other active ingredients in different types of formulations to optimise and complete its activity.

The development of resistances of Oomycetes against existing, well-established fungicide groups represent a threat for European farmers by increasing the complexity of their plant protection programs leading to severe economic impacts. With fluopicolide, farmers in EU-27 have access to a modern tool for their integrated crop protection programs, contributing to effective and sustainable management of resistance development and preserving high level of protection against Oomycete diseases.

By reducing the Oomycete damages, applications of fluopicolide + propamocarb SC 687.5 on target crops contribute to the achievement of optimum yield and quality, thus securing sufficient supply of high-quality potatoes and horticultural produces for European consumer destinations and markets abroad, being it fresh or for the processing industry.

CP 9.1 Fate and behaviour in soil

CP 9.1.1 Rate of degradation in soil

For information on the rate of degradation in soil please refer to Document MCA, Section 7.1.2.

CP 9.1.1.1 Laboratory studies

For information on laboratory studies please refer to Document MCA, Section 7.1.2.1.

CP 9.1.1.2 Field studies

For information on field studies please refer to Document MCA, Section 7.1.2.2.

CP 9.1.1.2.1 Soil dissipation studies

For information on field dissipation studies please refer to Document MCA, Section 7.1.2.2.1.

CP 9.1.1.2.2 Soil accumulation studies

For information on field accumulation studies please refer to Document MCA, Section 7.1.2.2.2.

CP 9.1.2 Mobility in the soil

For information on mobility studies please refer to Document MCA, Section 7.1.4.

CP 9.1.2.1 Laboratory studies

For information on laboratory studies please refer to Document MCA, Section 7.1.4.1.

CP 9.1.2.2 Lysimeter studies

For information on lysimeter studies please refer to Document MCA, Section 7.1.4.2.

CP 9.1.2.3 Field leaching studies

For information on field leaching studies please refer to Document MCA, Section 7.1.4.3.

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CP 9.1.3 Estimation of concentrations in soil

Predicted environmental concentrations in soil (PEC_s)

Data Point:	KCP 9.1.3/01
Report Author:	██████████
Report Year:	2003
Report Title:	Predicted environmental concentrations in soil (PEC _s) of AE C638206 and 3 metabolites after use in vine and potatoes in Europe calculated with FOCUS PELMO 3.3.2 Code: AE C638206, AE 0608000, AE C653711, AE C67188
Report No:	C036743
Document No:	M-221323-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	not applicable
Previous evaluation:	yes, evaluated and accepted DAR (2005)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005), this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Additionally calculations were performed for crop use on vines which is not one of the current representative uses. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier, however it is now superseded by KCP 9.1.3/06, ██████████ 2020, [M-686701-01-1](#).

Data Point:	KCP 9.1.3/02
Report Author:	██████████
Report Year:	2004
Report Title:	Predicted environmental concentrations in soil (PEC _s) of propamocarb-HCl after use in potatoes Code: AE B066752
Report No:	C039643
Document No:	M-227080-01-1
Guideline(s) followed in study:	
Deviations from current test guideline:	--
Previous evaluation:	Yes, evaluated and accepted DAR (2005)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005), this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier, however it is now superseded by KCP 9.1.3/07, ██████████ 2020, [M-687161-01-1](#).

Data Point:	KCP 9.1.3/03
Report Author:	[REDACTED]
Report Year:	2004
Report Title:	Assessment of the potential accumulation of AE C638206 and its metabolite BA (AE C653711) in soil based on FOCUS-PELMO Use in potatoes and vines in Europe
Report No:	C036744
Document No:	M-221326-01-1
Guideline(s) followed in study:	--
Deviations from current test guideline:	--
Previous evaluation:	yes, evaluated and accepted DAR (2005)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005), this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Additionally calculations were performed for crop use on vines which is not one of the current representative uses. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier, however it is now superseded by KCP 9.1.3/06 [REDACTED] 2020, [M-686701-01-1](#).

Data Point:	KCP 9.1.3/04
Report Author:	[REDACTED]
Report Year:	2006
Report Title:	Distribution of Fluopicolide (AE C638206) in soil under zero tillage conditions
Report No:	ME06/024
Document No:	M-268742-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	none
Previous evaluation:	yes, evaluated and accepted Addendum 1 to the DAR (2007)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005), this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier, however it is now superseded by KCP 9.1.3/06 [REDACTED] 2020, [M-686701-01-1](#).

PEC_{soil} for fluopicolide

Data Point:	KCP 9.1.3/05
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (FLC): Core PEC _{soil} EUR - Modelling core info document for soil risk assessment in Europe
Report No:	VC/19/041L
Document No:	M-686282-01-1
Guideline(s) followed in study:	FOCUS Degradation Kinetics 2006 & 2014
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

This summary summarises the substance data for fluopicolide and its metabolites, as used for the purpose of soil exposure and soil accumulation calculations (non-scenario based Tier 1). The parameters correspond to standard EU requirements.

Modelling reports utilising the core info document should have the substance data presented in the form as shown in the following table.

Table 9.1.3- 1: Compound and scenario input parameters as used for the calculation

Compound	Molar mass (g/mol)	Max occur. in soil (%)	DT ₅₀ (days)	Molar mass corr. factor (-)
Fluopicolide	383.59	100	457.6	1
M-01 (AE C653711)	190.03	48	344	0.4954
M-02 (AE C657188)	225.56	6.4	4.4	0.588
M-03 (AE 0608000)	399.58	10.6	1000	1.0417

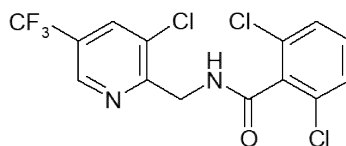
K Materials and Methods

Calculation of the substance parameters for fluopicolide and its metabolites M-01, M-02 and M-03 is detailed as follows:

Fluopicolide (AE C638206)

Physico-Chemical Properties

Structural formula



Common name

Fluopicolide (AE C638206)

Chemical name (IUPAC) 2,6-dichloro-N-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]methyl]-benzamide

Molar mass 383.59 g mol⁻¹

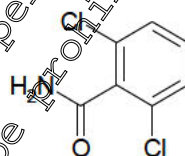
Un-normalised SFO DT₅₀ values for fluopicolide have been derived from 12 terrestrial field dissipation studies (2019: M-651636-01-1; 2003: M-218667-01-1; 2003: M-220477-02-1; 2004: M-234424-01-1; 2005: O-247645-01-1; 2005: M-251338-01-1; 2003: M-218672-01-1). A summary of the SFO DT₅₀ values derived for fluopicolide is given in Table 9.1.3-2. A worst-case un-normalised field DT₅₀ value of 457.6 days will be used in modelling.

Table 9.1.3- 2: Summary of un-normalised SFO DT₅₀ values derived for fluopicolide from terrestrial field dissipation studies (2019: M-651636-01-1; 2020: M-685682-01-1)

Soil type	Anaerobic field conditions					
	Location (country)	pH (CaCl ₂)	Depth (cm)	St. (γ ² cm) (%)	Method of calculation	DT ₅₀ (d) un-norm
Silt loam	Burscheid (Germany)	5.9	0 - 120	3.1	SFO	189.9
Clay	Great Chishill (UK)	7.8	0 - 120	11.9	SFO	457.6
Sandy loam	Lignieres de Vouraine (France)	6.9	0 - 120	6.8	SFO	284.4
Clay loam	St.Etienne du Gres (France)	8.1	0 - 120	8.0	SFO	370.6
Clay loam	Albaro di Ronca all'Adige (Italy)	7.8	0 - 120	12.6	SFO	284.6
Sandy clay loam	Vilebi d'Onyar (Spain)	6.9	0 - 120	9.0	SFO	208.3
Loamy sand	Philippsburg (Germany)	6.4	0 - 50	18.8	SFO	288.3
Sandy clay loam	Rödelsee (Germany)	7.4	0 - 30	18.5	SFO	256.9
Sand	Hüflosen (Germany)	4.9	0 - 50	16.5	SFO	290.2
Loamy sand	Valencia (Spain)	7.3	0 - 30	21.5	SFO	177.4
Sandy silt	Appilly (France)	7.1	0 - 30	16.3	SFO	194.4
Sandy silt loam	Soans (France)	7.6	0 - 45	14.3	SFO	178.6
					Worst-case	457.6

M-01 (BAM; AE C653711)

Physico-Chemical Properties
Structural formula



Common name M-01 (BAM; AE C653711)

Chemical name (IUPAC) 2,6-dichlorobenzamide

Molar mass 190.03 g mol⁻¹

Un-normalised SFO DT₅₀ values for M-01 (BAM) have been derived from five terrestrial field dissipation studies ([M-650733-02-1](#), [REDACTED] 2019b). A summary of the SFO DT₅₀ values derived for M-01 is given in Table 9.1.3- 3. A worst-case un-normalised field DT₅₀ value of **344 days** will be used in the modelling.

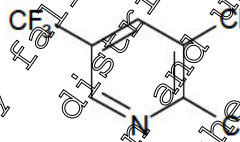
The maximum observed occurrence in soil of M-01 in laboratory studies, expressed as a molar fraction of fluopicolide, was **48%** ([M-555570-01-1](#), [REDACTED] 2016).

Table 9.1.3- 3: Summary of un-normalised SFO DT₅₀ values derived for M-01 (BAM) from terrestrial field dissipation studies ([M-650733-02-1](#), Heinemann and Kasel, 2019b)

Soil type	Aerobic field conditions					
	Location (country)	pH (CaCl ₂)	Depth (cm)	St (Ferr) (%)	Method of calculation	DT ₅₀ (d) un-norm
Silt loam	Burscheid (Germany)	5.9	0 - 120	17.6	SFO	155
Sandy loam	Lignieres de Touraine (France)	6.9	0 - 120	5.5	SFO	344
Clay loam	St.Etienne du Grès (France)	8.1	0 - 120	10.4	SFO	204
Clay loam	Albarodi Ronco all' Adige (Italy)	7.7	0 - 120	12.0	SFO	156
Sandy clay loam	Vilobi d'Onyar (Spain)	6.9	0 - 120	9.6	SFO	160
					Worst-case	344

M-02 (PCA; AE C657188)

Physico-Chemical Properties
Structural formula



Common name M-02 (PCA; AE C657188)

Chemical name (IUPAC) 3-chloro-(trifluoromethyl)pyridine-2-carboxylic acid

Molar mass 225.5 g mol⁻¹

The aerobic degradation and metabolism of M-02 (PCA) in soil was investigated in the laboratory by [REDACTED] (2003, [M-219834-01-1](#)) and [REDACTED] (2017, [M-581364-01-1](#)). A summary of the un-normalised SFO DegT₅₀ values derived by [REDACTED] (2020b, [M-685680-01-1](#)) for M-02 is given in Table 9.1.3- 4. A worst-case DegT₅₀ value of **4.4 days** will be used in the modelling.

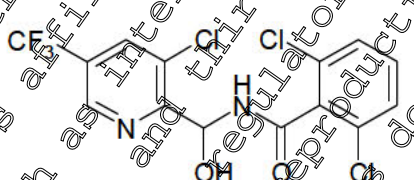
The maximum formation of metabolite M-02 in terrestrial field dissipation studies was **16.4%** ([M-220477-02-1](#), [REDACTED] 2003).

Table 9.1.3- 4: Summary of un-normalised DegT₅₀ values derived for M-02 (PCA) under laboratory conditions (after [M-685680-01-1](#), [REDACTED] 2020b)

Applied compound	Study	Soil	Model selected	DegT ₅₀ (d) un-normalised
M-02 (PCA)	M-219824-01-1 [REDACTED] 2003	Abington	SFO	4.4
		Münster	SFO	2.5
		Sarotti	SFO	4.4
	M-581364-01-1 [REDACTED] 2017	Dollendorf	SFO	1.1
		[REDACTED]	SFO	1.1
		[REDACTED]	SFO	0.7
		[REDACTED]	SFO	0.7
		Worst-case		3.4

M-03 (AE 0608000)

Physico-Chemical Properties
Structural formula



Common name

M-03 (AE 0608000)

Chemical name (IUPAC)

2,6-dichloro-N-[3-chloro-5-(trifluoromethyl)pyridin-2-yl](hydroxymethyl)benzamide

Molar mass

399.58 g mol⁻¹

The aerobic degradation and metabolism of M-03 in soil was investigated in the laboratory by M-241188-01-1, [REDACTED] (2003) and M-565219-01-1, [REDACTED] (2016). In addition, M-03 was observed to form from flupicolide in three studies (M-201230-02-1, [REDACTED] 2003; [M-241052-01-1](#), [REDACTED] 2003; [M-655056-01-1](#), [REDACTED] 2019). A summary of the un-normalised DegT₅₀ values derived by [M-685680-01-1](#), [REDACTED] (2020b) for M-03 is given in Table 9.1.3- 5. A worst-case DegT₅₀ value of 1000 days will be used in the modelling.

The maximum observed occurrence in soil of M-03 in laboratory studies was 10.6% ([M-201230-02-1](#), [REDACTED] 2003).

Table 9.1.3- 5: Summary of un-normalised DegT₅₀ values derived for M-03 under laboratory conditions (after [M-685680-01-1](#), [REDACTED] 2020b)

Applied compound	Study	Soil	Soil pH	Model selected	DegT ₅₀ (d) un-normalised
Flupicolide	M-201230-02-1 [REDACTED] 2003	Münster	4.9	SFO	62.6
	M-241052-01-1 [REDACTED] 2003	Lamberton	5.9	SFO	49.3
	M-655056-01-1 [REDACTED] 2019	Pikeville	4.5	SFO	29.3

Applied compound	Study	Soil	Soil pH	Model selected	DegT ₅₀ (d) un-normalised
M-03	M-241188-01-1, ██████████ 2003	Abington	7.2	SFO	0.1
		Münster	4.9	DFOP	1000 ^a
		Pikeville	5.4	DFOP	2.7 ^b
		Sarotti	7.1	SFO	0.1
	M-565219-01-1, ██████████ 2016	Brierlow (BL)	5.3	SFO	0.1
		██████████	6.0	SFO	0.9
Worst-case					1000

^a – Derived from DFOP k₂ parameter, fixed to conservative default value, ^b Pseudo-SFO DT₅₀ value derived as DT₉₀/3.32

II. Results and Discussion

Modelling reports utilising the core info document should have the substance data presented in the form as shown in the following table.

Table 9.1.3- 6: Compound and scenario input parameters as used for the calculation

Compound	Molar mass (g/mol)	Max occur. in soil (%)	DT ₅₀ (days)	Molar mass corr. factor (-)
Fluopicolide	383.59	100	457.6	1
M-01 (AE C653711)	190.03	8	344	0.4954
M-02 (AE C65718)	225.56	6.4	4.4	0.588
M-03 (AE 0608000)	169.58	10.6	1000	1.0417

III. Conclusion

Soil exposure and soil accumulation calculations should use the input parameters presented in this summary for all calculations.

Assessment and conclusion by applicant

The core modelling report was conducted according to FOCUS Degradation Kinetics (2006, 2014) and is considered valid to assess trigger and modelling endpoints for fluopicolide and its metabolites in soil under laboratory conditions.

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Data Point:	KCP 9.1.3/06
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (FLC) and metabolites: PECsoil EUR - Use in potatoes, lettuce and oil seed rape (winter) in Europe
Report No:	EnSa-20-0435
Document No:	M-686701-01-1
Guideline(s) followed in study:	Guidance Document on Persistence in Soil EU Commission 9188/VI/97 rev. 2000 and FOCUS 1997
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

The predicted environmental concentrations in soil (PEC_{soil}) of the active substance fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) were calculated based on a first tier approach using a Microsoft® Excel spreadsheet. The use of fluopicolide in potatoes and lettuce was assessed according to Good Agricultural Practice (GAP) under Europe cropping conditions. PECsoil values were also calculated for the application of fluopicolide as a seed treatment on oilseed rape but this is not included here as the formulation FLC+PGH SC 687.5 will be used exclusively as foliar treatment on crops.

Calculations assumed an even distribution of the compound in upper 0 - 5 cm soil layer following application and a soil density of 1.5 g/cm³.

An overview of maximum PECsoil values of fluopicolide and its metabolites for all use patterns under consideration is shown in Table 9.1.3- 7.

Table 9.1.3- 7: Maximum PECsoil of fluopicolide and its metabolites for the uses assessed

Use pattern	Fluopicolide (mg/kg)	M-01 (mg/kg)	M-02 (mg/kg)	M-03 (mg/kg)
Potatoes, 4 × 100 g a.s./ha	0.044	0.034	0.007	0.016
Potatoes, 4 × 100 g a.s./ha	0.079	0.019	0.003	0.009
Potatoes, 3 × 100 g a.s./ha	0.125	0.030	0.007	0.014
Potatoes, 2 × 100 g a.s./ha	0.053	0.014	0.003	0.007
Potatoes, 2 × 100 g a.s./ha	0.106	0.025	0.007	0.012
Potatoes, 2 × 100 g a.s./ha	0.040	0.009	0.003	0.004
Potatoes, 1 × 100 g a.s./ha	0.053	0.013	0.005	0.006
Potatoes, 1 × 100 g a.s./ha	0.020	0.005	0.002	0.002
Lettuce, 1 × 100 g a.s./ha	0.100	0.024	0.010	0.011
Lettuce, 2 × 100 g a.s./ha	0.080	0.019	0.005	0.009

The accumulation potential of fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) after long term use was also assessed, employing the larger soil depth for the calculation of the background concentration in cases where tillage is relevant. The results are presented in Table 9.1.3- 8. Please note that for technical reasons, accumulation calculation is performed and reported for all substances, even if they do not possess accumulation potential due to short half-life.

Table 9.1.3- 8: PECsoil of fluopicolide and its metabolites for the uses assessed, taking the effect of accumulation into account

Use pattern	PECsoil	Fluopicolide (mg/kg)	M-01 (mg/kg)	M-02 (mg/kg)	M-03 (mg/kg)
Potatoes 4 × 100 g a.s./ha	plateau (20 cm) total	0.049 0.192	0.008 0.042	0.001 0.007	0.014 0.030
Potatoes 4 × 100 g a.s./ha	plateau (20 cm) total	0.027 0.105	0.004 0.023	<0.001 0.003	0.008 0.016
Potatoes 3 × 100 g a.s./ha	plateau (20 cm) total	0.042 0.167	0.007 0.036	<0.001 0.003	0.012 0.026
Potatoes 3 × 100 g a.s./ha	plateau (20 cm) total	0.020 0.079	0.003 0.017	<0.001 0.003	0.006 0.012
Potatoes 2 × 100 g a.s./ha	plateau (20 cm) total	0.036 0.142	0.006 0.024	<0.001 0.007	0.010 0.022
Potatoes 2 × 100 g a.s./ha	plateau (20 cm) total	0.003 0.053	0.002 0.012	<0.001 0.003	0.004 0.008
Potatoes 1 × 100 g a.s./ha	plateau (20 cm) total	0.018 0.076	0.003 0.006	<0.001 0.005	0.005 0.011
Potatoes 1 × 100 g a.s./ha	plateau (20 cm) total	0.007 0.027	0.001 0.006	<0.001 0.003	0.002 0.004
Lettuce 1 × 100 g a.s./ha	plateau (20 cm) total	0.034 0.134	0.005 0.029	<0.001 0.010	0.010 0.021
Lettuce 2 × 100 g a.s./ha	plateau (20 cm) total	0.027 0.102	0.004 0.023	<0.001 0.005	0.008 0.016

I Materials and Methods

The predicted environmental concentrations in soil (PEC_{soil}) of the active substance fluopicolide and its metabolites M-01 (AE.C653011), M-02 (AE.C654188) and M-03 (AE.0608000) were calculated based on a first tier approach using a Microsoft® Excel spreadsheet. The use of fluopicolide in potatoes and lettuce was assessed according to Good Agricultural Practice (GAP) under Europe cropping conditions. Calculations assumed an even distribution of the compound in upper 0 - 5 cm soil layer following application and a soil density of 1.5 g/cm³.

The use of fluopicolide was assessed according to the Good Agricultural Practice (GAP) as summarised below.

Table 9.1.3- 9: Application data of fluopicolide according to the use pattern in Europe

Individual crop	FOCUS crop	Rate (g a.s./ha)	Interval (days)	Plant interception (%)	BBCH stage (-)	Amount reaching soil (g a.s./ha)
Potatoes	Potatoes	4 × 100	7	60 60 85 85	21 21 40 40	40.000 40.000 15.000 15.000
Potatoes	Potatoes	4 × 100	7	4 × 85	4 × 40	4 × 15.000
Potatoes	Potatoes	3 × 100	7	60 60 85	21 21 40	40.000 40.000 15.000
Potatoes	Potatoes	3 × 100	7	3 × 85	3 × 40	3 × 15.000
Potatoes	Potatoes	2 × 100	7	2 × 60	2 × 21	2 × 40.000

Individual crop	FOCUS crop	Rate (g a.s./ha)	Interval (days)	Plant interception (%)	BBCH stage (-)	Amount reaching soil (g a.s./ha)
Potatoes	Potatoes	2 × 100	7	2 × 85	2 × 40	2 × 15.000
Potatoes	Potatoes	1 × 100	-	60	41	1 × 40.000
Potatoes	Potatoes	1 × 100	-	85	40	1 × 15.000
Lettuce	Cabbage	1 × 100	-	25	13	1 × 75.000
Lettuce	Cabbage	2 × 100	7	2 × 70	2 × 40 - 49	2 × 30.000

The calculations were based on the maximum intended application rate together with the maximum intended number of applications per season and (for multi-application sequences) the minimum interval between the applications. Crop interception was taken into account according to the BBCH growth stage, as recommended by FOCUS (2014).

For metabolite(s), the (pseudo) application rate is calculated based on the maximum amount of the metabolite observed in soil degradation studies, the interception and the molar mass correction are summarised in Table 9.1.3- 10 and Table 9.1.3- 11.

Table 9.1.3- 10: Summary of properties for metabolite rate calculation

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C651188)	M-03 (AE 0608000)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58
Corr. factor	(-)	1	0.4954	0.588	1.0417
Max occ. in soil	(%)	90	48	16.4	10.6

Table 9.1.3- 11: Calculation of metabolite application rates (# = application number)

Compound Crop rate	#	Fluopicolide (g a.s./ha)	M-01 (g/ha)	M-02 (g/ha)	M-03 (g/ha)
Potatoes, 4 × 100 g a.s./ha	1	40	9.51	3.86	4.42
	2	40	9.51	3.86	4.42
	3	15	3.57	1.45	1.66
	4	15	3.57	1.45	1.66
Potatoes, 2 × 100 g a.s./ha	1	15	3.57	1.45	1.66
	2	15	3.57	1.45	1.66
	3	15	3.57	1.45	1.66
Potatoes, 3 × 100 g a.s./ha	1	40	9.51	3.86	4.42
	2	40	9.51	3.86	4.42
	3	15	3.57	1.45	1.66
Potatoes, 5 × 100 g a.s./ha	1	15	3.57	1.45	1.66
	2	15	3.57	1.45	1.66
Potatoes, 2 × 100 g a.s./ha	1	40	9.51	3.86	4.42
	2	40	9.51	3.86	4.42
Potatoes, 2 × 100 g a.s./ha	1	15	3.57	1.45	1.66
	2	15	3.57	1.45	1.66
Potatoes, 1 × 100 g a.s./ha	1	40	9.51	3.86	4.42
Potatoes, 1 × 100 g a.s./ha	1	15	3.57	1.45	1.66
Lettuce, 1 × 100 g a.s./ha	1	75	17.83	7.23	8.28
Lettuce, 2 × 100 g a.s./ha	1	30	7.13	2.89	3.31
	2	30	7.13	2.89	3.31

Substance parameters used as input in the calculations are based on substance parameters whose derivation is described in detail in the modelling core info document (KCP 9.1.3/05). The modelling parameters used for the calculations are given in Table 9.1.3- 12.

Table 9.1.3- 12: Compound and scenario input parameters as used for the calculation

Compound	Molar mass (g/mol)	Max occur. in soil (%)	DT50 (days)	Molar mass corr. factor (-)
Fluopicolide	383.59	100	457.6	1
M-01 (AE C653711)	190.03	48	344	0.4954
M-02 (AE C657188)	225.56	16.4	4.4	0.588
M-03 (AE 0608000)	399.58	10.6	100	1.0417
Soil bulk density	1.5 kg/L			
Soil mixing depth	50 cm			
Tillage depth for plateau (if relevant)	20 cm			

The information which mixing depths are employed for individual uses assessed in this report is provided in Table 9.1.3- 13.

Table 9.1.3- 13: Mixing depths used for plateau calculation

Use pattern	Plateau mixing depth
Potatoes	20 cm
Lettuce	20 cm

The details of the calculation can be found below

Parent compound

1st tier estimation of the initial PEC_{soil} concentration is done using the equation

$$PEC_{soil} = \frac{A \cdot f}{\rho_{soil} \cdot d} \quad (1)$$

with A being the nominal single field application rate, f the fraction reaching soil surface (taking into account crop interception factors according to FOCUS), ρ_{soil} the dry soil bulk density, and d the thickness of the soil layer.

In single application scenarios, the initial PEC_{soil} value is equal to the overall maximum. For multiple (n) applications with constant application rate, crop interception, and application interval, the maximum PEC_{soil} can be written as

$$PEC_{soil,max} = \frac{A \cdot f}{\rho_{soil} \cdot d} \cdot \frac{1 - e^{-k n \Delta t}}{1 - e^{-k \Delta t}} \quad (2)$$

where Δt the application interval and k is the first order degradation rate, calculated from the soil half-life (DT_{50}) as

$$k = \frac{\ln 2}{DT_{50}} \quad (3)$$

For multiple (n) applications with variable application rate, crop interception, or application interval, the PEC_{soil} just after the application (i) can be calculated stepwise as

$$PEC(i)_{soil,max} = \frac{A(i) \cdot f(i)}{\rho_{soil} \cdot d} + PEC(i)_{soil,co} \quad (4)$$

where $PEC_{soil,co}$ represents the residue from the preceding applications, at the time of the actual application. For the first application, $PEC_{soil,co}$ is zero, for the following applications it can be written as

$$PEC(i)_{soil,co} = PEC(i-1)_{soil} \cdot e^{-k \Delta t(i)} \quad (5)$$

with $\Delta t(i)$ being the time interval between applications (i-1) and (i). $PEC_{soil,max}$ is then defined as the maximum of the individual PEC_{soil} values.

$$PEC_{soil,max} = \max(PEC(i)_{soil,max}) \quad (6)$$

Metabolites

Maximum soil concentration of a metabolite is calculated in a similar manner to that of the parent compound, taking into account the maximum amount of the metabolite observed in soil ($X_{met,max}$) as well as the different molar masses of the parent (M_{par}) and metabolite (M_{met}).

The value of the initial metabolite concentration $PEC_{soil,met}$ is calculated using

$$PEC_{soil,met} = PEC_{soil,par} \cdot X_{met,max} \cdot \frac{M_{met}}{M_{par}} \quad (7)$$

where $PEC_{soil,par}$ is the respective initial parent concentration.

For a single application the $PEC_{soil,met}$ value is equal to $PEC_{soil,max,met}$. For multiple applications, the maximum metabolite soil concentration has to be calculated using the equations (4) - (6) given in the previous section, with the parent dissipation rate replaced by that of the metabolite, and with maximum metabolite occurrence in soil and different molar masses of the parent and metabolite taken into account.

Concentrations over time

For first-order kinetics with a degradation rate k the declining PEC values at time t after the maximum can be calculated by

$$PEC(t) = PEC_{max} \cdot e^{-k t} \quad (8)$$

For a better comparison of exposure and effect data time-weighted average concentrations (TWA) may be useful. For first-order kinetics, the TWA are given by the following formula.

$$TWA(t) = PEC_{max} \cdot \frac{1}{k \cdot t} \cdot (1 - e^{-k t}) \quad (9)$$

Accumulation after long term use

Potential accumulation after long term use is also assessed, based on the maximum $PEC_{soil,max}$ concentration of the respective compound, obtained as described before.

In case of a single application (or a multiple application sequence leading to the maximum PEC_{soil} after the last application), it can be shown that the maximum concentration in soil after perpetual use ($PEC_{soil,accu}$) can be expressed as

$$PEC_{soil,accu} = PEC_{soil,max} \cdot \frac{1}{1 - e^{-k \cdot t}} \quad (10)$$

where t is the number of days between two events where $PEC_{soil,max}$ is reached, *i.e.*, 365 days for yearly applications, 730 days for bi-yearly applications, *etc.* This PEC_{soil} value is based on a normal mixing depth. In the case of a multiple application sequence leading to the maximum PEC_{soil} before the last application another approach has to be used.

The concentration in soil after an infinite number of applications and immediately before the application in the last year (the so called plateau concentration $PEC_{plateau}$) can be written as

$$PEC_{plateau} = PEC_{soil,accu} \cdot \frac{d}{d_{accu}} \cdot e^{-k \cdot t} \quad (11)$$

This formula can take the effect of deep soil tillage (or another mixing process) into account by distributing the soil residue amongst larger amounts of soil (larger soil mixing depth d_{accu} of, *e.g.*, 20 cm). In the absence of such mixing process, the factors involving mixing depth cancel out. The total PEC_{soil} taking the effect of accumulation into account is then the sum of $PEC_{plateau}$ and the maximum PEC_{soil} , as defined previously.

$$PEC_{soil,total} = PEC_{plateau} + PEC_{soil,max} \quad (12)$$

The plateau concentration is driven by the dissipation DT_{50} in soil. The ratio between maximum PEC_{soil} due to actual application and the respective plateau concentration (taking effect of tillage into account here) can be written as

$$\frac{PEC_{plateau}}{PEC_{soil,max}} = \frac{e^{-k \cdot t}}{1 - e^{-k \cdot t}} \cdot \frac{d}{d_{accu}} \quad (13)$$

Inspection of Equation (13) shows that this ratio is independent of the application rate. For a DT_{90} of less than a year, the plateau concentration is marginal ($\approx 3\%$ of actual $PEC_{soil,max}$ for $d = 5$ cm and $d_{accu} = 20$ cm). It is thus deemed appropriate to neglect the plateau concentration in such a case.

Complex application patterns

If the maximum PEC_{soil} value in a multiple application sequence is reached before the last application (*e.g.*, due to the effects of varying plant interception), a slightly modified calculation procedure has to be used.

Let us assume that the length of the application sequence (the number of days between the first and last applications) is Δt . The maximum concentration in soil after continual use ($PEC_{soil,accu}$) can be expressed as

$$PEC_{soil,accu} = PEC_{soil,last} \cdot \frac{1}{1 - e^{-k \cdot \Delta t}} \quad (14)$$

where $PEC_{soil,last}$ is the concentration in soil after the last application in the whole sequence and t^* is the number of days between two events where $PEC_{soil,last}$ is reached minus the length of the application sequence, *i.e.*, $t^*=365-\Delta t$ days for yearly applications, $t^*=730-\Delta t$ days for bi-yearly applications, *etc.* The same approach (replacing t by t^*) is used for all the steps described in the previous section. Other parts of the calculation are not affected.

This provides a conservative assessment since the degradation of the compound in soil is assumed to happen for a shorter time than in reality.

II. Results and Discussion

Detailed results (maximum, short-term and long-term PEC and TWA and accumulation values) for individual uses are provided in Table 9.1.3- 14 to Table 9.1.3- 53.

Table 9.1.3- 14: PECsoil of fluopicolide, potatoes, 4×100 g a.s./ha, 60/60/85/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.053	-	0.144	-
Short term	24 h	0.053	0.053	0.144	0.144
	2 d	0.053	0.053	0.143	0.143
Long term	4 d	0.053	0.053	0.143	0.143
	7 d	0.053	0.053	0.142	0.143
	14 d	0.052	0.053	0.141	0.142
	21 d	0.052	0.052	0.139	0.141
	28 d	0.052	0.052	0.138	0.141
	42 d	0.050	0.052	0.138	0.139
	50 d	0.049	0.051	0.133	0.138
	100 d	0.046	0.049	0.123	0.133
Plateau concentration (20 cm) after year 5		0.014	-	0.049	-
PECaccumulation (PECact + PECsoil plateau)		0.071	-	0.192	-

Table 9.1.3- 15: PECsoil of M-01, potatoes, 4×100 g a.s./ha, 60/60/85/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.013	-	0.034	-
Short term	24 h	0.013	0.013	0.034	0.034
	2 d	0.013	0.013	0.034	0.034
Long term	4 d	0.013	0.013	0.034	0.034
	7 d	0.013	0.013	0.033	0.034
	14 d	0.012	0.013	0.033	0.033
	21 d	0.012	0.012	0.033	0.033
	28 d	0.012	0.012	0.032	0.033
	42 d	0.012	0.012	0.031	0.033
	50 d	0.011	0.012	0.031	0.032
	100 d	0.010	0.011	0.028	0.031
Plateau concentration (20 cm) after year 4		0.003	-	0.008	-
PECaccumulation (PECact + PECsoil plateau)		0.016	-	0.042	-

Table 9.1.3- 16: PECsoil of M-02, potatoes, 4 × 100 g a.s./ha, 60/60/85/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.005	-	0.007	-
Short term	24 h	0.004	0.005	0.006	0.006
	2 d	0.004	0.004	0.005	0.005
	4 d	0.003	0.004	0.004	0.005
Long term	7 d	0.002	0.003	0.002	0.004
	14 d	<0.001	0.002	0.001	0.003
	21 d	<0.001	0.001	0.001	0.002
	28 d	<0.001	0.001	<0.001	0.002
	42 d	<0.001	<0.001	<0.001	0.001
	50 d	<0.001	<0.001	0.001	<0.001
	100 d	<0.001	0.001	0.001	<0.001
Plateau concentration (20 cm) after year 0		<0.001	-	<0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.005	-	0.007	-

Table 9.1.3- 17: PECsoil of M-03, potatoes, 4 × 100 g a.s./ha, 60/60/85/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.006	-	0.016	-
Short term	24 h	0.006	0.006	0.016	0.016
	2 d	0.006	0.006	0.016	0.016
	4 d	0.006	0.006	0.016	0.016
Long term	7 d	0.006	0.006	0.016	0.016
	14 d	0.006	0.006	0.016	0.016
	21 d	0.006	0.006	0.016	0.016
	28 d	0.006	0.006	0.016	0.016
	42 d	0.006	0.006	0.016	0.016
	50 d	0.006	0.006	0.015	0.016
	100 d	0.005	0.006	0.015	0.015
Plateau concentration (20 cm) after year 10		0.006	-	0.014	-
PECaccumulation (PECact + PECsoil plateau)		0.011	-	0.030	-

Table 9.1.3- 18: PECsoil of fluopicolide, potatoes, 4 × 100 g a.s./ha, 4 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.020	-	0.079	-
Short term	24 h	0.020	0.020	0.079	0.079
	2 d	0.020	0.020	0.079	0.079
Long term	4 d	0.020	0.020	0.079	0.079
	7 d	0.020	0.020	0.078	0.078
	14 d	0.020	0.020	0.077	0.078
	21 d	0.019	0.020	0.076	0.078
	28 d	0.019	0.020	0.075	0.077
	42 d	0.019	0.019	0.074	0.076
	50 d	0.019	0.019	0.073	0.075
	100 d	0.019	0.019	0.068	0.073
Plateau concentration (20 cm) after year 3		0.007	-	0.027	-
PECaccumulation (PECact + PECsoil plateau)		0.027	-	0.105	-

Table 9.1.3- 19: PECsoil of M-01, potatoes, 4 × 100 g a.s./ha, 4 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.005	-	0.019	-
Short term	24 h	0.005	0.005	0.019	0.019
	2 d	0.005	0.005	0.019	0.019
Long term	4 d	0.005	0.005	0.018	0.019
	7 d	0.005	0.005	0.018	0.018
	14 d	0.005	0.005	0.018	0.018
	21 d	0.005	0.005	0.018	0.018
	28 d	0.004	0.005	0.018	0.018
	42 d	0.004	0.005	0.017	0.018
	50 d	0.004	0.005	0.017	0.018
	100 d	0.004	0.004	0.015	0.017
Plateau concentration (20 cm) after year 4		0.001	-	0.004	-
PECaccumulation (PECact + PECsoil plateau)		0.006	-	0.023	-

Table 9.1.3- 20: PECsoil of M-02, potatoes, 4 × 100 g a.s./ha, 4 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.003	-
Short term	24 h	0.002	0.002	0.002	0.002
	2 d	0.001	0.002	0.002	0.002
	4 d	0.001	0.001	0.002	0.002
Long term	7 d	<0.001	0.001	<0.001	0.002
	14 d	<0.001	<0.001	0.001	0.004
	21 d	<0.001	0.001	<0.001	<0.001
	28 d	<0.001	0.001	<0.001	<0.001
	42 d	<0.001	<0.001	<0.001	0.001
	50 d	<0.001	<0.001	0.001	<0.001
	100 d	<0.001	0.001	0.001	<0.001
Plateau concentration (20 cm) after year 10		<0.001	-	<0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.002	-	0.003	-

Table 9.1.3- 21: PECsoil of M-03, potatoes, 4 × 100 g a.s./ha, 4 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.009	-
Short term	24 h	0.002	0.002	0.009	0.009
	2 d	0.002	0.002	0.009	0.009
	4 d	0.002	0.002	0.009	0.009
Long term	7 d	0.002	0.002	0.009	0.009
	14 d	<0.002	0.002	0.009	0.009
	21 d	0.002	0.002	0.009	0.009
	28 d	0.002	0.002	0.009	0.009
	42 d	0.002	0.002	0.009	0.009
	50 d	0.002	0.002	0.008	0.009
	100 d	0.002	0.002	0.008	0.008
Plateau concentration (20 cm) after year 10		0.002	-	0.008	-
PECaccumulation (PECact + PECsoil plateau)		0.004	-	0.016	-

Table 9.1.3- 22: PECsoil of fluopicolide, potatoes, 3 × 100 g a.s./ha, 60/60/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.053	-	0.125	-
Short term	24 h	0.053	0.053	0.125	0.125
	2 d	0.053	0.053	0.125	0.125
	4 d	0.053	0.053	0.124	0.124
Long term	7 d	0.053	0.053	0.124	0.124
	14 d	0.052	0.053	0.124	0.124
	21 d	0.052	0.052	0.121	0.123
	28 d	0.051	0.052	0.120	0.122
	42 d	0.050	0.052	0.117	0.121
	50 d	0.049	0.051	0.116	0.120
	100 d	0.046	0.049	0.107	0.116
Plateau concentration (20 cm) after year 5		0.018	-	0.042	-
PECaccumulation (PECact + PECsoil plateau)		0.071	-	0.157	-

Table 9.1.3- 23: PECsoil of M-01, potatoes, 3 × 100 g a.s./ha, 60/60/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.013	-	0.030	-
Short term	24 h	0.013	0.013	0.030	0.030
	2 d	0.013	0.013	0.029	0.030
	5 d	0.013	0.013	0.029	0.029
Long term	7 d	0.013	0.013	0.029	0.029
	14 d	0.012	0.013	0.029	0.029
	21 d	0.012	0.012	0.028	0.029
	28 d	0.012	0.012	0.028	0.029
	42 d	0.012	0.012	0.027	0.028
	50 d	0.011	0.012	0.027	0.028
	100 d	0.010	0.011	0.024	0.027
Plateau concentration (20 cm) after year 4		0.003	-	0.007	-
PECaccumulation (PECact + PECsoil plateau)		0.016	-	0.036	-

Table 9.1.3- 24: PECsoil of M-02, potatoes, 3 × 100 g a.s./ha, 60/60/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.005	-	0.007	-
Short term	24 h	0.004	0.005	0.006	0.006
	2 d	0.004	0.004	0.005	0.006
Long term	4 d	0.003	0.004	0.004	0.005
	7 d	0.002	0.003	0.002	0.004
	14 d	<0.001	0.002	<0.001	0.003
	21 d	<0.001	0.001	<0.001	0.002
	28 d	<0.001	0.001	0.001	0.002
	42 d	<0.001	0.001	<0.001	0.001
	50 d	<0.001	0.001	<0.001	<0.001
	100 d	<0.001	<0.001	<0.001	0.001
Plateau concentration (20 cm) after year 0		<0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.005	-	0.007	-

Table 9.1.3- 25: PECsoil of M-03, potatoes, 3 × 100 g a.s./ha, 60/60/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.006	-	0.014	-
Short term	24 h	0.006	0.006	0.014	0.014
	2 d	0.006	0.006	0.014	0.014
Long term	4 d	0.006	0.006	0.014	0.014
	7 d	0.006	0.006	0.014	0.014
	14 d	0.006	0.006	0.014	0.014
	21 d	0.006	0.006	0.014	0.014
	28 d	0.006	0.006	0.014	0.014
	42 d	0.006	0.006	0.014	0.014
	50 d	0.006	0.006	0.013	0.014
	100 d	0.006	0.006	0.013	0.013
Plateau concentration (20 cm) after year 10		0.005	-	0.012	-
PECaccumulation (PECact + PECsoil plateau)		0.011	-	0.026	-

Table 9.1.3- 26: PECsoil of fluopicolide, potatoes, 3 × 100 g a.s./ha, 3 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.020	-	0.059	-
Short term	24 h	0.020	0.020	0.059	0.059
	2 d	0.020	0.020	0.059	0.059
	4 d	0.020	0.020	0.059	0.059
Long term	7 d	0.020	0.020	0.059	0.059
	14 d	0.020	0.020	0.059	0.059
	21 d	0.019	0.020	0.058	0.058
	28 d	0.019	0.020	0.057	0.058
	42 d	0.019	0.019	0.056	0.058
	50 d	0.019	0.019	0.055	0.057
	100 d	0.017	0.019	0.051	0.055
Plateau concentration (20 cm) after year 5		0.007	-	0.020	-
PECaccumulation (PECact + PECsoil plateau)		0.027	-	0.079	-

Table 9.1.3- 27: PECsoil of M-01, potatoes, 3 × 100 g a.s./ha, 3 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.005	-	0.014	-
Short term	24 h	0.005	0.005	0.014	0.014
	2 d	0.005	0.005	0.014	0.014
	5 d	0.005	0.005	0.014	0.014
Long term	7 d	0.005	0.005	0.014	0.014
	14 d	0.005	0.005	0.014	0.014
	21 d	0.005	0.005	0.013	0.014
	28 d	0.004	0.005	0.013	0.014
	42 d	0.004	0.005	0.013	0.013
	50 d	0.004	0.005	0.013	0.013
	100 d	0.004	0.004	0.012	0.013
Plateau concentration (20 cm) after year 4		0.001	-	0.003	-
PECaccumulation (PECact + PECsoil plateau)		0.006	-	0.017	-

Table 9.1.3- 28: PECsoil of M-02, potatoes, 3 × 100 g a.s./ha, 3 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.003	-
Short term	24 h	0.002	0.002	0.002	0.003
	2 d	0.001	0.002	0.002	0.002
	4 d	0.001	0.001	0.001	0.002
Long term	7 d	<0.001	0.001	<0.001	0.002
	14 d	<0.001	<0.001	<0.001	0.001
	21 d	<0.001	<0.001	<0.001	0.001
	28 d	<0.001	<0.001	0.001	<0.001
	42 d	<0.001	0.001	<0.001	<0.001
	50 d	<0.001	0.001	<0.001	<0.001
	100 d	0.001	<0.001	<0.001	0.001
Plateau concentration (20 cm) after year 0		<0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.002	-	0.003	-

Table 9.1.3- 29: PECsoil of M-03, potatoes, 3 × 100 g a.s./ha, 3 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.007	-
Short term	24 h	0.002	0.002	0.007	0.007
	2 d	0.002	0.002	0.007	0.007
	4 d	0.002	0.002	0.007	0.007
Long term	7 d	0.002	0.002	0.007	0.007
	14 d	0.002	0.002	0.007	0.007
	21 d	0.002	0.002	0.006	0.007
	28 d	0.002	0.002	0.006	0.007
	42 d	0.002	0.002	0.006	0.006
	50 d	0.002	0.002	0.006	0.006
	100 d	0.002	0.002	0.006	0.006
Plateau concentration (20 cm) after year 10		0.002	-	0.006	-
PECaccumulation (PECact + PECsoil plateau)		0.004	-	0.012	-

Table 9.1.3- 30: PECsoil of fluopicolide, potatoes, 2 × 100 g a.s./ha, 2 × 60% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.053	-	0.106	-
Short term	24 h	0.053	0.053	0.106	0.106
	2 d	0.053	0.053	0.106	0.106
Long term	4 d	0.053	0.053	0.105	0.105
	7 d	0.053	0.053	0.105	0.105
	14 d	0.052	0.053	0.105	0.105
	21 d	0.052	0.052	0.103	0.104
	28 d	0.051	0.052	0.102	0.104
	42 d	0.050	0.052	0.100	0.103
	50 d	0.049	0.051	0.098	0.102
	100 d	0.046	0.049	0.091	0.098
Plateau concentration (20 cm) after year 5		0.018	-	0.036	-
PECaccumulation (PECact + PECsoil plateau)		0.071	-	0.142	-

Table 9.1.3- 31: PECsoil of M-01, potatoes, 2 × 100 g a.s./ha, 2 × 60% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.012	-	0.025	-
Short term	24 h	0.013	0.013	0.025	0.025
	2 d	0.013	0.013	0.025	0.025
Long term	4 d	0.013	0.013	0.025	0.025
	7 d	0.013	0.013	0.025	0.025
	14 d	0.012	0.013	0.024	0.025
	21 d	0.012	0.012	0.024	0.025
	28 d	0.012	0.012	0.024	0.024
	42 d	0.012	0.012	0.023	0.024
	50 d	0.011	0.012	0.023	0.024
	100 d	0.010	0.011	0.021	0.023
Plateau concentration (20 cm) after year 4		0.003	-	0.006	-
PECaccumulation (PECact + PECsoil plateau)		0.016	-	0.031	-

Table 9.1.3- 32: PECsoil of M-02, potatoes, 2 × 100 g a.s./ha, 2 × 60% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.005	-	0.007	-
Short term	24 h	0.004	0.005	0.006	0.006
	2 d	0.004	0.004	0.005	0.006
	4 d	0.003	0.004	0.004	0.005
Long term	7 d	0.002	0.003	0.002	0.004
	14 d	<0.001	0.002	<0.001	0.003
	21 d	<0.001	0.001	<0.001	0.002
	28 d	<0.001	0.001	0.001	0.002
	42 d	<0.001	0.001	<0.001	0.001
	50 d	<0.001	0.001	<0.001	<0.001
	100 d	<0.001	<0.001	<0.001	0.001
Plateau concentration (20 cm) after year 0		<0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.005	-	0.007	-

Table 9.1.3- 33: PECsoil of M-03, potatoes, 2 × 100 g a.s./ha, 2 × 60% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.006	-	0.012	-
Short term	24 h	0.006	0.006	0.012	0.012
	2 d	0.006	0.006	0.012	0.012
	5 d	0.006	0.006	0.012	0.012
Long term	7 d	0.006	0.006	0.012	0.012
	14 d	0.006	0.006	0.012	0.012
	21 d	0.006	0.006	0.012	0.012
	28 d	0.006	0.006	0.012	0.012
	42 d	0.006	0.006	0.011	0.012
	50 d	0.006	0.006	0.011	0.012
	100 d	0.006	0.006	0.011	0.011
Plateau concentration (20 cm) after year 10		0.005	-	0.010	-
PECaccumulation (PECact + PECsoil plateau)		0.011	-	0.022	-

Table 9.1.3- 34: PECsoil of fluopicolide, potatoes, 2 × 100 g a.s./ha, 2 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.020	-	0.040	-
Short term	24 h	0.020	0.020	0.040	0.040
	2 d	0.020	0.020	0.040	0.040
	4 d	0.020	0.020	0.040	0.040
Long term	7 d	0.020	0.020	0.039	0.039
	14 d	0.020	0.020	0.039	0.039
	21 d	0.019	0.020	0.039	0.039
	28 d	0.019	0.020	0.038	0.039
	42 d	0.019	0.019	0.037	0.039
	50 d	0.019	0.019	0.037	0.038
	100 d	0.017	0.019	0.034	0.037
Plateau concentration (20 cm) after year 5		0.007	-	0.013	-
PECaccumulation (PECact + PECsoil plateau)		0.027	-	0.053	-

Table 9.1.3- 35: PECsoil of M-01, potatoes, 2 × 100 g a.s./ha, 2 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.005	-	0.009	-
Short term	24 h	0.005	0.005	0.009	0.009
	2 d	0.005	0.005	0.009	0.009
	4 d	0.005	0.005	0.009	0.009
Long term	7 d	0.005	0.005	0.009	0.009
	14 d	0.005	0.005	0.009	0.009
	21 d	0.005	0.005	0.009	0.009
	28 d	0.004	0.005	0.009	0.009
	42 d	0.004	0.005	0.009	0.009
	50 d	0.004	0.005	0.009	0.009
	100 d	0.004	0.004	0.008	0.009
Plateau concentration (20 cm) after year 4		0.001	-	0.002	-
PECaccumulation (PECact + PECsoil plateau)		0.006	-	0.012	-

Table 9.1.3- 36: PECsoil of M-02, potatoes, 2 × 100 g a.s./ha, 2 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.003	-
Short term	24 h	0.002	0.002	0.002	0.002
	2 d	0.001	0.002	0.002	0.002
	4 d	0.001	0.001	0.001	0.002
Long term	7 d	<0.001	0.001	<0.001	0.002
	14 d	<0.001	<0.001	<0.001	0.001
	21 d	<0.001	<0.001	<0.001	0.001
	28 d	<0.001	<0.001	0.001	<0.001
	42 d	<0.001	0.001	<0.001	<0.001
	50 d	<0.001	0.001	<0.001	<0.001
	100 d	0.001	<0.001	<0.001	0.001
Plateau concentration (20 cm) after year 0		<0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.002	-	0.003	-

Table 9.1.3- 37: PECsoil of M-03, potatoes, 2 × 100 g a.s./ha, 2 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.004	-
Short term	24 h	0.002	0.002	0.004	0.004
	2 d	0.002	0.002	0.004	0.004
	4 d	0.002	0.002	0.004	0.004
Long term	7 d	0.002	0.002	0.004	0.004
	14 d	0.002	0.002	0.004	0.004
	21 d	0.002	0.002	0.004	0.004
	28 d	0.002	0.002	0.004	0.004
	42 d	0.002	0.002	0.004	0.004
	50 d	0.002	0.002	0.004	0.004
	100 d	0.002	0.002	0.004	0.004
Plateau concentration (20 cm) after year 10		0.002	-	0.004	-
PECaccumulation (PECact + PECsoil plateau)		0.004	-	0.008	-

Table 9.1.3- 38: PECsoil of fluopicolide, potatoes, 1 × 100 g a.s./ha, 60% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.053	-	0.053	-
Short term	24 h	0.053	0.053	0.053	0.053
	2 d	0.053	0.053	0.053	0.053
	4 d	0.053	0.053	0.053	0.053
Long term	7 d	0.053	0.053	0.053	0.053
	14 d	0.052	0.053	0.052	0.053
	21 d	0.052	0.052	0.052	0.052
	28 d	0.051	0.052	0.051	0.052
	42 d	0.050	0.051	0.050	0.052
	50 d	0.049	0.051	0.049	0.051
	100 d	0.046	0.049	0.046	0.049
Plateau concentration (20 cm) after year 5		0.018	-	0.018	-
PECaccumulation (PECact + PECsoil plateau)		0.071	-	0.071	-

Table 9.1.3- 39: PECsoil of M-01, potatoes, 1 × 100 g a.s./ha, 60% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.013	-	0.013	-
Short term	24 h	0.013	0.013	0.013	0.013
	2 d	0.013	0.013	0.013	0.013
	4 d	0.013	0.013	0.013	0.013
Long term	7 d	0.013	0.013	0.013	0.013
	14 d	0.012	0.013	0.012	0.013
	21 d	0.012	0.012	0.012	0.012
	28 d	0.012	0.012	0.012	0.012
	42 d	0.012	0.012	0.012	0.012
	50 d	0.011	0.012	0.011	0.012
	100 d	0.010	0.011	0.010	0.011
Plateau concentration (20 cm) after year 5		0.003	-	0.003	-
PECaccumulation (PECact + PECsoil plateau)		0.016	-	0.016	-

Table 9.1.3- 40: PECsoil of M-02, potatoes, 1 × 100 g a.s./ha, 60% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.005	-	0.005	-
Short term	24 h	0.004	0.005	0.004	0.005
	2 d	0.004	0.004	0.004	0.004
	4 d	0.003	0.004	0.003	0.004
Long term	7 d	0.002	0.003	0.002	0.003
	14 d	<0.001	0.002	<0.001	0.002
	21 d	<0.001	0.001	<0.001	0.001
	28 d	<0.001	0.001	<0.001	0.001
	42 d	<0.001	<0.001	0.001	0.001
	50 d	<0.001	0.001	<0.001	<0.001
	100 d	<0.001	0.001	<0.001	<0.001
Plateau concentration (20 cm) after year 0		0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.005	-	0.005	-

Table 9.1.3- 41: PECsoil of M-03, potatoes, 1 × 100 g a.s./ha, 60% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.006	-	0.006	-
Short term	24 h	0.006	0.006	0.006	0.006
	2 d	0.006	0.006	0.006	0.006
	4 d	0.006	0.006	0.006	0.006
Long term	7 d	0.006	0.006	0.006	0.006
	14 d	0.006	0.006	0.006	0.006
	21 d	0.006	0.006	0.006	0.006
	28 d	0.006	0.006	0.006	0.006
	42 d	0.006	0.006	0.006	0.006
	50 d	0.006	0.006	0.006	0.006
	100 d	0.005	0.006	0.005	0.006
Plateau concentration (20 cm) after year 10		0.005	-	0.005	-
PECaccumulation (PECact + PECsoil plateau)		0.011	-	0.011	-

Table 9.1.3- 42: PECsoil of fluopicolide, potatoes, 1 × 100 g a.s./ha, 85% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.020	-	0.020	-
Short term	24 h	0.020	0.020	0.020	0.020
	2 d	0.020	0.020	0.020	0.020
	4 d	0.020	0.020	0.020	0.020
Long term	7 d	0.020	0.020	0.020	0.020
	14 d	0.020	0.020	0.020	0.020
	21 d	0.019	0.020	0.019	0.020
	28 d	0.019	0.020	0.019	0.020
	42 d	0.019	0.019	0.019	0.019
	50 d	0.019	0.019	0.019	0.019
	100 d	0.017	0.019	0.017	0.019
Plateau concentration (20 cm) after year 5		0.007	-	0.007	-
PECaccumulation (PECact + PECsoil plateau)		0.027	-	0.027	-

Table 9.1.3- 43: PECsoil of M-01, potatoes, 1 × 100 g a.s./ha, 85% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.005	-	0.005	-
Short term	24 h	0.005	0.005	0.005	0.005
	2 d	0.005	0.005	0.005	0.005
	4 d	0.005	0.005	0.005	0.005
Long term	7 d	0.005	0.005	0.005	0.005
	14 d	0.005	0.005	0.005	0.005
	21 d	0.005	0.005	0.005	0.005
	28 d	0.004	0.005	0.004	0.005
	42 d	0.004	0.005	0.004	0.005
	50 d	0.004	0.005	0.004	0.005
	100 d	0.004	0.004	0.004	0.004
Plateau concentration (20 cm) after year 4		0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.006	-	0.006	-

Table 9.1.3- 44: PECsoil of M-02, potatoes, 1 × 100 g a.s./ha, 85% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.002	-
Short term	24 h	0.002	0.002	0.002	0.002
	2 d	0.001	0.002	0.001	0.002
	4 d	0.001	0.001	0.001	0.001
Long term	7 d	<0.001	0.001	<0.001	0.001
	14 d	<0.001	<0.001	<0.001	<0.001
	21 d	<0.001	<0.001	<0.001	<0.001
	28 d	<0.001	<0.001	<0.001	0.001
	42 d	<0.001	<0.001	0.001	0.001
	50 d	<0.001	0.001	0.001	<0.001
	100 d	<0.001	0.001	<0.001	<0.001
Plateau concentration (20 cm) after year 0		0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.002	-	0.002	-

Table 9.1.3- 45: PECsoil of M-03, potatoes, 1 × 100 g a.s./ha, 85% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.002	-
Short term	24 h	0.002	0.002	0.002	0.002
	2 d	0.002	0.002	0.002	0.002
	4 d	0.002	0.002	0.002	0.002
Long term	7 d	0.002	0.002	0.002	0.002
	14 d	0.002	0.002	0.002	0.002
	21 d	0.002	0.002	0.002	0.002
	28 d	0.002	0.002	0.002	0.002
	42 d	0.002	0.002	0.002	0.002
	50 d	0.002	0.002	0.002	0.002
	100 d	0.002	0.002	0.002	0.002
Plateau concentration (20 cm) after year 10		0.002	-	0.002	-
PECaccumulation (PECact + PECsoil plateau)		0.004	-	0.004	-

Table 9.1.3- 46: PECsoil of fluopicolide, lettuce, 1 × 100 g a.s./ha, 25% interception

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.100	-	0.100	-
Short term	24 h	0.100	0.100	0.100	0.100
	2 d	0.100	0.100	0.100	0.100
	4 d	0.099	0.100	0.099	0.100
Long term	7 d	0.099	0.099	0.099	0.099
	14 d	0.098	0.099	0.098	0.099
	21 d	0.097	0.098	0.097	0.098
	28 d	0.096	0.098	0.096	0.098
	42 d	0.094	0.095	0.094	0.097
	50 d	0.093	0.096	0.093	0.096
	100 d	0.086	0.093	0.086	0.093
Plateau concentration (20 cm) after year 5		0.034	-	0.034	-
PECaccumulation (PECact + PECsoil plateau)		0.034	-	0.134	-

Table 9.1.3- 47: PECsoil of M-01, lettuce, 1 × 100 g a.s./ha, 25% interception

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.024	-	0.024	-
Short term	24 h	0.024	0.024	0.024	0.024
	2 d	0.024	0.024	0.024	0.024
	4 d	0.024	0.024	0.024	0.024
Long term	7 d	0.023	0.024	0.023	0.024
	14 d	0.023	0.023	0.023	0.023
	21 d	0.023	0.023	0.023	0.023
	28 d	0.022	0.023	0.022	0.023
	42 d	0.022	0.023	0.022	0.023
	50 d	0.022	0.023	0.022	0.023
	100 d	0.019	0.022	0.019	0.022
Plateau concentration (20 cm) after year 4		0.005	-	0.005	-
PECaccumulation (PECact + PECsoil plateau)		0.029	-	0.029	-

Table 9.1.3- 48: PECsoil of M-02, lettuce, 1 × 100 g a.s./ha, 25% interception

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.010	-	0.010	-
Short term	24 h	0.008	0.009	0.008	0.009
	2 d	0.007	0.008	0.007	0.008
	4 d	0.005	0.007	0.005	0.007
Long term	7 d	0.003	0.006	0.003	0.006
	14 d	0.001	0.004	0.001	0.004
	21 d	<0.001	0.003	<0.001	0.003
	28 d	<0.001	0.002	<0.001	0.002
	42 d	<0.001	0.001	<0.001	0.001
	50 d	<0.001	0.001	<0.001	0.001
	100 d	<0.001	0.001	<0.001	0.001
Plateau concentration (20 cm) after year 0		0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.010	-	0.010	-

Table 9.1.3- 49: PECsoil of M-03, lettuce, 1 × 100 g a.s./ha, 25% interception

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.011	-	0.011	-
Short term	24 h	0.011	0.011	0.011	0.011
	2 d	0.011	0.011	0.011	0.011
	4 d	0.011	0.011	0.011	0.011
Long term	7 d	0.011	0.011	0.011	0.011
	14 d	0.011	0.011	0.011	0.011
	21 d	0.011	0.011	0.011	0.011
	28 d	0.011	0.011	0.011	0.011
	42 d	0.011	0.011	0.011	0.011
	50 d	0.011	0.011	0.011	0.011
	100 d	0.010	0.011	0.010	0.011
Plateau concentration (20 cm) after year 10		0.010	-	0.010	-
PECaccumulation (PECact + PECsoil plateau)		0.021	-	0.021	-

Table 9.1.3- 50: PECsoil of fluopicolide, lettuce, 2 × 100 g a.s./ha, 2 × 70% interception, 7 d app. interval

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.040	-	0.080	-
Short term	24 h	0.040	0.040	0.079	0.080
	2 d	0.040	0.040	0.079	0.079
	4 d	0.040	0.040	0.079	0.079
Long term	7 d	0.040	0.040	0.079	0.079
	14 d	0.039	0.040	0.079	0.079
	21 d	0.039	0.039	0.077	0.078
	28 d	0.038	0.039	0.076	0.078
	42 d	0.038	0.039	0.075	0.077
	50 d	0.037	0.039	0.074	0.077
	100 d	0.034	0.037	0.068	0.074
Plateau concentration (20 cm) after year 5		0.014	-	0.027	-
PECaccumulation (PECact + PECsoil plateau)		0.054	-	0.107	-

Table 9.1.3- 51: PECsoil of M-01, lettuce, 2 × 100 g a.s./ha, 2 × 70% interception, 7 d app. interval

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.010	-	0.019	-
Short term	24 h	0.009	0.010	0.019	0.019
	2 d	0.009	0.009	0.019	0.019
	5 d	0.009	0.009	0.019	0.019
Long term	7 d	0.009	0.009	0.019	0.019
	14 d	0.009	0.009	0.018	0.019
	21 d	0.009	0.009	0.018	0.018
	28 d	0.009	0.009	0.018	0.018
	42 d	0.009	0.009	0.017	0.018
	50 d	0.009	0.009	0.017	0.018
	100 d	0.008	0.009	0.015	0.017
Plateau concentration (20 cm) after year 4		0.002	-	0.004	-
PECaccumulation (PECact + PECsoil plateau)		0.012	-	0.023	-

Table 9.1.3- 52: PECsoil of M-02, lettuce, 2 × 100 g a.s./ha, 2 × 70% interception, 7 d app. interval

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.004	-	0.005	-
Short term	24 h	0.003	0.004	0.004	0.005
	2 d	0.003	0.003	0.004	0.004
	4 d	0.002	0.003	0.003	0.004
Long term	7 d	0.001	0.002	0.002	0.003
	14 d	<0.001	0.002	<0.001	0.002
	21 d	<0.001	0.001	<0.001	0.001
	28 d	<0.001	<0.001	0.001	0.001
	42 d	<0.001	0.001	<0.001	<0.001
	50 d	<0.001	0.001	<0.001	<0.001
	100 d	0.001	<0.001	<0.001	0.001
Plateau concentration (20 cm) after year 0		<0.001	-	0.001	-
PECaccumulation (PECact + PECsoil plateau)		0.004	-	0.005	-

Table 9.1.3- 53: PECsoil of M-03, lettuce, 2 × 100 g a.s./ha, 2 × 70% interception, 7 d app. interval

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.004	-	0.009	-
Short term	24 h	0.004	0.004	0.009	0.009
	2 d	0.004	0.004	0.009	0.009
	4 d	0.004	0.004	0.009	0.009
Long term	7 d	0.004	0.004	0.009	0.009
	14 d	0.004	0.004	0.009	0.009
	21 d	0.004	0.004	0.009	0.009
	28 d	0.004	0.004	0.009	0.009
	42 d	0.004	0.004	0.009	0.009
	50 d	0.004	0.004	0.009	0.009
	100 d	0.004	0.004	0.008	0.009
Plateau concentration (20 cm) after year 10		0.004	-	0.008	-
PECaccumulation (PECact + PECsoil plateau)		0.008	-	0.016	-

An overview of maximum PECsoil values of fluopicolide and its metabolites for all use patterns under consideration is shown in Table 9.1.3- 54.

Table 9.1.3- 54: Maximum PECsoil of fluopicolide and its metabolites for the uses assessed

Use pattern	Fluopicolide (mg/kg)	M-01 (mg/kg)	M-02 (mg/kg)	M-03 (mg/kg)
Potatoes, 4 × 100 g a.s./ha	0.144	0.034	0.007	0.016
Potatoes, 4 × 100 g a.s./ha	0.079	0.019	0.003	0.009
Potatoes, 3 × 100 g a.s./ha	0.125	0.030	0.007	0.014
Potatoes, 3 × 100 g a.s./ha	0.059	0.014	0.003	0.007
Potatoes, 2 × 100 g a.s./ha	0.106	0.025	0.007	0.012
Potatoes, 2 × 100 g a.s./ha	0.040	0.009	0.003	0.004
Potatoes, 1 × 100 g a.s./ha	0.053	0.013	0.003	0.006
Potatoes, 1 × 100 g a.s./ha	0.026	0.009	0.002	0.002
Lettuce, 1 × 100 g a.s./ha	0.140	0.024	0.010	0.011
Lettuce, 2 × 100 g a.s./ha	0.080	0.019	0.005	0.009

The accumulation potential of fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) after long term use was also assessed employing the larger soil depth for the calculation of the background concentration in cases where tillage is relevant. The results are presented in Table 9.1.3- 55. Please note that for technical reasons accumulation calculation is performed and reported for all substances even if they do not possess accumulation potential due to short half-life.

Table 9.1.3- 55: PECsoil of fluopicolide and its metabolites for the uses assessed, taking the effect of accumulation into account

Use pattern	PECsoil	Fluopicolide (mg/kg)	M-01 (mg/kg)	M-02 (mg/kg)	M-03 (mg/kg)
Potatoes 4 × 100 g a.s./ha	plateau (20 cm)	0.049	0.008	<0.001	0.014
	total	0.192	0.042	0.007	0.030
Potatoes 4 × 100 g a.s./ha	plateau (20 cm)	0.027	0.004	<0.001	0.008
	total	0.105	0.023	0.003	0.016
Potatoes 3 × 100 g a.s./ha	plateau (20 cm)	0.042	0.005	<0.001	0.012
	total	0.166	0.036	0.007	0.026
Potatoes 3 × 100 g a.s./ha	plateau (20 cm)	0.020	0.003	<0.001	0.006
	total	0.079	0.017	0.003	0.012
Potatoes 2 × 100 g a.s./ha	plateau (20 cm)	0.036	0.006	<0.001	0.010
	total	0.142	0.031	0.007	0.022
Potatoes 2 × 100 g a.s./ha	plateau (20 cm)	0.013	0.002	<0.001	0.004
	total	0.053	0.012	0.003	0.008
Potatoes 1 × 100 g a.s./ha	plateau (20 cm)	0.008	0.003	<0.001	0.005
	total	0.071	0.016	0.005	0.011
Potatoes 1 × 100 g a.s./ha	plateau (20 cm)	0.007	0.001	<0.001	0.002
	total	0.027	0.006	0.002	0.004
Lettuce 1 × 100 g a.s./ha	plateau (20 cm)	0.034	0.005	<0.001	0.010
	total	0.134	0.029	0.010	0.021
Lettuce 2 × 100 g a.s./ha	plateau (20 cm)	0.027	0.004	<0.001	0.008
	total	0.107	0.023	0.005	0.016

III. Conclusion

The predicted environmental concentrations in soil (PEC_{soil}) of the active substance fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) were calculated for use in potatoes and lettuce.

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2014) and is considered valid to assess predicted environmental concentrations in soil (PEC_{soil}) for fluopicolide and its metabolites in potatoes and lettuce.

PEC_{soil} for propamocarb-hydrochloride

Data Point:	KCP 9.1.3/07
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Propamocarb-hydrochloride (PCH) PEC_{soil} EUFA Use in potatoes and lettuce in Europe
Report No:	EnSa-20-0436
Document No:	M-687161-011
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

The predicted environmental concentrations in soil (PEC_{soil}) of the active substance propamocarb-hydrochloride were calculated based on a first tier approach using a Microsoft® Excel spreadsheet. The use of propamocarb-hydrochloride in potatoes and lettuce was assessed according to Good Agricultural Practice (GAP) under European cropping conditions. Calculations assumed an even distribution of the compound in upper 0 - 10 cm soil layer following application and a soil density of 1.5 g/cm³.

Overview of maximum PEC_{soil} values of propamocarb-hydrochloride for all use patterns under consideration is shown in Table 9.1.3-1.

Table 9.1.3- 56: Maximum PECsoil of propamocarb-hydrochloride for the uses assessed

Use pattern	Propamocarb-hydrochloride (mg/kg)
Potatoes, 4 × 1000 g a.s./ha	1.369
Potatoes, 4 × 1000 g a.s./ha	0.759
Potatoes, 3 × 1000 g a.s./ha	1.211
Potatoes, 3 × 1000 g a.s./ha	0.579
Potatoes, 2 × 1000 g a.s./ha	1.048
Potatoes, 2 × 1000 g a.s./ha	0.399
Potatoes, 1 × 1000 g a.s./ha	0.533
Potatoes, 1 × 1000 g a.s./ha	0.200
Lettuce, 1 × 1000 g a.s./ha	1.000
Lettuce, 2 × 1000 g a.s./ha	0.756

The accumulation potential of propamocarb-hydrochloride after long term use was also assessed, employing the larger soil depth for the calculation of the background concentration in cases where tillage is relevant. The results are presented in Table 9.1.3- 57.

Table 9.1.3- 57: PECsoil of propamocarb-hydrochloride for the uses assessed taking the effect of accumulation into account

Use pattern	PECsoil	Propamocarb-hydrochloride (mg/kg)
Potatoes 4 × 1000 g a.s./ha	plateau (20 cm) total	0.063 1.432
Potatoes 4 × 1000 g a.s./ha	plateau (20 cm) total	0.035 0.794
Potatoes 3 × 1000 g a.s./ha	plateau (20 cm) total	0.056 1.267
Potatoes 3 × 1000 g a.s./ha	plateau (20 cm) total	0.027 0.606
Potatoes 2 × 1000 g a.s./ha	plateau (20 cm) total	0.048 1.096
Potatoes 2 × 1000 g a.s./ha	plateau (20 cm) total	0.018 0.411
Potatoes 1 × 1000 g a.s./ha	plateau (20 cm) total	0.025 0.558
Potatoes 1 × 1000 g a.s./ha	plateau (20 cm) total	0.009 0.209
Lettuce 1 × 1000 g a.s./ha	plateau (20 cm) total	0.046 1.046
Lettuce 2 × 1000 g a.s./ha	plateau (20 cm) total	0.036 0.822

I. Materials and Methods

The use of propamocarb-hydrochloride in potatoes and lettuce in Europe was assessed according to the Good Agricultural Practice (GAP) as summarised below.

Table 9.1.3- 58: Application data of propamocarb-hydrochloride according to the use pattern in Europe

Individual crop	FOCUS crop	Rate (g a.s./ha)	Interval (days)	Plant interception (%)	BBCH stage	Amount reaching soil (g a.s./ha)
Potatoes	Potatoes	4 × 1000	7	60 60 85 85	21 21 40 40	400.000 400.000 150.000 150.000
Potatoes	Potatoes	4 × 1000		4 × 85	4 × 40	4 × 150.000
Potatoes	Potatoes	3 × 1000		60 60 85	21 21 40	400.000 400.000 150.000
Potatoes	Potatoes	3 × 1000		3 × 85	3 × 40	3 × 150.000
Potatoes	Potatoes	2 × 1000	7	2 × 60	2 × 21	2 × 400.000
Potatoes	Potatoes	2 × 1000		2 × 85	2 × 40	2 × 150.000
Potatoes	Potatoes	1 × 1000		60	21	1 × 400.000
Potatoes	Potatoes	1 × 1000	-	85	40	1 × 150.000
Lettuce	Cabbage	1 × 1000	-	25	13	1 × 750.000
Lettuce	Cabbage	2 × 1000		2 × 85	2 × 40	2 × 300.000

The calculations were based on the maximum intended application rate together with the maximum intended number of applications per season and/or multi-application sequences) the minimum interval between the applications. Crop interception was taken into account according to the BBCH growth stage, as recommended by FOCUS (2014).

For metabolite(s) the (pseudo) application rate is calculated based on the maximum amount of the metabolite observed in soil degradation studies, the interception and the molar mass correction (Table 9.1.3- 59 and Table 9.1.3- 60).

Table 9.1.3- 59: Summary of properties for metabolite rate calculation

Parameter	Unit	Propamocarb-hydrochloride
Molar mass	(g/mol)	224.7
Corr. factor	(-)	1
Max occ. in soil	(%)	100

Table 9.1.3- 60: Calculation of metabolite application rates (# = application number)

Compound Crop / rate	#	Propamocarb-hydrochloride (g a.s./ha)
Potatoes, 4 × 1000 g a.s./ha	1	400
	2	400
	3	150
	4	150
Potatoes, 4 × 1000 g a.s./ha	1	150
	2	150
	3	150
	4	150
Potatoes, 3 × 1000 g a.s./ha	1	400
	2	400
Potatoes, 3 × 1000 g a.s./ha	3	150
	4	150
	5	150
Potatoes, 2 × 1000 g a.s./ha	1	150
	2	150
Potatoes, 2 × 1000 g a.s./ha	1	400
	2	400
Potatoes, 1 × 1000 g a.s./ha	1	150
	2	150
Potatoes, 1 × 1000 g a.s./ha	1	150
Lettuce, 1 × 1000 g a.s./ha	1	750
Lettuce, 2 × 1000 g a.s./ha	1	300
	2	300

Substance parameters used as input in the calculations are based on substance parameters whose derivation is taken from the EFSA LoEP [EFSA Scientific Report 87, 12 May 2006]. The modelling parameters used for the calculations are given in Table 9.1.3- 61.

Table 9.1.3- 61: Compound and scenario input parameters as used for the calculation

Compound	Molar mass (g/mol)	Max occur. in soil (%)	DT ₅₀ (days)	Molar mass corr. factor (-)
Propamocarb-hydrochloride	224.7	100	136	1
Soil bulk density	1.5 kg/L			
Soil mixing depth	5 cm			
Tillage depth for plateau (if relevant)	20 cm			

The information which mixing depths are employed for individual uses assessed in this report is provided in Table 9.1.3- 62.

Table 9.1.3- 62: Mixing depths used for plateau calculation

Use pattern	Plateau mixing depth
Potatoes	20 cm
Lettuce	20 cm

The details of the calculation can be found below.

Parent compound

1st tier estimation of the initial PEC_{soil} concentration is done using the equation

$$PEC_{soil} = \frac{A \cdot f}{\rho_{soil} \cdot d} \quad (8)$$

with A being the nominal single field application rate, f the fraction reaching soil surface (taking into account crop interception factors according to FOCUS), ρ_{soil} the dry soil bulk density, and d the thickness of the soil layer.

In single application scenarios, the initial PEC_{soil} value is equal to the overall maximum. For multiple (n) applications with constant application rate, crop interception, and application interval, the maximum PEC_{soil} can be written as

$$PEC_{soil,max} = \frac{A \cdot f}{\rho_{soil} \cdot d} \frac{1 - e^{-k \cdot n \cdot \Delta t}}{1 - e^{-k \cdot \Delta t}} \quad (9)$$

where Δt the application interval and k is the first order degradation rate, calculated from the soil half-life (DT_{50}) as

$$k = \frac{\ln 2}{DT_{50}} \quad (10)$$

For multiple (n) applications with variable application rate, crop interception or application interval, the PEC_{soil} just after the application (i) can be calculated stepwise as

$$PEC(i)_{soil,max} = \frac{A(i) \cdot f(i)}{\rho_{soil} \cdot d} + PEC(i)_{soil,co} \quad (11)$$

where $PEC_{soil,co}$ represents the residue from the preceding applications at the time of the actual application. For the first application, $PEC_{soil,co}$ is zero, for the following applications it can be written as

$$PEC(i)_{soil,co} = PEC(i-1)_{soil} \cdot e^{-k \cdot \Delta t(i)} \quad (12)$$

with $\Delta t(i)$ being the time interval between applications (i-1) and (i). $PEC_{soil,max}$ is then defined as the maximum of the individual PEC_{soil} values.

$$PEC_{soil,max} = \max(PEC(i)_{soil,max}) \quad (13)$$

Metabolites

Maximum soil concentration of a metabolite is calculated in a similar manner to that of the parent compound, taking into account the maximum amount of the metabolite observed in soil ($X_{met,max}$) as well as the different molar masses of the parent (M_{par}) and metabolite (M_{met}).

The value of the initial metabolite concentration $PEC_{soil,met}$ is calculated using

$$PEC_{soil,met} = PEC_{soil,par} \cdot X_{met,max} \cdot \frac{M_{met}}{M_{par}} \quad (14)$$

where $PEC_{soil,par}$ is the respective initial parent concentration.

For a single application, the $PEC_{soil,met}$ value is equal to $PEC_{soil,max,met}$. For multiple applications, the maximum metabolite soil concentration has to be calculated using the equations (4) - (6) given in the previous section, with the parent dissipation rate replaced by that of the metabolite, and with maximum metabolite occurrence in soil and different molar masses of the parent and metabolite taken into account.

Concentrations over time

For first-order kinetics with a degradation rate k the declining PEC values at time t after the maximum can be calculated by

$$PEC(t) = PEC_{max} \cdot e^{-kt} \quad (8)$$

For a better comparison of exposure and effect data, time-weighted average concentrations (TWA) may be useful. For first-order kinetics, the TWA are given by the following formula:

$$TWA(t) = PEC_{max} \cdot \frac{1}{k \cdot t} \cdot (1 - e^{-kt}) \quad (9)$$

Accumulation after long term use

Potential accumulation after long term use is also assessed based on the maximum $PEC_{soil,max}$ concentration of the respective compound, obtained as described before.

In case of a single application (or a multiple application sequence leading to the maximum PEC_{soil} after the last application), it can be shown that the maximum concentration in soil after perpetual use ($PEC_{soil,accu}$) can be expressed as:

$$PEC_{soil,accu} = PEC_{soil,max} \cdot \frac{1}{1 - e^{-k \cdot t}} \quad (10)$$

where t is the number of days between two events where $PEC_{soil,max}$ is reached, *i.e.*, 365 days for yearly applications, 930 days for 3-yearly applications, etc. This PEC_{soil} value is based on a normal mixing depth. In the case of a multiple application sequence leading to the maximum PEC_{soil} before the last application another approach has to be used.

The concentration in soil after an infinite number of applications and immediately before the application in the last year (the so called plateau concentration $PEC_{plateau}$) can be written as

$$PEC_{plateau} = PEC_{soil,accu} \cdot \frac{d}{d_{accu}} \cdot e^{-k \cdot t} \quad (11)$$

This formula can take the effect of deep soil tillage (or another mixing process) into account by distributing the soil residue amongst larger amounts of soil (larger soil mixing depth d_{accu} of, *e.g.*, 20 cm). In the absence of such mixing process, the factors involving mixing depth cancel out.

The total PEC_{soil} taking the effect of accumulation into account is then the sum of $PEC_{plateau}$ and the maximum PEC_{soil} , as defined previously.

$$PEC_{soil,total} = PEC_{plateau} + PEC_{soil,max} \quad (12)$$

The plateau concentration is driven by the dissipation DT_{50} in soil. The ratio between maximum PEC_{soil} due to actual application and the respective plateau concentration (taking effect of tillage into account here) can be written as

$$\frac{PEC_{plateau}}{PEC_{soil,max}} = \frac{e^{-k \cdot t}}{1 - e^{-k \cdot t}} \cdot \frac{d}{d_{accu}} \quad (13)$$

Inspection of Equation (13) shows that this ratio is independent of the application rate. For a DT_{90} less than a year, the plateau concentration is marginal (< 3% of actual $PEC_{soil,max}$ for $d = 5$ cm and $d_{accu} = 20$ cm). It is thus deemed appropriate to neglect the plateau concentration in such a case.

Complex application patterns

If the maximum PEC_{soil} value in a multiple application sequence is reached before the last application (e.g., due to the effects of varying plant interception), a slightly modified calculation procedure has to be used.

Let us assume that the length of the application sequence (the number of days between the first and last applications) is Δt . The maximum concentration in soil after continual use ($PEC_{soil,accu}$) can be expressed as

$$PEC_{soil,accu} = PEC_{soil,last} \cdot \frac{1}{1 - e^{-k \cdot t^*}} \quad (14)$$

where $PEC_{soil,last}$ is the concentration in soil after the last application in the whole sequence and t^* is the number of days between two events where $PEC_{soil,last}$ is reached minus the length of the application sequence, i.e. $t^* = 365 \cdot \Delta t$ days for yearly applications, $t^* = 730 \cdot \Delta t$ days for bi-yearly applications, etc. The same approach (replacing t by t^*) is used for all the steps described in the previous section. Other parts of the calculation are not affected.

This provides a conservative assessment since the degradation of the compound in soil is assumed to happen for a shorter time than in reality.

II. Results and Discussion

Detailed results (maximum, short-term and long-term PEC and TWA, and accumulation values) for individual uses are provided in Table 9.1.3- 6 to Table 9.1.3- 72.

Table 9.1.3- 63: PECsoil of propamocarb-hydrochloride in potatoes, 4 × 1000 g a.s./ha, 60/60/85/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.533	-	1.369	-
Short term	24 h	0.531	0.532	1.362	1.365
	2 d	0.528	0.531	1.355	1.362
Long term	4 d	0.523	0.528	1.341	1.355
	7 d	0.515	0.524	1.321	1.335
	14 d	0.497	0.515	1.275	1.321
	21 d	0.479	0.506	1.230	1.298
	28 d	0.462	0.495	1.187	1.276
	42 d	0.430	0.480	1.105	1.232
	50 d	0.413	0.471	1.061	1.208
	100 d	0.320	0.448	0.822	1.072
Plateau concentration (20 cm after year 2)		0.025	-	0.063	-
PECaccumulation (PECact + PECsoil plateau)		0.558	-	1.432	-

Table 9.1.3- 64: PECsoil of propamocarb-hydrochloride, potatoes, 4 × 1000 g a.s./ha, 4 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.200	-	0.759	-
Short term	24 h	0.190	0.199	0.755	0.757
	2 d	0.198	0.199	0.751	0.755
Long term	4 d	0.196	0.198	0.744	0.751
	7 d	0.193	0.196	0.732	0.746
	14 d	0.186	0.193	0.707	0.732
	21 d	0.180	0.190	0.682	0.720
	28 d	0.173	0.186	0.658	0.707
	42 d	0.161	0.180	0.613	0.683
	50 d	0.155	0.177	0.588	0.670
	100 d	0.120	0.157	0.456	0.595
Plateau concentration (20 cm after year 2)		0.009	-	0.035	-
PECaccumulation (PECact + PECsoil plateau)		0.209	-	0.794	-

Table 9.1.3- 65: PECsoil of propamocarb-hydrochloride, potatoes, 3 × 1000 g a.s./ha, 60/60/85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple application	
		Actual	TWA	Actual	TWA
Initial		0.533	-	1.211	-
Short term	24 h	0.531	0.532	1.205	1.208
	2 d	0.528	0.531	1.199	1.205
Long term	4 d	0.523	0.528	1.187	1.199
	7 d	0.515	0.524	1.169	1.199
	14 d	0.497	0.515	1.128	1.169
	21 d	0.479	0.506	1.088	1.149
	28 d	0.462	0.497	1.050	1.129
	42 d	0.433	0.480	0.978	1.090
	50 d	0.413	0.471	0.939	1.069
	100 d	0.320	0.418	0.738	0.949
Plateau concentration (20 cm) after year 2		0.025	-	1.056	-
PECaccumulation (PECact + PECsoil plateau)		0.558	-	1.299	-

Table 9.1.3- 66: PECsoil of propamocarb-hydrochloride, potatoes, 3 × 1000 g a.s./ha, 3 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.200	-	0.579	-
Short term	24 h	0.199	0.199	0.576	0.578
	2 d	0.198	0.199	0.573	0.576
Long term	4 d	0.196	0.198	0.568	0.573
	7 d	0.193	0.196	0.559	0.569
	14 d	0.188	0.193	0.539	0.559
	21 d	0.180	0.190	0.520	0.549
	28 d	0.173	0.186	0.502	0.540
	42 d	0.161	0.180	0.468	0.521
	50 d	0.155	0.177	0.449	0.511
	100 d	0.120	0.157	0.348	0.454
Plateau concentration (20 cm) after year 2		0.009	-	0.027	-
PECaccumulation (PECact + PECsoil plateau)		0.209	-	0.606	-

Table 9.1.3- 67: PECsoil of propamocarb-hydrochloride, potatoes, 2 × 1000 g a.s./ha, 2 × 60% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple application	
		Actual	TWA	Actual	TWA
Initial		0.533	-	1.048	-
Short term	24 h	0.531	0.532	1.043	1.045
	2 d	0.528	0.531	1.037	1.043
Long term	4 d	0.523	0.528	1.027	1.037
	7 d	0.515	0.524	1.011	1.031
	14 d	0.497	0.515	0.977	1.011
	21 d	0.479	0.506	0.942	0.994
	28 d	0.462	0.497	0.909	0.977
	42 d	0.433	0.480	0.846	0.943
	50 d	0.413	0.471	0.812	0.925
	100 d	0.320	0.418	0.630	0.821
Plateau concentration (20 cm) after year 2		0.025	-	1.048	-
PECaccumulation (PECact + PECsoil plateau)		0.558	-	1.098	-

Table 9.1.3- 68: PECsoil of propamocarb-hydrochloride, potatoes, 2 × 1000 g a.s./ha, 2 × 85% interception, 7 d app. interval

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.200	-	0.393	-
Short term	24 h	0.199	0.199	0.391	0.392
	2 d	0.198	0.199	0.389	0.391
Long term	4 d	0.196	0.198	0.385	0.389
	7 d	0.193	0.196	0.379	0.386
	14 d	0.188	0.193	0.366	0.379
	21 d	0.180	0.190	0.353	0.373
	28 d	0.173	0.186	0.341	0.366
	42 d	0.161	0.180	0.317	0.354
	50 d	0.155	0.177	0.305	0.347
	100 d	0.120	0.157	0.236	0.308
Plateau concentration (20 cm) after year 2		0.009	-	0.018	-
PECaccumulation (PECact + PECsoil plateau)		0.209	-	0.411	-

Table 9.1.3- 69: PECsoil of propamocarb-hydrochloride, potatoes, 1 × 1000 g a.s./ha, 60% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.533	-	0.533	-
Short term	24 h	0.531	0.532	0.531	0.532
	2 d	0.528	0.531	0.528	0.531
	4 d	0.523	0.528	0.523	0.528
Long term	7 d	0.515	0.524	0.515	0.524
	14 d	0.497	0.515	0.497	0.515
	21 d	0.479	0.506	0.479	0.506
	28 d	0.462	0.497	0.462	0.497
	42 d	0.431	0.480	0.431	0.480
	50 d	0.413	0.471	0.413	0.471
	100 d	0.420	0.418	0.420	0.418
Plateau concentration (20 cm after year 2)		0.025	-	0.025	-
PECaccumulation (PECact + PECsoil plateau)		0.558	-	0.558	-

Table 9.1.3- 70: PECsoil of propamocarb-hydrochloride, potatoes, 1 × 1000 g a.s./ha, 85% interception

PECsoil (mg/kg)		Potatoes			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.200	-	0.200	-
Short term	24 h	0.199	0.199	0.199	0.199
	2 d	0.198	0.199	0.198	0.199
	4 d	0.196	0.198	0.196	0.198
Long term	7 d	0.193	0.196	0.193	0.196
	14 d	0.186	0.193	0.186	0.193
	21 d	0.180	0.190	0.180	0.190
	28 d	0.173	0.186	0.173	0.186
	42 d	0.161	0.180	0.161	0.180
	50 d	0.155	0.177	0.155	0.177
	100 d	0.120	0.157	0.120	0.157
Plateau concentration (20 cm after year 2)		0.009	-	0.009	-
PECaccumulation (PECact + PECsoil plateau)		0.209	-	0.209	-

Table 9.1.3- 71: PECsoil of propamocarb-hydrochloride, lettuce, 1 × 1000 g a.s./ha, 25% interception

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple application	
		Actual	TWA	Actual	TWA
Initial		1.000	-	1.000	-
Short term	24 h	0.995	0.997	0.995	0.997
	2 d	0.990	0.995	0.990	0.995
Long term	4 d	0.980	0.990	0.980	0.990
	7 d	0.965	0.982	0.965	0.982
	14 d	0.931	0.965	0.931	0.965
	21 d	0.898	0.948	0.898	0.948
	28 d	0.867	0.932	0.867	0.932
	42 d	0.807	0.900	0.807	0.900
	50 d	0.775	0.883	0.775	0.883
	100 d	0.601	0.783	0.601	0.783
Plateau concentration (20 cm after year 2)		0.046	-	0.046	-
PECaccumulation (PECact + PECsoil plateau)		1.046	-	1.046	-

Table 9.1.3- 72: PECsoil of propamocarb-hydrochloride, lettuce, 2 × 1000 g a.s./ha, 2 × 70% interception, 7 d app. interval

PECsoil (mg/kg)		Lettuce			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.400	-	0.786	-
Short term	24 h	0.398	0.399	0.782	0.784
	2 d	0.396	0.398	0.778	0.782
Long term	4 d	0.392	0.396	0.770	0.778
	7 d	0.386	0.392	0.758	0.772
	14 d	0.372	0.386	0.732	0.759
	21 d	0.359	0.379	0.706	0.745
	28 d	0.347	0.373	0.681	0.732
	42 d	0.323	0.360	0.635	0.708
	50 d	0.310	0.353	0.609	0.694
	100 d	0.240	0.313	0.472	0.616
Plateau concentration (20 cm after year 2)		0.018	-	0.036	-
PECaccumulation (PECact + PECsoil plateau)		0.418	-	0.822	-

Overview of maximum PEC_{soil} values of propamocarb-hydrochloride for all use patterns under consideration is shown in Table 9.1.3- 73.

Table 9.1.3- 73: Maximum PEC_{soil} of propamocarb-hydrochloride for the uses assessed

Use pattern	Propamocarb-hydrochloride (mg/kg)
Potatoes, 4 × 1000 g a.s./ha	1.369
Potatoes, 4 × 1000 g a.s./ha	0.759
Potatoes, 3 × 1000 g a.s./ha	1.215
Potatoes, 3 × 1000 g a.s./ha	0.579
Potatoes, 2 × 1000 g a.s./ha	1.048
Potatoes, 2 × 1000 g a.s./ha	0.393
Potatoes, 1 × 1000 g a.s./ha	0.533
Potatoes, 1 × 1000 g a.s./ha	0.200
Lettuce, 1 × 1000 g a.s./ha	1.000
Lettuce, 2 × 1000 g a.s./ha	0.786

The accumulation potential of propamocarb-hydrochloride after long term use was also assessed, employing the larger soil depth for the calculation of the background concentration in cases where tillage is relevant. The results are presented in Table 9.1.3- 74.

Table 9.1.3- 74: PEC_{soil} of propamocarb-hydrochloride for the uses assessed, taking the effect of accumulation into account

Use pattern	PEC _{soil}	Propamocarb-hydrochloride (mg/kg)
Potatoes 4 × 1000 g a.s./ha	plateau (20 cm)	0.063
	total	1.432
Potatoes 4 × 1000 g a.s./ha	plateau (20 cm)	0.035
	total	0.794
Potatoes 3 × 1000 g a.s./ha	plateau (20 cm)	0.056
	total	1.267
Potatoes 3 × 1000 g a.s./ha	plateau (20 cm)	0.027
	total	0.606
Potatoes 2 × 1000 g a.s./ha	plateau (20 cm)	0.048
	total	1.096
Potatoes 2 × 1000 g a.s./ha	plateau (20 cm)	0.018
	total	0.411
Potatoes 1 × 1000 g a.s./ha	plateau (20 cm)	0.025
	total	0.558
Potatoes 1 × 1000 g a.s./ha	plateau (20 cm)	0.009
	total	0.209
Lettuce 1 × 1000 g a.s./ha	plateau (20 cm)	0.046
	total	1.046
Lettuce 2 × 1000 g a.s./ha	plateau (20 cm)	0.036
	total	0.822

III. Conclusion

The predicted environmental concentrations in soil (PEC_{soil}) of the active substance propamocarb-hydrochloride were calculated for use in potatoes and lettuce.

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2014) and is considered valid to assess predicted environmental concentrations in soil (PEC_{soil}) for propamocarb-hydrochloride in potatoes and lettuce.

CP 9.2 Fate and behaviour in water and sediment

CP 9.2.1 Aerobic mineralisation in surface water

For information on aerobic mineralisation in surface water studies please refer to Document MCA, Section 7.2.2.2.

CP 9.2.2 Water/sediment study

For information on water/sediment studies please refer to Document MCA, Section 7.2.2.3.

CP 9.2.3 Irradiated water/sediment study

For information on irradiated water/sediment studies please refer to Document MCA, Section 7.2.2.4.

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CP 9.2.4 Estimation of concentrations in groundwater

CP 9.2.4.1 Calculation of concentrations in groundwater

Predicted environmental concentrations in groundwater (PEC_{GW})

Data Point:	KCP 9.2.4.1/01
Report Author:	[REDACTED]
Report Year:	2003
Report Title:	Leaching risk assessment for AE C638206 and 9 of its metabolites for the use in vine and potatoes in Europe calculated with FOCUS PELMO 3.52 Code AE C638206, AE 0608000, AE C653711, AE C657188, AE 1344022, AE 1344123, AE 1388273
Report No:	C036742
Document No:	M-221319-01-1
Guideline(s) followed in study:	--
Deviations from current test guideline:	--
Previous evaluation:	yes, evaluated and accepted (DAR, 2005)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005), this modelling report was evaluated and in part, accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Additionally calculations were performed for crop use on vines which is not one of the current representative uses. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier however it is now superseded by KCP 9.2.4.1/07; [REDACTED] & [REDACTED] 2020; [M-688510-01-1](#) and KCP 9.2.4.1/08; [REDACTED] 2020; [M-688511-01-1](#)

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Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

Data Point:	KCP 9.2.4.1/02
Report Author:	[REDACTED]
Report Year:	2001
Report Title:	Leaching risk assessment for propamocarb-hydrochloride for the application to lettuce and tomato in Europe following FOCUS procedures Code: AE B06672
Report No:	C014997
Document No:	M-207713-01-1
Guideline(s) followed in study:	--
Deviations from current test guideline:	--
Previous evaluation:	yes, evaluated and accepted DAR (2005)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005), this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier.

Data Point:	KCP 9.2.4.1/05
Report Author:	[REDACTED]
Report Year:	2007
Report Title:	Predicted environmental concentrations in groundwater (PEC _{gw}) for fluopicolide and its metabolites calculated with FOCUS PEARL and FOCUS PELMO - Use in potatoes in Europe
Report No:	MPF-07/165
Document No:	M-28795-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	not applicable
Previous evaluation:	yes, evaluated and accepted Addendum 1 to the DAR (2007)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (Addendum 1 to the DAR, 2007), this modelling report was evaluated and accepted in part as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier however it is now superseded by KCP 9.2.4.1/07; [REDACTED] 2020; [M-688510-01-1](#).



Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

Data Point:	KCP 9.2.4.1/04
Report Author:	[REDACTED]
Report Year:	2008
Report Title:	Predicted environmental concentrations in groundwater (PECgw) for fluopicolide and its metabolites calculated with FOCUS PEARL and FOCUS PELMO - Use in potatoes in Europe
Report No:	MEF-08/154
Document No:	M-299223-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	not applicable
Previous evaluation:	yes, evaluated and accepted Addendum 2 to the DAR (2008)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (Addendum 2 to the DAR, 2008), this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier however it is now superseded by KCP 9.2.4.1/07; [REDACTED] 2020; [M-688510-01-1](#).

Data Point:	KCP 9.2.4.1/05
Report Author:	[REDACTED]
Report Year:	2018
Report Title:	Fluopicolide (FLC) and metabolite M-15 PECgw FOCUS PEARL and PELMO in Vines and Potato
Report No:	VC/18/09D
Document No:	M-689003-01-1
Guideline(s) followed in study:	none
Deviations from current test guideline:	Not applicable
Previous evaluation:	yes, evaluated and accepted Confirmatory Data 2018
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (Confirmatory Data, 2018), this modelling report was evaluated and accepted in part as valid. However the modelling endpoints have been superseded by new kinetic evaluations. Additionally calculations were performed for crop use on vines which is not one of the current representative uses. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier however it is now superseded by KCP 9.2.4.1/07; [REDACTED] 2020; [M-688510-01-1](#) and KCP 9.2.4.1/08; [REDACTED] 2020; [M-688511-01-1](#).

PEC_{gw} for fluopicolide

Data Point:	KCP 9.2.4.1/06
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (FLC): Core PEC _{gw} EUR - Modelling core info document for groundwater risk assessment in Europe
Report No:	VC/19/041J
Document No:	M-688396-01-1
Guideline(s) followed in study:	FOCUS Degradation Kinetics 2006 and 2014
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

This document summarises the substance data for fluopicolide and its metabolites as used for the purpose of groundwater risk assessment. The following deterministic pesticide fate models were used in the calculations:

- FOCUS PEARA
- FOCUS PELMO
- FOCUS MACRO

The parameters correspond to standard EU requirements.

Modelling reports utilising this core info document should have the substance data presented in the form as shown in Table 9.2.4- 1 and Table 9.2.4- 2.

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Table 9.2.4- 1: Compound input parameters for fluopicolide and its metabolites – without aged sorption

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03* (AE 0608000)	M-05 (AE 1344122)
Common						
Molar mass	(g/mol)	383.59	190.03	225.56	399.58	253.2
Solubility	(mg/L)	2.8	2220	115000	10	120000
at temp.	(°C)	20	20	20	20	20
Vapour pressure	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
at temp.	(°C)	20	20	20	20	20
Freundlich exponent	(-)	0.888	0.91	0.888	0.97	0.9
Plant uptake factor	(-)	0.5	0.5	0.5	0.5	0.5
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	FLC	M01	M02	M03	M05
DT50	(days)	182.0	146.0	18	17.9	23.2
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	155.3	14.0	3.3	62.0	8.1
PELMO parameters						
Substance code	(-)	Fluopicolide	M-01	M-02	M-03	M-05
Rate constant	(1/day)	0.003809	0.004748	0.433217	0.038722	0.027506
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	267.7	24.1	5.7	106.5	14.0
MACRO parameters						
Substance code	(-)	Fluopicolide	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948
Parameter	Unit	M-10 (AE 1344123)	M-11/12 (AE 1344119/ AE 1344120)	M-13 (Fluopicolide- P3)	M-14 (AE 1388273)	M-15 (AE 1413903)
Common						
Molar mass	(g/mol)	271.17	287.1	241.85	241.19	463.64
Solubility	(mg/L)	100000	1600	1000	15800	160000
at temp.	(°C)	20	20	20	20	20
Vapour pressure	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
at temp.	(°C)	20	20	20	20	20
Freundlich exponent	(-)	1.0	1.0	1.0	0.942	0.937
Plant uptake factor	(-)	0	0	0	0	0
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	M10	M11-2	M13	M14	M15
DT50	(days)	35.4	87.6	20.7	9.4	145.0
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	11	0	0	5.7	10.9
PELMO parameters						
Substance code	(-)	M-10	M-11/12	M-13	M-14	M-15
Rate constant	(1/day)	0.019540	0.007913	0.033485	0.073739	0.004780
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	1.8	0	0	9.9	18.8
MACRO parameters						
Substance code	(-)	-	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948

* Metabolite M-03 not simulated in alkaline soils

Table 9.2.4- 2: Compound input parameters for fluopicolide and metabolites – with aged sorption

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03* (AE 0608000)	M-05 (AE 1344122)
Common						
Molar mass	(g/mol)	383.59	190.03	225.56	399.58	253.2
Solubility	(mg/L)	2.8	2220	115000	10	120000
at temp.	(°C)	20	20	20	20	20
Vapour pressure	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
at temp.	(°C)	20	20	20	20	20
Freundlich exponent	(-)	0.888	0.91	0.888	0.97	0.9
Plant uptake factor	(-)	0.5	0.5	0.5	0.5	0.5
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	FLC	M01	M02	M03	M05
DT50	(days)	121.0	146.0	146.0	17.9	27.2
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	155.3	14.0	3.3	62.0	8.1
k _{des}	(1/day)	0.0356	0	0	0	0
F _{ne}	(-)	0.508	0	0	0	0
PELMO parameters						
Substance code	(-)	Fluopicolide	M-01	M-02	M-03	M-05
Rate constant	(1/day)	0.005728	0.004748	0.43217	0.038223	0.027506
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	267.7	24.1	5.7	206.9	14.0
MACRO parameters						
Substance code	(-)	Fluopicolide	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/g)	0.0948	0.0948	0.0948	0.0948	0.0948
Parameter	Unit	M-10 (AE 1344123)	M-11/12 (AE 1344119/ AE 1344120)	M-13 (Fluopicolide- P3)	M-14 (AE 1388273)	M-15 (AE 1413903)
Common						
Molar mass	(g/mol)	271.17	271.17	241.55	241.19	463.64
Solubility	(mg/L)	200000	1000	1000	15800	160000
at temp.	(°C)	20	20	20	20	20
Vapour pressure	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
at temp.	(°C)	20	20	20	20	20
Freundlich exponent	(-)	1.0	1.0	1.0	0.942	0.937
Plant uptake factor	(-)	0	0	0	0	0
Walker exponent	(-)	0.7	0	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	M10	M11-2	M13	M14	M15
DT50	(days)	35.7	87.6	20.7	9.4	145.0
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	1.1	0	0	5.7	10.9
k _{des}	(1/day)	0	0	0	0	0
F _{ne}	(-)	0	0	0	0	0
PELMO parameters						
Substance code	(-)	M-10	M-11/12	M-13	M-14	M-15
Rate constant	(1/day)	0.019580	0.007913	0.033485	0.073739	0.004780
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	1.8	0	0	9.9	18.8

MACRO parameters						
Substance code	(-)	-	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948

* Metabolite M-03 not simulated in alkaline soils

I. Materials and Methods

Calculation of the substance parameters for fluopicolide and its metabolites M-01, M-02, M-03, M-05, M-10, M-11/M-12, M-13, M-14, and M-15 is detailed as follows:

Figure 9.2.4- 1: Degradation pathway for fluopicolide in acidic soils

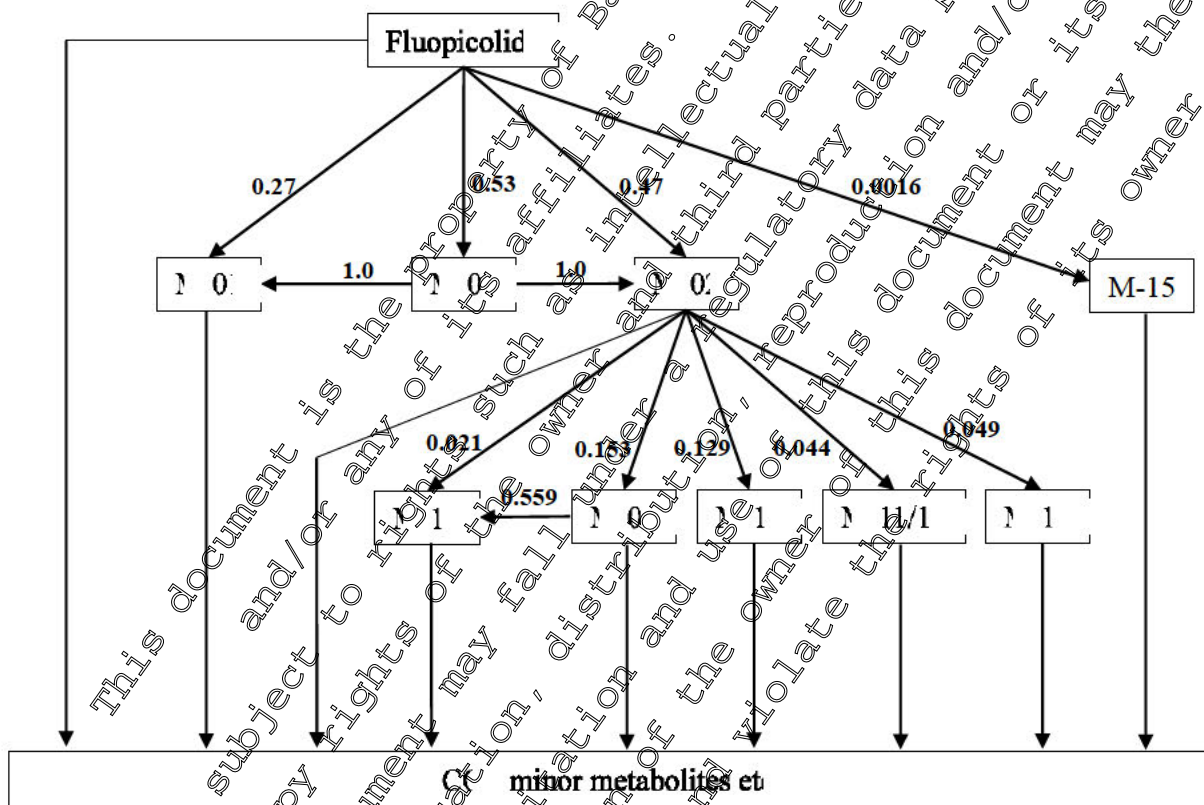


Figure 9.2.4- 2: Degradation pathway for fluopicolide in alkaline soils

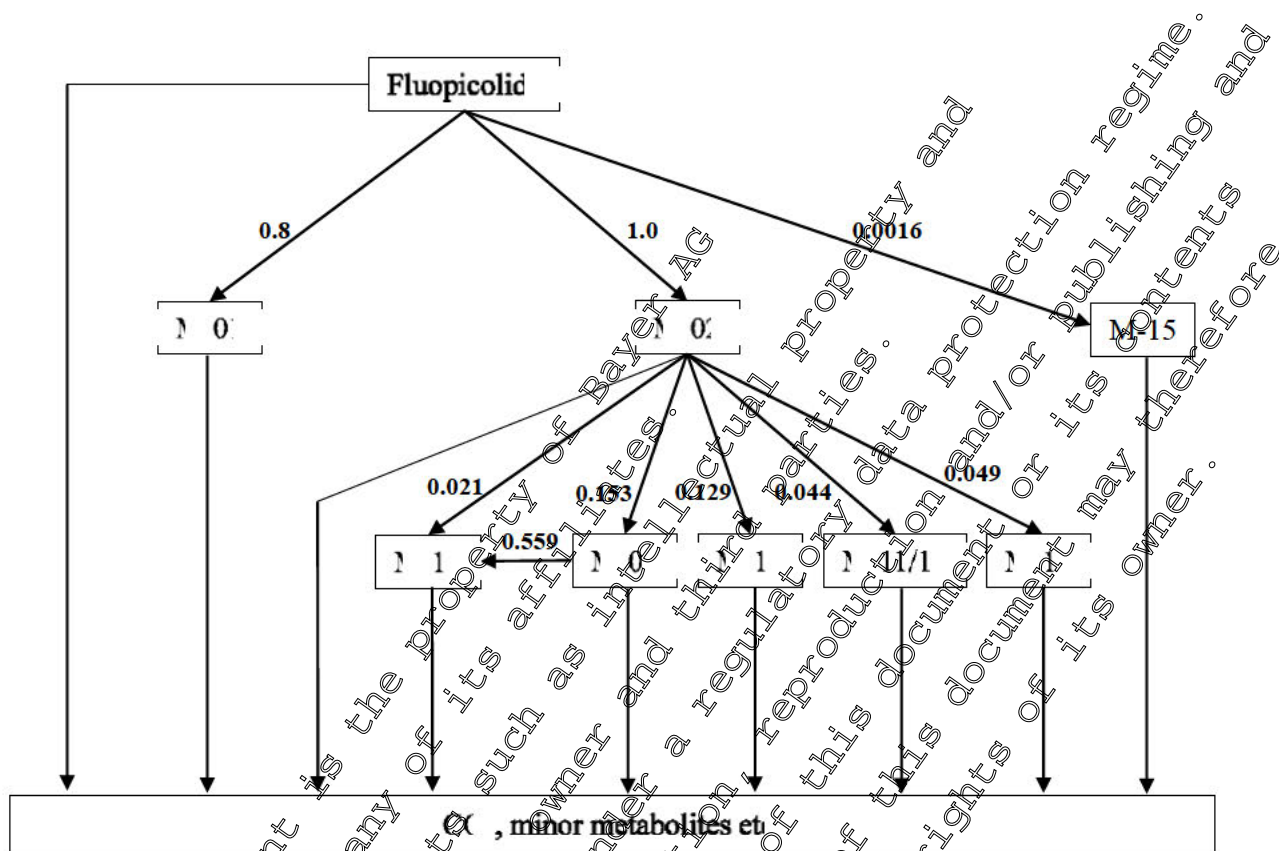


Table 9.2.4- 3: Degradation pathway related parameters for fluopicolide and its metabolites

Degradation fraction from → to (-) (FOCUS PEARL): acidic soils	FLC → M01: 0.27 FLC → M02: 0.73 FLC → M03: 0.53 FLC → M15: 0.0016 M01 → M01: 1.0 M03 → M02: 1.0 M02 → M05: 0.153 M02 → M10: 0.129 M02 → M11-2: 0.044 M02 → M13: 0.049 M02 → M14: 0.021 M05 → M14: 0.559
Degradation fraction from → to (-) (FOCUS PEARL): alkaline soils	FLC → M01: 0.8 FLC → M02: 1.0 FLC → M15: 0.0016 M02 → M05: 0.153 M02 → M10: 0.129 M02 → M11-2: 0.044 M02 → M13: 0.049 M02 → M14: 0.021 M05 → M14: 0.559
Partial DT ₅₀ /Degradation rate from → to (day or 1/day) (FOCUS PELMO) ^a : acidic soils	Pathway 1: Active Substance → M-02: 387.234 / 0.0017900 Active Substance → M-03: 343.396 / 0.0020190



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	<p>Active Substance (TDS) → M-02: 257.447 / 0.0026920 Active Substance (TDS) → M-03: 228.302 / 0.0030360 Active Substance → BR/CO2: 0 M-03 → M-02: 17.9 / 0.0387230 M-02 → M-05: 10.458 / 0.0662790 M-02 → M-10: 12.403 / 0.0558850 M-02 → M-14: 76.190 / 0.0090980 M-02 → BR/CO2: 2.296 / 0.3018930 M-05 → M-14: 45.081 / 0.0153760 M-05 → BR/CO2: 57.143 / 0.0121300 M-10 → BR/CO2: 35.4 / 0.0195800 M-14 → BR/CO2: 9.4 / 0.0737390</p> <p>Pathway 2: Active Substance → M-02: 387.234 / 0.0017900 Active Substance → M-03: 343.396 / 0.0020190 Active Substance (TDS) → M-02: 257.447 / 0.0026920 Active Substance (TDS) → M-03: 228.302 / 0.0030360 Active Substance → BR/CO2: 0 M-03 → M-02: 17.9 / 0.0387230 M-02 → M-11/12: 36.364 / 0.0190610 M-02 → M-13: 32.653 / 0.0212280 M-02 → BR/CO2: 1.764 / 0.3929410 M-11/12 → BR/CO2: 87.6 / 0.0079130 M-13 → BR/CO2: 20.7 / 0.0737390</p> <p>Pathway 3: Active Substance → M-01: 674.074 / 0.0010280 Active Substance → M-03: 343.396 / 0.0020190 Active Substance → M-05: 113750 / 6.09E-06 Active Substance → BR/CO2: 917.339 / 0.000756 Active Substance (TDS) → M-01: 448.148 / 0.0015470 Active Substance (TDS) → M-03: 228.302 / 0.0030360 Active Substance (TDS) → M-15: 75625 / 9.17E-06 Active Substance (TDS) → BR/CO2: 609.879 / 0.0011370 M-03 → M-01: 17.9 / 0.0387230 M-01 → BR/CO2: 146 / 0.0047480 M-15 → BR/CO2: 14570.0047800</p>
<p>Partial DT₅₀/Degradation rate from 0 to (day or 1/day) (FOCUS PELMO) alkaline soils</p>	<p>Pathway 1: Active Substance → M-02: 182 / 0.0038090 Active Substance (TDS) → M-02: 121 / 0.0057280 Active Substance → BR/CO2: 0 M-02 → M-05: 10.458 / 0.0662790 M-02 → M-10: 12.403 / 0.0558850 M-02 → M-14: 76.190 / 0.0090980 M-02 → BR/CO2: 2.296 / 0.3018930 M-05 → M-14: 45.081 / 0.0153760 M-05 → BR/CO2: 57.143 / 0.0121300 M-10 → BR/CO2: 35.4 / 0.0195800 M-14 → BR/CO2: 9.4 / 0.0737390</p> <p>Pathway 2: Active Substance → M-02: 182 / 0.0038090 Active Substance (TDS) → M-02: 121 / 0.0057280 Active Substance → BR/CO2: 0 M-02 → M-11/12: 36.364 / 0.0190610 M-02 → M-13: 32.653 / 0.0212280 M-02 → BR/CO2: 1.764 / 0.3929410 M-11/12 → BR/CO2: 87.6 / 0.0079130</p>

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	<p>M-13 → BR/CO2: 20.7 / 0.0737390</p> <p>Pathway 3: Active Substance → M-01: 227.500 / 0.0030470 Active Substance → M-15: 113750 / 6.09E-06 Active Substance → BR/CO2: 917.339 / 0.000756 Active Substance (TDS) → M-01: 151.480 / 0.0045836 Active Substance (TDS) → M-15: 75625 / 9.17E-06 Active Substance (TDS) → BR/CO2: 609.879 / 0.0011379 M-01 → BR/CO2: 146 / 0.0047480 M-15 → BR/CO2: 145 / 0.0047500</p>
Conversion factor from → to (-) (FOCUS MACRO) ^b : acidic soils	-
Conversion factor from → to (-) (FOCUS MACRO) ^b : alkaline soils	-

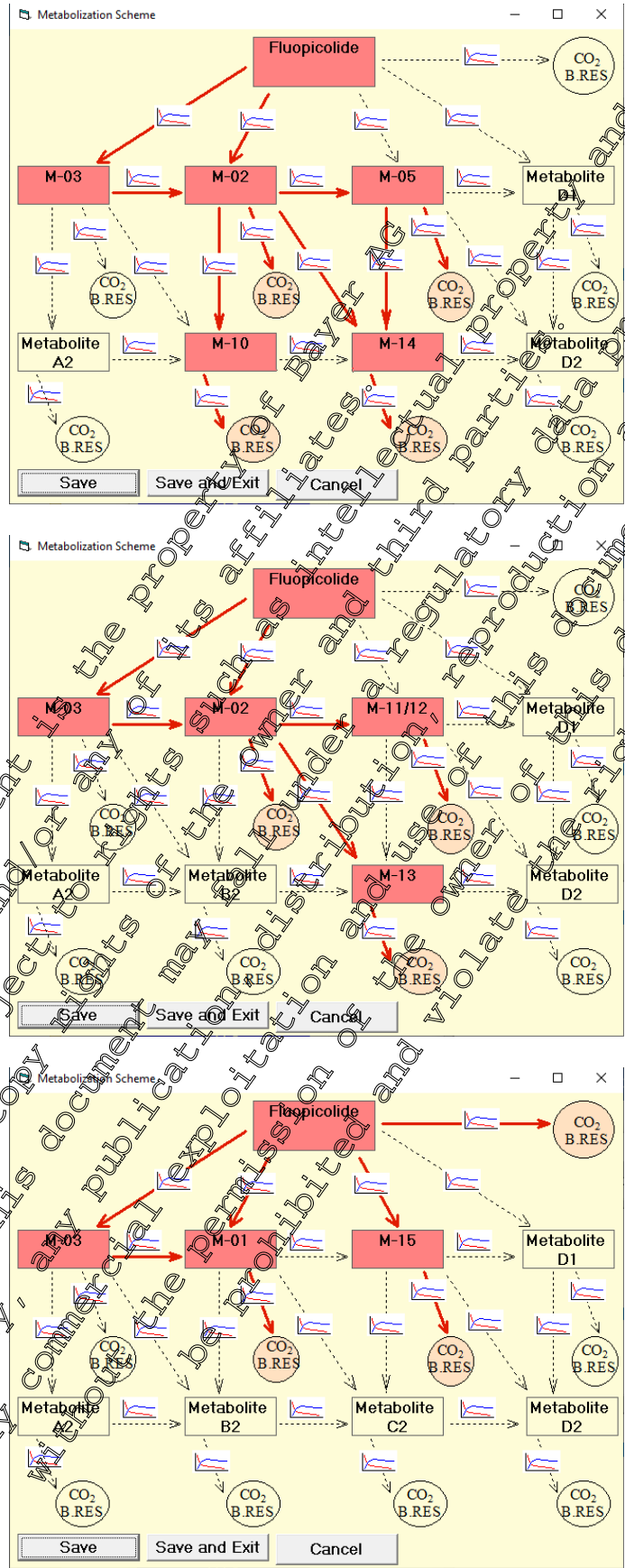
^a Calculated as $\ln(2) / DT50 \times \text{formation fraction}$

^b Calculated as $\text{molar mass} / \text{molar mass predecessor} \times \text{formation fraction}$

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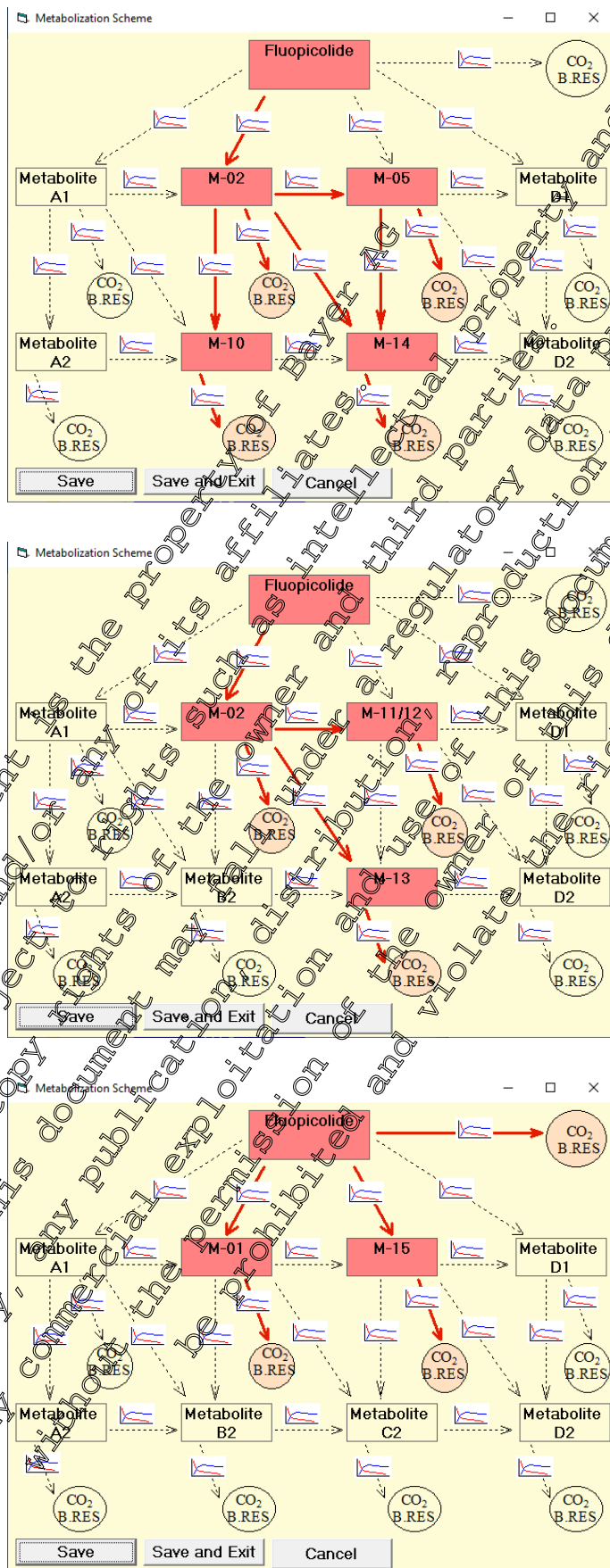
Figure 9.2.4- 3

PELMO simulation pathways for fluopicolide in acidic soils



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Figure 9.2.4- 4: PELMO simulation pathways for fluopicolide in alkaline soils

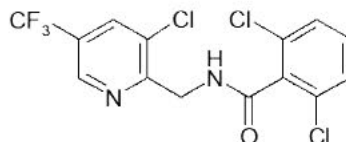


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Fluopicolide (AE C638206)

Physico-Chemical Properties

Structural formula



Common name

Fluopicolide (AE C638206)

Chemical name (IUPAC)

2,6-dichloro-N-[[3-chloro-5-(trifluoromethyl)2-pyridinyl]methyl]-benzamide

Molar mass

383.99 g mol⁻¹

Water solubility

2.8 mg L⁻¹ at 20 °C (M-234496-01-1, [REDACTED] 2003a)

Vapour pressure

3.63 × 10⁻⁶ Pa at 20 °C (M-197497-01-1, [REDACTED] 2000)

Degradation in Aerobic Soil

Laboratory studies

The aerobic degradation and metabolism of fluopicolide in soil was investigated in the laboratory by M-201230-02-1, [REDACTED] (2003); M-241049-01-1, [REDACTED] (2003a); M-241052-01-1, [REDACTED] (2003b); M-241051-01-1, [REDACTED] (2003c); M-550687-01-1, [REDACTED] (2016a); M-55570-01-1, [REDACTED] (2016b) and M-655056-01-1, [REDACTED] (2019). A summary of the modelling endpoint DegT₅₀ values derived for fluopicolide (KCA 7.1.2.1:10, M-685680-01-1, [REDACTED] 2020), normalised to 20°C and pF2, is given in Table 9.2.4.4.

Table 9.2.4. 4: Summary of DegT₅₀ values derived for fluopicolide under laboratory conditions (after M-685680-01-1, [REDACTED] 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised to 20°C and pF2 (d)
Fluopicolide	M-201230-02-1, [REDACTED] 2003	Münster	SFO	212.0	212.0
	[REDACTED] 2003	Sarotti	SFO	191.2	191.2
	M-241049-01-1, [REDACTED] 2003a	Abington (non-sterile)	SFO	348.0	340.2
	M-241051-01-1, [REDACTED] 2003b	Lamberton	SFO	1290.0	1037.9
	M-241052-01-1, [REDACTED] 2003c	Lamberton	SFO	358.0	395.8
	[REDACTED] 2003	Pikeville	DFOP	612.9 ^a / 30.1 ^b	616.0 ^a / 30.3 ^b
	[REDACTED] 2016a	Albaro/Marcomcini	DFOP	146.2 ^a / 2.8 ^b	146.2 ^a / 2.8 ^b
	[REDACTED] 2016a	Great Chishill	DFOP	312.4 ^a / 2.7 ^b	312.4 ^a / 2.7 ^b
	[REDACTED] 2016a	[REDACTED]	DFOP	155.5 ^a / 7.2 ^b	155.5 ^a / 7.2 ^b
	[REDACTED] 2016a	Mas du Coq	DFOP	216.7 ^a / 10.5 ^b	193.7 ^a / 9.4 ^b
	[REDACTED] 2016a	Parcey Meslay	DFOP	202.5 ^a / 8.1 ^b	202.5 ^a / 8.1 ^b
	[REDACTED] 2016a	Vilobi d'Onyar	DFOP	93.5 ^a / 7.8 ^b	93.5 ^a / 7.8 ^b
[REDACTED] 2016a	Dollendorf II	DFOP	111.4 ^a / 0.6 ^b	111.4 ^a / 0.6 ^b	

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised to 20°C and pF2 (d)
	M-555570-01-1, 2016b		DFOP	137.7 ^a / 4.2 ^b	137.7 ^a / 4.2 ^b
			DFOP	141.3 ^a / 6.3 ^b	141.3 ^a / 6.3 ^b
			DFOP	133.5 ^a / 9.4 ^b	133.5 ^a / 9.4 ^b
	M-655056-01-1, 2019	Abington 2	DFOP	142.1 ^a / 1.9 ^b	142.1 ^a / 1.9 ^b
		Lamberton	DFOP	176.1 ^a / 2.8 ^b	145.1 ^a / 2.3 ^b
		Lignieres	DFOP	141.4 ^a / 1.4 ^b	141.4 ^a / 1.4 ^b
		Münster	DFOP	170.1 ^a / 5.3 ^b	161.5 ^a / 3.9 ^b
		Pikeville	DFOP	155.2 ^a / 4.1 ^b	129.4 ^a / 3.5 ^b
		Sarotti 2	DFOP	161.2 ^a / 1.6 ^b	143.6 ^a / 1.4 ^b
	Geometric mean (SFO and DFOP slow phase)				

a – Pseudo-SFO value based on slow phase of decline (calculated as $\ln(2)/k_2$ and normalised if applicable)
b – Pseudo-SFO value based on fast phase of decline (calculated $\ln(2)/k_1$ and normalised if applicable)
c – Geometric mean calculated of DegT₅₀ values from Lambertons soils prior to calculation of overall geometric mean

Field Dissipation Studies

DegT₅₀ values for fluopicolide, normalised to 20°C and pF2, have been derived by M-685675-01-1, (2020a) and M-685676-01-1, (2020b) from 12 terrestrial field dissipation studies (M-651636-01-1, (2019a); M-218662-01-1, (2003); M-220477-02-1, (2003); M-234424-01-1, (2004); M-247946-01-1, (2005a); M-251338-01-1, (2005b); M-218673-01-1, (2003)). A summary of the modelling endpoint DegT₅₀ values derived for fluopicolide is given in Table 9.2.4- 5.

Table 9.2.4- 5: Summary of DegT₅₀ values (normalised to 20°C and pF2) derived for fluopicolide from terrestrial field dissipation studies (after M-685675-01-1, 2020a and M-685676-01-1, 2020b)

Soil type	Aerobic field conditions					
	Location (country)	pH (CaCl ₂)	Depth (cm)	St. (χ^2 err) (%)	Method of calculation	DegT ₅₀ (d) norm
Silt loam	Burscheid (Germany)	5.9	0-120	9.80	SFO	111.9
Clay	Great Clonshill (UK)	7.8	0-120	11.64	SFO	216.9
Sandy loam	Lignieres de Touraine (France)	6.9	0-120	4.82	SFO	158.6
Clay loam	St.Etienne du Gres (France)	8.1	0-120	4.90	SFO	303.2
Clay loam	Albano di Ronco all'Adige (Italy)		0-120	9.99	SFO	237.3
Sandy clay loam	Viloria Onyria (Spain)	6.9	0-120	6.20	SFO	166.8
Loamy sand	Philippsburg (Germany)	6.4	0-50	9.477	SFO	199.6
Sandy clay loam	Rödelsce (Germany)	7.4	0-30	21.59	SFO	146.4
Sand	Hundlosen (Germany)	4.9	0-50	15.46	SFO	168.4
Loamy sand	Valencia (Spain)	7.3	0-30	13.95	SFO	317.4
Sandy silt	Appilly (France)	7.1	0-30	11.16	SFO	144.2
Sandy silt loam	Senas (France)	7.6	0-45	9.864	SFO	136.5
Geometric mean						183

Degradation in Aerobic Soil: Overall DegT₅₀ value

Degradation half-lives for fluopicolide derived from laboratory and field dissipation studies were compared using the EFSA DegT₅₀ Endpoint Selector (EFSA, 2014). This comparison indicated that the laboratory and field DegT₅₀ values for fluopicolide should be combined.

An overall geometric mean DegT₅₀ value of **182 days** in soil was derived for fluopicolide for use in surface water calculations, including both laboratory and field data.

Plant Uptake

The plant uptake factor for fluopicolide was set to **0.5**. Residues of fluopicolide and metabolites have been found in different plants in a rotational crop study (M-240707-031, ██████████ 2003). Fluopicolide is redistributed via the xylem (acropetal systemic activity) but is not phloem mobile. TSCF calculated according to Briggs is 0.47.

The uptake of fluopicolide into potato plants has been investigated in a new study (M-698372-01-1, ██████████ 2020) and the transpiration stream concentration factor (TSCF) determined. The mean TSCF was determined as 0.71 (DA12), 0.75 (DA14) and 0.82 (DA16), thus fully supporting the use of the default value of 0.5 in the PEC_{gw} evaluations.

Adsorption

The adsorption and desorption of fluopicolide has been investigated in five studies (M-241425-01-1, ██████████ 2003b; M-233840-01-1, ██████████ 2003b; M-54194-02-1, ██████████ 2015; M-572869-01-1, ██████████ 2016; M-59521-01-1, ██████████ 2017). A summary of K_{OC} and 1/n values derived for fluopicolide from these studies is given in Table 9.2.4- 6.

A geometric mean K_{OC} value of **267.7 mL/g**, corresponding to a K_{OM} value of 155.3 mL/g (K_{OM} = K_{OC} ÷ 1.724), was used for fluopicolide in the modelling, with an arithmetic mean 1/n value of **0.888**.

Table 9.2.4- 6: Summary of sorption parameters used for fluopicolide

Study reference	Soil	Soil Code	Texture	pH	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
M-241425-01-1, ██████████ (2003b)	Pikeville Sediment	EFS-54	loam	4.5	2.0	7.73	373*	0.926*
	Pikeville, North Carolina	EFS-65	sand	4.7	0.5	1.42	283	0.924
	Abington	EFS-86	sandy loam	5	2.21	7.53 (**3.36)	341 (**151.6)	0.929 (**0.882)
	Sarotti	EFS-88	silty clay loam	7.4	0.9	3.2	356	0.905
	Münster	EFS-93	loamy sand	5.7	1.3	4.54	349	0.929
	Münster	EFS-94	loamy sand	6.2	0.2	0.21	106*	0.931*
	Münster	EFS-95	loamy sand	6.2	0.2	0.17	83*	0.951*
M-233840-01-1, ██████████ (2003b)	Philippsburg	03/02	sandy loam	6.3	0.6	1.49	248	0.841
	Senftenberg	03/03	clay loam	7.6	1.5	3.59	239	0.882
	Huntlosen	03/04	loamy sand	5.3	1.6	9.27	580	0.953
	Rodelsee	03/05	clay	7	1.5	2.59	172	0.859
M-54194-02-1, ██████████ (2015)	WuW	WuW	loam	5	1.8	4.65	258.6	0.9258
	HaH	HaH	silt loam	6.1	1.9	6.22	327.5	0.8741
	Dollendorf II,	Doll	clay loam	7.3	4.8	11.71	244.1	0.8596
		AXXa	sandy loam	6.5	1.5	4.04	269.3	0.8723

Study reference	Soil	Soil Code	Texture	pH	OC [%]	K _r (mL/g)	K _{oc} (mL/g)	1/n
M-572869-01-1 , [redacted] (2016)	Burscheid	VG08	silt loam	6.1	0.7	2.12	303.3	0.8868
	Great Chishill	ENG2	clay	7.3	2.1	5.40	257.0	0.9076
	Parcay Meslay	FR09B	loam	6.7	1.3	3.35	257.4	0.8992
	Tarascon Le Cayades	FR08	clay loam	7.6	0.9	1.84	204.9	0.8668
	Valerio Tomelini	IT09	silty clay	7.2	2.1	1.93	187.7	0.9110
	Vilobi D'Onyar	SPA01	sandy loam	6.3	0.8	2.34	292.0	0.8818
M-595721-01-1 , [redacted] (2017)	Abington	AB	sandy loam	7.3	2.6	5.6	214.7	0.868
	Lamberton	LB	loam	5.6	2.6	8.6	33.9	0.844
	Lignieres	LN	sandy loam	5.7	0.8	2.9	363.1	0.868
	Muenster	MS	loamy sand	7.2	1.2	1.4	282.6	0.916
	Pikeville	PV	loamy sand	4.5	0.8	6.2	34.6	0.873
	Sarotti	SR	silty clay loam	6.9	1.4	2.7	185.6	0.91
Arithmetic mean								0.888
Geometric mean								0.877

*excluded from calculations, **checklist value used for geometric mean and average

Aged sorption

Data from three aerobic degradation and time dependent sorption studies in sixteen soils ([M-550687-01-1](#), [redacted] 2016a; [M-555576-01-1](#), [redacted] 2016b; and [M-655056-01-1](#), [redacted] 2019) were evaluated by [M-685678-02-1](#), [redacted] (2020a). The aged sorption parameters derived for fluopicolide are summarised in Table 9.2.4.

Existing lower-tier degradation study data for fluopicolide from laboratory studies ([M-201230-02-1](#), [redacted] 2003; [M-24109-01-1](#), [redacted] 2003a; [M-241052-01-1](#), [redacted] 2003b; [M-241051-01-1](#), [redacted] 2003c and [M-685678-01-1](#), [redacted] 2020) and field studies ([M-651636-01-1](#), [redacted] 2019a; [M-685678-01-1](#), [redacted] 2020a; [M-218667-01-1](#), [redacted] 2003; [M-220477-02-1](#), [redacted] 2003; [M-23442-01-1](#), [redacted] 2004; [M-247949-01-1](#), [redacted] 2005a; [M-251338-01-1](#), [redacted] 2005b; [M-318672-01-1](#), [redacted] 2003; [M-685676-01-1](#), [redacted] 2020b) were also evaluated to derive DegT50eq values ([M-685157-01-1](#), [redacted] 2020b). When combined with the higher-tier aged-sorption values, this yielded an overall geometric mean DegT50eq of **121 days** (Table 9.2.4- 8) for use in exposure modelling, in combination with the mean aged-sorption parameters: F_{ne} **0.508** and k_{des} **0.0356 d⁻¹**.

The F_{ne} and k_{des} values require conversion for use in MACRO, resulting in $F_{neMACRO}$ **0.337** and α_{MACRO} **0.0120**.

Table 9.2.4- 7: **Aged sorption parameters derived for fluopicolide (after [M-685678-02-1](#), [redacted] 2020a)**

Soil	F_{ne} (-)	K_{des} (1/d)	DT _{50,eq} (d)	DT _{50,eq} 20°C, pF2 (d)	Evidence of aged sorption	Robust parameters
[redacted]	0.553	0.0432	80.5	80.5	Yes	Yes
Dollendorf	0.271	0.0433	98.6	98.6	Yes	Yes
[redacted]	0.632	0.0420	69.8	69.8	Yes	Yes
[redacted]	0.785	0.0467	45.4	45.4	Yes	Yes
[redacted]	0.506	0.0507	76.2	76.2	Yes	Yes
Great Chishill	0.571	0.0248	170.9	170.9	Yes	Yes

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Soil	f _{NE} (-)	K _{des} (1/d)	DT _{50,eq} (d)	DT _{50, eq} 20°C, pF2 (d)	Evidence of aged sorption	Robust parameters
Parcey Meslay	0.493	0.0524	111.0	111.0	Yes	Yes
Mas du Coq	0.514	0.0310	121.2	108.4	Yes	Yes
Albaro	0.303	0.0287	112.2	112.2	Yes	Yes
Vilobi d'Onyar	0.435	0.0575	52.2	52.2	Yes	Yes
Abington	0.289	0.0855	97.5	97.5	Yes	Yes
Lamberton	0.830	0.0145	91.2	91.6	Yes	Yes
Munster	0.524	0.0163	103.1	75.4	Yes	Yes
Pikeville	0.710	0.0319	80.2	66.8	Yes	Yes
Sarrotti	0.484	0.0534	111.5	99.3	Yes	Yes
Lignieres	0.638	0.0158	96.8	96.8	Yes	Yes
Geometric mean	0.508	0.0356		86.6	-	-

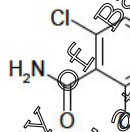
Table 9.2.4- 8: Overall DegT_{50eq} evaluation results (after M-687157-01, 2020b)

Soil	DegT _{50, eq} (days)	Derivation
[Redacted]	80.5	TDS - PEARLneq
Dollendorf	98.6	TDS - PEARLneq
[Redacted]	69.8	TDS - PEARLneq
[Redacted]	45.4	TDS - PEARLneq
[Redacted]	66.2	TDS - PEARLneq
Great Chishill	170.8	TDS - PEARLneq
Parcey Meslay	111.0	TDS - PEARLneq
Mas du Coq	108.4	TDS - PEARLneq
Albaro	112.2	TDS - PEARLneq
Vilobi d'Onyar	52.2	TDS - PEARLneq
Abington	97.5	TDS - PEARLneq
Lamberton	91.6	TDS - PEARLneq
Munster	75.4	TDS - PEARLneq
Pikeville	66.8	TDS - PEARLneq
Sarrotti	99.3	TDS - PEARLneq
Lignieres	96.8	TDS - PEARLneq
Munster	78.1	Lab Tier 1 refit
Sarrotti	138.6	Lab Tier 1 refit
Abington	256.4	Lab Tier 1 refit
Lamberton	532.5	Lab Tier 1 refit
Pikeville	295.2	Lab Tier 1 refit
Burscheid (Germany)	84.3	Field Scaling factor 1
Great Chishill (UK)	155.8	Field Scaling factor 1
Lignieres de Touraine (France)	109.8	Field Scaling factor 1
St Etienne de Grès (France)	234.2	Field Scaling factor 1
Albaro di Ronco all'Adige (Italy)	205.3	Field Scaling factor 1
Vilobi d'Onyar (Spain)	132.5	Field Scaling factor 1
Philippsburg (Germany)	158.9	Field Scaling factor 1

Soil	DegT ₅₀ , eq (days)	Derivation
Rödelsee (Germany)	109.0	Field Scaling factor 1
Huntlosen (Germany)	124.7	Field Scaling factor 1
Valencia (Spain)	234.4	Field Scaling factor 1
Appilly (France)	107.6	Field Scaling factor 1
Senas (France)	101.3	Field Scaling factor 1
Geometric mean	121	

M-01 (BAM; AE C653711)

Physico-Chemical Properties
Structural formula



Common name

M-01 (BAM; AE C653711)

Chemical name (IUPAC)

2,6-dichlorobenzamide

Molar mass

190.03 g mol⁻¹

Water solubility

2220 mg L⁻¹ at 20°C (M-502637-01-1, [redacted] 2014)

Vapour pressure

Assumed 0 Pa as worst case for modelling

Degradation in Aerobic Soil

Laboratory studies

The aerobic degradation of M-01 (BAM) in soil was investigated in the laboratory by [M-234320-01-1](#), [redacted] (2002). In addition, M-01 was observed to form from fluopicolide in six studies ([M-241049-01-1](#), [redacted] 2003a; [M-241052-01-1](#), [redacted] 2003b; [M-241051-01-1](#), [redacted] 2003c; [M-550687-01-1](#), [redacted] 2016a; [M-555570-01-1](#), [redacted] 2016b and [M-655056-01-1](#), [redacted] 2019) and from M-03 in one study ([M-241088-01-1](#), [redacted] 2003). A summary of the modelling endpoints derived for M-01 (KC₅₀ = 7.1.2.1/10⁶ [M-685680-01-1](#), [redacted] 2020) is given in Table 9.2.4- 9.

Overall formation fractions for M-01 (BAM) from fluopicolide, considering both direct formation and formation via metabolite M-03 were also derived by [M-685680-01-1](#), [redacted] (2020), and are summarised in Table 9.2.4-10. The overall arithmetic mean formation fraction of M-01 from fluopicolide was 0.8. Where metabolite M-03 was included in the groundwater simulations (i.e. for acidic soils), this was implemented by assuming a molar formation fraction of 0.27 from fluopicolide, with a molar formation fraction of 1.0 from metabolite M-03 (where f_{fm} FLC→M-03 = 0.53). Where M-03 was not included in the simulations (i.e. for alkaline soils), the molar formation fraction of M-01 from fluopicolide was set to 0.8.

Table 9.2.4- 9: Summary of modelling endpoints derived for M-01 (BAM) under laboratory conditions (after [M-685680-01-1](#), [REDACTED] 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised to 20°C and pF2 (d)
Fluopicolide	M-201230-02-1 [REDACTED] 2003	Münster	SFO	1000 ^a	1000 ^a
		Sarotti	SFO	1000 ^a	1000 ^a
	M-241049-01-1 [REDACTED] 2003a	Abington (non-sterile)	SFO	1000 ^a	1000 ^a
	M-241052-01-1 [REDACTED] 2003b	Lamberton	SFO	1000 ^a	1000 ^a
	M-241051-01-1 [REDACTED] 2003c	Lamberton	SFO	1000 ^a	1000 ^a
		Pikeville	SFO	173.0	174.0
	M-550687-01-1 [REDACTED] 2016a	Albaro/Marcocini	SFO	27.3	417.3
		Great Chishill	SFO	1000 ^a	1000 ^a
		[REDACTED]	SFO	571.7	571.7
		Was du Coq	SFO	472.2	402.2
		Parcey Meslay	SFO	908.4	908.4
	M-555570-00-1 [REDACTED] 2016b	Villevi d'Ornyar	SFO	323.9	323.9
		Dollenhoff II	SFO	159.7	159.7
	M-650056-01-1 [REDACTED] 2019	[REDACTED]	SFO	869.3	869.3
		[REDACTED]	SFO	556.2	556.2
		[REDACTED]	SFO	1000 ^a	1000 ^a
		Abington 2	SFO	175.6	175.6
		Lamberton	SFO	1000 ^a	1000 ^a
	M-650056-01-1 [REDACTED] 2019	Lignieres	SFO	1000 ^a	1000 ^a
		Münster	SFO	294.7	215.6
Pikeville		SFO	135.9	113.3	
Sarotti 2		SFO	267.1	237.9	
Betham		SFO	1858.0	2077.6	
M-01	M-244320-01-1 [REDACTED] 2002	North Dakota	SFO	568.8	913.6
M-03	M-241188-00-1 [REDACTED] 2002	Münster	SFO	1000 ^a	1000 ^a
		Pikeville	SFO	1000 ^a	1000 ^a
Geometric mean					569.5^d

a – Conservative default value
b – Pseudo-SFO value based on slow phase of decline (calculated as $\ln(2)/k_2$ and normalised if applicable)
c – Pseudo-SFO value based on fast phase of decline (calculated $\ln(2)/k_1$ and normalised if applicable)
d – Geometric mean calculated on DT₅₀ values from Lamberton soil prior to calculation of overall geometric mean.

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Table 9.2.4- 10: Overall formation fraction of M-01 (BAM) from fluopicolide

Applied compound	Study	Soil	ffm FLC→M-01	ffm FLC→M-03	ffm M-03→M-01	Overall ffm from FLC	
Fluopicolide	M-201230-02-1 [redacted] 2003	Münster	0.3914	0.6086	0.3892	0.8283	
		Sarotti	0.798	-	-	0.798	
	M-241049-01-1 [redacted] 2003a	Abington (non-sterile)	0.8406	-	-	0.8406	
	M-241052-01-1 [redacted] 2003b	Lamberton	0.7155	-	-	0.7155	
	M-241051-01-1 [redacted] 2003c	Lamberton	0.4067	0.933	-	-	
		Pikeville	1	-	-	1	
	M-550687-01-1 [redacted] 2016a	Albaro/Marcomcino	0.8262	-	-	0.8262	
		Great Chishill	0.6013	-	-	0.6013	
		[redacted]	0.8953	-	-	0.8953	
		Mas du Coq	0.8075	-	-	0.8075	
		Parco Mealay	0.8286	-	-	0.8286	
		Vilobi d'Oryar	0.9776	-	-	0.9776	
	M-555570-01-1 [redacted] 2016b	Dollendorf II	0.819	-	-	0.819	
		[redacted]	0.8773	-	-	0.8773	
		[redacted]	0.8156	-	-	0.8156	
		[redacted]	0.8022	-	-	0.8022	
	M-655028-01-1 [redacted] 2019	Abington 2	0.7879	-	-	0.7879	
		Lamberton	0.7252	-	-	0.7252	
		Orignier	0.6264	-	-	0.6264	
		Münster	0.9101	-	-	0.9101	
		Pikeville	0.39	0.4009	1	0.7909	
		Sarotti 2	0.6227	-	-	0.6227	
	Arithmetic mean						0.80^a

^a – Arithmetic mean calculated of overall formation fractions from Lamberton soil prior to calculation of overall arithmetic mean.

Field Dissipation Studies

DegT₅₀ values for M-01 (BAM), normalised to 20°C and pF2, have been derived by [M-685675-01-1](#), [redacted] (2020a) from five terrestrial field dissipation studies ([M-650733-02-1](#), [redacted] 2019b). A summary of the modelling endpoint DegT₅₀ values derived for M-01 Table 9.2.4- 11.

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Table 9.2.4- 11: Summary of DegT₅₀ values (normalised to 20°C and pF2) derived for M-01 (BAM) from terrestrial field dissipation studies (after [M-685675-01-1](#), 2020a)

Aerobic field conditions						
Soil type	Location (country)	pH (CaCl ₂)	Depth (cm)	St. (χ ² err) (%)	Method of calculation	DegT ₅₀ (d) norm
Silt loam	Burscheid (Germany)	5.9	0-120	14.68	SFO	94.0
Sandy loam	Lignieres de Touraine (France)	6.9	0-120	7.82	SFO	191.1
Clay loam	St.Etienne du Grès (France)	8.1	0-120	5.87	SFO	179.9
Clay loam	Albarodi Ronco all'Adige (Italy)	7.7	0-120	13.93	SFO	151.8
Sandy clay loam	Vilobi d'Onyar (Spain)	6.9	0-120	10.94	SFO	136.6
Geometric mean						146

Degradation in Aerobic Soil: Overall DegT₅₀ value

Degradation half-lives for M-01 (BAM) derived from laboratory and field dissipation studies were compared using the EFSA DegT₅₀ Endpoint Selector (EFSA, 2014). This comparison indicated that the field DegT₅₀ values for M-01 were significantly shorter than the laboratory studies, therefore the geometric mean field DegT₅₀ value of **146 days** was used in the modelling for M-01 (BAM).

Plant uptake

The plant uptake factor for M-01 was set to **0.5**. Residues of fluopicolide, M-01 and other metabolites have been found in different plants in a rotational crop study ([M-240707-03-1](#), 2003). M-01 is described as high xylem systemic TSCF calculated according to Briggs is 0.49. The uptake of M-01 into potato plants has been investigated in a new study ([M-688374-01-1](#), 2020b) and the transpiration stream concentration factor (TSCF) determined. The mean TSCF was determined as 0.86 (DAT2), 0.75 (DAT4) and 0.71 (DAT6), thus fully supporting the use of the default value of 0.5 in the PEC_{gw} evaluations.

Adsorption

The adsorption and desorption of M-01 (BAM) has been investigated in ten soils ([M-235837-01-1](#), 2001; [M-224926-01-2](#), 2003; [M-686388-01-1](#), 2020a). A summary of the sorption parameters derived for M-01 from these studies is given in Table 9.2.4- 12. A geometric mean K_{OC} value of **24.1 mL/g**, corresponding to a K_{OM} value of **14.0 mL/g** (K_{OM} = K_{OC} ÷ 1.724), was used for M-01 in the modelling with an arithmetic mean P_n value of **0.914**.

Table 9.2.4- 12: Summary of sorption parameters derived for M-01 (BAM)

Report reference	Soil	Soil Code	Texture	pH	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
M-235837-01-1 (2001)	Connecticut	RL-51	Sandy loam	4.8	0.9	0.241	26*	1.141*
	North Dakota	RL-81	Sandy loam	7.7	5.7	1.761	31	0.809
	Florida	RM-014	Sand	6.3	1.4	0.529	38	0.916
	Washington	RM-019	Sand	4.9	4.2	1.890	45	0.913
	California	RM-022	Sandy clay loam	6.6	0.4	0.208	51	0.972
M-224926-01-2 (2003)	Connecticut	RL-51	Sandy loam	4.8	0.9	0.359	39.9**	0.970**
M-686388-01-1 (2020a)	LUFA 2.1	2.1	sand	5.2	0.59	0.103	17.5	0.958
	LUFA 2.3	2.3	sandy loam	6.2	0.61	0.056	9.2	0.859

Report reference	Soil	Soil Code	Texture	pH	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
	LUFA 5M	5M	sandy loam	7.1	1.10	0.162	14.8	0.888°
	LUFA 6S	6S	clay loam	7.3	1.78	0.265	14.9	0.972
	Frankenforst	FF	silt loam	6.9	2.4	0.418	17.4	0.980
Geometric mean							24.1	-
Arithmetic mean							-	0.974

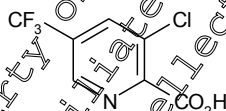
*Excluded from calculations

**Recalculated and used for calculations

M-02 (PCA; AE C657188)

Physico-Chemical Properties

Structural formula



Common name

M-02 (PCA; AE C657188)

Chemical name (IUPAC)

3-chloro-5-(trifluoromethyl)pyridine-2-carboxylic acid

Molar mass

225.56 g mol⁻¹

Water solubility

115000 mg L⁻¹ at 20°C (M-653965-01-1, [REDACTED], 2019)

Vapour pressure

Assumed 0 Pa as worst case for modelling

Degradation in Aerobic Soil

The aerobic degradation and metabolism of M-02 (PCA) in soil was investigated in the laboratory by M-219824-01-1, [REDACTED] (2003) and M-581364-01-1, [REDACTED] (2017). A summary of the modelling endpoints derived for M-02 (K_{oc} 7.2, 1.1, 1.0, M-685680-01-1, [REDACTED] 2020) is given in Table 9.2.4-13. A geometric mean DegT₅₀ value of 1.6 days was used in the modelling for M-02 (PCA).

The overall formation fraction of M-02 (PCA) from fluopicolide was set to 1.0 as a conservative assumption. Where metabolite M-03 was included in the groundwater simulations (i.e. for acidic soils), this was implemented by assuming a molar formation fraction of 0.47 from fluopicolide, with a molar formation fraction of 1.0 from metabolite M-03 (where f_{fm} FLC→M-03 = 0.53). Where M-03 was not included in the groundwater simulations (i.e. for alkaline soils), the molar formation fraction of M-02 from fluopicolide was set to 1.0.

Table 9.2.4-13: Summary of modelling endpoints derived for M-02 (PCA) under laboratory conditions (after M-685680-01-1, [REDACTED] 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised to 20°C and pF2 (d)
M-02 (PCA)	M-219824-01-1 [REDACTED] 2003	Abington	SFO	4.4	4.4
		Münster	SFO	3.5	3.5
		Sarotti	SFO	4.4	4.1

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised to 20°C and pF2 (d)
	M-581364-01-1 [redacted] 017	Dollendorf	SFO	1.1	1.1
		[redacted]	SFO	1.1	0.7
		[redacted]	SFO	0.7	0.7
		[redacted]	SFO	0.7	0.7
Geometric mean					1.6

Plant uptake

The plant uptake factor for M-02 was set to 0. Residues of fluopicolide, M-01, M-02 and other metabolites have been found in different plants in a rotational crop study (M-200707-03-1, [redacted] 2003). M-02 is described as phloem mobile.

Adsorption

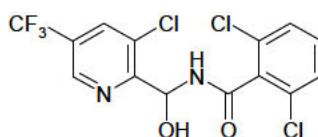
The adsorption and desorption of M-02 (PCA) has been investigated in eight soils (M-219828-01-1, [redacted] 2003; M-686387-01-1, [redacted] 2020b). A summary of the sorption parameters derived for M-02 from these studies is given in Table 9.2.4- 14. A geometric mean K_{oc} value of 5.7 mL/g, corresponding to a K_{OM} value of 3.3 mL/g ($K_{OM} = K_{oc} \div 1.724$), was used for M-02 in the modelling, with an arithmetic mean 1/n value of 0.889.

Table 9.2.4- 14: Summary of sorption parameters derived for M-02 (PCA)

Report reference	Soil	Soil Code	Texture	pH (CaCl ₂)	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
M-219828-01-1 [redacted] (2003)	Bington	06	Sandy loam	7.2	2.6	0.029	1.1	0.725
	Munster	03/07	Loamy sand	5.4	4.1	0.116	10.5	0.887
	Sarotti	03/10	Silt loam	7.5	1.3	0.082	6.3	0.709
M-686387-01-1 [redacted] (2020b)	LUF A 2.1	2.1	Sand	5.2	0.59	0.047	8.0	1.031
	LUF A 2.3	2.3	Sandy loam	6.2	0.61	0.038	6.2	0.853
	LUF A 5M	5M	Sandy loam	7.1	1.1	0.154	14.0	0.989
	LUF A 6S	6S	Clay loam	6.3	1.78	0.145	8.2	1.105
	Frankenforst	FF	Silt loam	6.9	2.4	0.059	2.5	0.814
Geometric mean							5.7	-
Arithmetic mean							-	0.889

M-03 (AE 0608000)

Physico-Chemical Properties
Structural formula



Common name

M-03 (AE 0608000)

Chemical name (IUPAC)	2,6-dichloro-N-{{3-chloro-5-(trifluoromethyl)pyridine-2-yl}(hydroxy)methyl}benzamide
Molar mass	399.58 g mol ⁻¹
Water solubility	10 mg L ⁻¹ at 20°C (M-223201-01-1, ██████████ 2003)
Vapour pressure	Assumed 0 Pa as worst case for modelling

Degradation in Aerobic Soil

The aerobic degradation and metabolism of M-03 in soil was investigated in the laboratory by M-241188-01-1, ██████████ (2003) and M-565219-01-1, ██████████ (2016a). In addition, M-03 was observed to form from fluopicolide in three studies (M-201230-02-1, ██████████ 2003; M-241052-01-1, ██████████ 2003; M-655056-01-1, ██████████ 2019). A summary of the modelling endpoints derived for M-03 (KCA 7.1.2.1.1/10, M-685680-01-1, ██████████ 2020) is given in Table 9.2.4- 15.

The half-lives derived indicate that M-03 is transient in alkaline soils, and this metabolite was therefore simulated for acidic conditions only. A geometric mean DegT₅₀ value of 17.9 days was used in the groundwater modelling, derived from acidic soils (pH < 6), with an arithmetic mean formation fraction from fluopicolide of 0.53.

Table 9.2.4- 15: Summary of modelling endpoints derived for M-03 under laboratory conditions (after M-685680-01-1, ██████████, 2020)

Applied compound	Study	Soil	Soil pH	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)	ffm from FLC
Fluopicolide	M-201230-02-1, ██████████ 2003	Münster	4.5	SFO	62.6	62.6	0.6086
	M-241052-01-1, ██████████ 2003	Lamberton	5.9	SFO	49.3	54.5	0.5933
	M-655056-01-1, ██████████ 2019	Pikeville	4.5	SFO	29.3	24.4	0.4009
M-03	M-241188-01-1, ██████████ 2003	Abington	7.2	SFO	0.1	0.1	-
		Münster	4.9	DFOP	1000 ^a	1000 ^a	-
		Pikeville	5.4	DFOP	2.7 ^b	2.2 ^b	-
	Sargol	7.1	SFO	0.1	0.08	-	
	M-565219-01-1, ██████████ 2016	Brierlow (BL)	6.0	SFO	2.5	2.5	-
Geometric mean (pH <6)						17.9^c	-
Arithmetic mean (pH <6)						-	0.53
Geometric mean (soil pH ≥6)						0.19	-
Arithmetic mean (pH ≥6)						-	-

a – DFOP k₂ parameter fixed to conservative default value

b – Pseudo-SFO DT₅₀ value derived as DT₉₀/3.32 (and normalised if applicable)

c – Geometric mean calculated for Münster soils prior to calculation of overall value

Plant uptake

As the metabolite M-03 (AE 0608000) has not been detected in the plants from rotational crop studies, the uptake factor was set to a conservative default of 0.

Adsorption

The adsorption and desorption of M-03 has been investigated in three soils by [M-221107-01-2](#), [REDACTED] (2003). A summary of the sorption parameters derived for M-03 is given in Table 9.2.4.16. A geometric mean K_{OC} value of **106.9 mL/g**, corresponding to a K_{OM} value of **62.0 mL/g** ($K_{OM} = K_{OC} \div 1.724$), was used for M-03 in the modelling, with an arithmetic mean $1/n$ value of **0.971**.

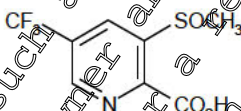
Table 9.2.4- 16: Summary of sorption parameters derived for M-03

Report reference	Soil	Soil Code	Texture	pH (CaCl ₂)	OC [%]	K_f (mL/g)	K_{oc} (mL/g)	1/n
M-221107-01-2	Ingleby	02/03	Sandy loam	4.1	3.9	2.86	81	0.961
[REDACTED]	Huntlosen	03/04	Loamy sand	4.7	1.7	2.2	193	0.012
(2003)	Munster	03/07	Loamy sand	5.4	1.1	1.3	112	0.939
Geometric mean							106.9	
Arithmetic mean								0.971

M-05 (AE 1344122)

Physico-Chemical Properties

Structural formula



Common name

M-05 (AE 1344122)

Chemical name (IUPAC)

3-methylsulfinyl-5-(trifluoromethyl)pyridine-2-carboxylic acid

Molar mass

253.29 g mol⁻¹

Water solubility

120000 mg L⁻¹ at 20°C ([M-507655-01-1](#), [REDACTED] 2015)

Vapour pressure

Assumed 0 Pa as worst case for modelling

Degradation in Aerobic Soil

The aerobic degradation and metabolism of M-05 in soil was investigated in the laboratory by [M-241410-01-2](#), [REDACTED] (2003a) and [M-51223-01-1](#), [REDACTED] (2016b). In addition, M-05 was observed to form from M-02 in two studies ([M-219824-01-1](#), [REDACTED] 2003; [M-581364-01-1](#), [REDACTED] 2017).

A summary of the modelling endpoints derived for M-05 (KCA 7.1.2.1.1/10, [M-685680-01-1](#), [REDACTED] 2020) is given in Table 9.2.4.17. A geometric mean DegT₅₀ value of **25.2 days** was used in the modelling for M-05, with an arithmetic mean molar formation fraction from M-02 of **0.153**.

Table 9.2.4- 17: Summary of modelling endpoints derived for M-05 under laboratory conditions (after [M-685680-01-1](#), [REDACTED], 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)	ff _{M-02} from M-02 (PCA)
M-02	M-219824-01-1 [REDACTED] 2003	Abington	SFO	29.4	29.4	0.2581 ^a
		Münster	SFO	172.1	172.1	0.1557 ^a
		Sarotti	SFO	45.5	42.3	0.1817
	M-581364-01-1 [REDACTED] 2017	Dollendorf	SFO	9	9	0.1528
		[REDACTED]	SFO	21.2	9.3	0.0859
		[REDACTED]	SFO	5.1	5.1	0.1038
M-05	M-241410-01-2 [REDACTED] 2003a	Abington	SFO	62.2	62.2	-
		Münster	SFO	136.1	136.1	-
		Sarotti	SFO	34.9	32.5	-
	M-565223-01-1 [REDACTED] 2016b	[REDACTED]	SFO	22.5	22.5	-
		[REDACTED]	SFO	16.8	16.8	-
		[REDACTED]	SFO	19.0	19.0	-
				Geometric mean	25.2	
				Arithmetic mean	-	0.153

a – Factored formation fraction: $ff_{M-02-ghost} \times ff_{ghost-M-02}$

Plant uptake

The plant uptake factor for M-05 (AE 134412) was set to 0. Residues of fluopicolide, M-01, M-02 and other metabolites have been found in different plants in a rotational crop study ([M-240707-03-1](#), [REDACTED] 2003).

Adsorption

The adsorption and desorption of M-05 has been investigated in seven soils by [M-241403-01-2](#), [REDACTED] (2003a) and [M-587789-01-1](#), [REDACTED] (2017). A summary of the sorption parameters derived for M-05 is given in Table 9.2.4- 18. These data indicate that the sorption of M-05 is pH-dependent, with greater sorption observed in acidic soils (pH <7).

As a conservative approach at Tier 2, a geometric mean K_{oc} value of 14.0 mL/g was used in the modelling, based on alkaline soils (pH ≥7), with a corresponding arithmetic mean 1/n value of 0.942. A corresponding K_{om} value of 8.1 mL/g was calculated by dividing the K_{oc} value by 1.724.

Table 9.2.4- 18: Summary of sorption parameters derived for M-05

Report reference	Soil	Soil Code	Texture	pH (CaCl ₂)	OC [%]	K _r (mL/g)	K _{oc} (mL/g)	1/n
M-241403-01-2 [REDACTED] (2003a)	Abington	n/a	Sandy loam	7.2	2.6	0.294	11	0.883
	Münster	n/a	Loamy sand	5.4	1.1	0.544	49	0.954
	Sarotti	n/a	Silt loam	7.7	1.3	0.218	17	0.918
M-587789-01-1 [REDACTED] (2017)	[REDACTED]	331	Sandy loam	5.3	1.9	1.4793	77.9	0.974
	[REDACTED]	329	Silt loam	6.3	2	0.4915	24.6	0.985

Report reference	Soil	Soil Code	Texture	pH (CaCl ₂)	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
	Dollendorf	330	Loam	7.3	4.5	0.6629	14.7	1.025
	[REDACTED]	327	Loamy sand	6.3	1.6	0.4671	29.2	0.98
Geometric mean (pH <7)							40	
Arithmetic mean (pH <7)							-	0.974
Geometric mean (pH ≥7)							14.0	
Arithmetic mean (pH ≥7)								0.942

M-10 (AE 1344123)

Physico-Chemical Properties

Structural formula



Common name

M-10 (AE 1344123)

Chemical name (IUPAC)

3-sulfo-5-(trifluoromethyl)pyridin-2-carboxylic acid

Molar mass

271.17 g mol⁻¹

Water solubility

100000 mg L⁻¹ at 20°C (M-517628-01-1, [REDACTED], 2015)

Vapour pressure

Assumed 0.19 as worst case for modelling

Degradation in Aerobic Soil

The aerobic degradation and metabolism of M-10 in soil was investigated in the laboratory by [M-241411-01-1](#), [REDACTED] (2003b) and [M-565224-01-1](#), [REDACTED] (2013c). In addition, M-10 was observed to form from M-02 in two studies ([M-219824-01-1](#), [REDACTED] 2003; [M-581364-01-1](#), [REDACTED], 2017).

A summary of the modelling endpoints derived for M-10 (CCA 7.1.2.1.1/10, [M-685680-01-1](#), [REDACTED], 2020) is given in Table 9.2.4-C19. A geometric mean DegT₅₀ value of **35.4 days** was used in the modelling for M-10, with an arithmetic mean molar formation fraction from M-02 of **0.129**.

Table 9.2.4-19: Summary of modelling endpoints derived for M-10 under laboratory conditions (after [M-685680-01-1](#), [REDACTED] 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)	ffm from M-02 (PCA)	
M-02 (PCA)	M-219824-01-1 [REDACTED] 2003	Abington	SFO	5.4	5.4	0.1436 ^a	
		Münster	SFO	1000 ^b	1000 ^a	0.0335	
		Sarotti	SFO	14.6	13.6	0.0796 ^a	
	M-581364-01-1 [REDACTED] 2017	Dollendorf	SFO	3.5	3.5	0.1997	
		[REDACTED]	[REDACTED]	SFO	20.2	16.8	0.1265
		[REDACTED]	[REDACTED]	SFO	88.2	88.2	0.1502
		[REDACTED]	SFO	5.8	5.8	0.1686	

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)	ff _{M-02} (PCA)
M-10	[REDACTED] 2003b	Abington	SFO	31.6	31.6	-
		Münster	SFO	241.9	241.9	-
		Sarotti	SFO	21.3	19.8	-
	M-565224-01-1 [REDACTED] 2016c	[REDACTED]	SFO	21.6	21.6	-
		[REDACTED]	SFO	83.9	83.9	-
		[REDACTED]	HS	228.8	228.8	-
				Geometric mean	35.4	-
				Arithmetic mean		0.029

a – Factored formation fraction: ff_{M-02-ghost} × ff_{ghost-M-05}

b – Conservative default value

Plant uptake

As the metabolite M-10 (AE 1344123) was not been detected in the plants from rotational crop studies, the uptake factor was set to a conservative default of 0.

Adsorption

The adsorption and desorption of M-10 has been investigated in three soils by [REDACTED] (2003b). A summary of the sorption parameters derived for M-10 is given in Table 9.2.4- 20. A geometric mean K_{oc} value of **1.8 mL/g**, corresponding to a K_{om} value of **1.1 mL/g** (K_{OM} = K_{oc} ÷ 1.724), was used for M-10 in the modelling, with a default ν_n value of **1.0**.

Table 9.2.4- 20: Summary of sorption parameters derived for M-10

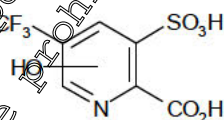
Report reference	Soil	Soil Code	Texture	pH (CaCl ₂)	OC [%]	K _r (mL/g)	K _{oc} (mL/g)	1/n	
M-241404-01-1 [REDACTED] (2003b)	Abington	n/a	Sandy loam	7.2	2.6	0.003 ^a	0.07 ^a	n/a	
	Munster	n/a	Loamy sand	5.4	1.1	0.09 ^a	8.2 ^a	n/a	
	Sarotti	n/a	Silt loam	7.5	1.3	0.14 ^a	10.7 ^a	n/a	
							Geometric mean	1.8	-

a – EFSA value

M-11 and M-12 (AE 1344119 and AE 1344120)

Physico-Chemical Properties

Structural formula



Common name

M-11 and M-12 (two isomers; AE 1344119 and AE 1344120)

Chemical name (IUPAC)

6-hydroxy-3-sulfo-5-(trifluoromethyl)pyridine-2-carboxylic acid; 4-hydroxy-3-sulfo-5-(trifluoromethyl)pyridine-2-carboxylic acid

Molar mass

287.17 g mol⁻¹

Water solubility	1000 mg L ⁻¹ at 20°C (default)
Vapour pressure	Assumed 0 Pa as worst case for modelling
Mixture of two isomers	M-11:M-12 ≈ 60:40

Degradation in Aerobic Soil

Metabolites M-11/12 were observed to form from M-02 in a study by [M-219824-01-1](#), [REDACTED] 2003.

A summary of the modelling endpoints derived for M-11/12 (KCA 7.1.2.1.1/10, [M-685680-01-1](#), [REDACTED], 2020) is given in Table 9.2.4- 21. A geometric mean DegT₅₀ value of **87.6 days** was used in the modelling for M-11/12, with an arithmetic mean molar formation fraction from M-02 of **0.044**.

Additional supporting information for M-11/12 was obtained from inverse model fitting of lysimeter study data ([M-687853-01-1](#), [REDACTED], 2020b), where an overall ffm value of 0.054 was derived considering a fixed DT₅₀ of 87.6 days.

M-11/12 is a mixture of two isomers M-11 and M-12 in the ratio M-11:M-12 ≈ 60:40. PEC_{gw} calculations are conducted for M-11/12 and the results then split in the ratio 60:40 to derive PEC_{gw} values for M-11 and M-12.

Table 9.2.4- 21: Summary of modelling endpoints derived for M-11/12 under laboratory conditions (after [M-685680-01-1](#), [REDACTED] 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)	ffm from M-02 (PCA)
M-02 (PCA)	M-219824-01-1 [REDACTED] 2003	Abington	SFO	31.7	31.7	0.0177
		Münster	SFO	242.5	242.5	0.0711
				Geometric mean	87.6	-
				Arithmetic mean		0.044

Plant uptake

As the metabolites M-11/M-12 have not been detected in the plants from rotational crop studies, the uptake factor was set to a conservative default of **0**.

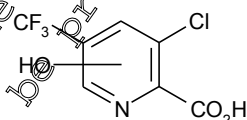
Adsorption

No reliable sorption parameters have been derived for M-11/12. A worst-case K_{OC}/K_{OM} value of **0 mL/g** was therefore used in the groundwater modelling, with a default 1/n value of **1.0**.

M-13 (Fluopicolide-P3)

Physico-Chemical Properties

Structural formula



Common name

M-13 (Fluopicolide-P3)

Chemical name (IUPAC)

3-chloro-4-hydroxy-5-(trifluoromethyl)pyridine-2-carboxylic acid; 3-chloro-6-hydroxy-5-(trifluoromethyl)pyridine-2-carboxylic acid

Molar mass

241.55 g mol⁻¹

Water solubility 1000 mg L⁻¹ at 20°C (default)

Vapour pressure Assumed 0 Pa as worst case for modelling

Degradation in Aerobic Soil

Metabolite M-13 was observed to form from M-02 in a study by [M-219824-01-1](#), [REDACTED], 2003.

A summary of the modelling endpoints derived for M-13 (KCA 7.1.2.1/10, [M-685680-01-1](#), [REDACTED], 2020) is given in Table 9.2.4- 22. A geometric mean DegT₅₀ value of **20.7 days** was used in the modelling for M-13, with an arithmetic mean molar formation fraction from M-02 of **0.049**.

Additional supporting information for M-13 was obtained from inverse model fitting of lysimeter study data ([M-687853-01-1](#), [REDACTED], 2020), where an overall f_{fm} value of 0.023 was derived considering a fixed DT₅₀ of 20.7 days.

Table 9.2.4- 22: Summary of modelling endpoints derived for M-13 under laboratory conditions (after [M-685680-01-1](#), [REDACTED], 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)	f _{fm} from M-02 (PCA)
M-02 (PCA)	M-219824-01-1 [REDACTED] 2003	Arlington	SFO	23.3	23.3	0.0667
		Münster	SFO	48.4	48.4	0.0286
		Sareff	SFO	14	14	0.0507
				Geometric mean	20.7	-
				Arithmetic mean	-	0.049

Plant uptake

As the metabolite M-13 has not been detected in the plants from rotational crop studies, the uptake factor was set to a conservative default of **0**.

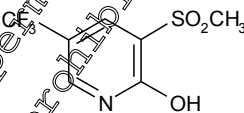
Adsorption

No reliable sorption parameters have been derived for M-13. A worst-case K_{OC}/K_{OM} value of **0 mL/g** was therefore used in the groundwater modelling, with a default 1/n value of **1.0**.

M-14 (AE 1388273)

Physico-Chemical Properties

Structural formula



Common name

M-14 (AE 1388273)

Chemical name (IUPAC)

3-Methylsulfonyl-5-(trifluoromethyl)-1H-pyridin-2-one

Molar mass

241.19 g mol⁻¹

Water solubility

15800 mg L⁻¹ at 20°C ([M-505731-01-1](#), [REDACTED], 2014)

Vapour pressure

Assumed 0 Pa as worst case for modelling

Degradation in Aerobic Soil

The aerobic degradation and metabolism of M-14 in soil was investigated in the laboratory by [M-234149-01-2](#), [redacted] (2003). In addition, M-14 was observed to form from M-05 in a study by [M-241410-01-2](#), [redacted] (2003a).

A summary of the modelling endpoints derived for M-14 (KCA 7.1.2.1.1/10, [M-685680-01-1](#), [redacted], 2020) is given in Table 9.2.4- 23. A geometric mean DegT₅₀ value of **9.4 days** was used in the modelling for M-14, along with a formation fraction of **0.559** from M-05 and **0.021** from M-02 (PCA). These values represent overall formation fractions for M-14 via metabolite M-20, which was not included in the groundwater simulations.

Table 9.2.4- 23: Summary of modelling endpoints derived for M-14 under laboratory conditions (after [M-685680-01-1](#), [redacted] 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ normalised (d)	DegT ₅₀ normalised (d)	fm from M-20 ^a
M-05	M-241410-01-2 [redacted] 2003a	Abington	SFO	16.4	16.4	1
		Sarotti	SFO	21.7	20.7	1
M-14	M-234149-01-2 [redacted] 2003	Abington	SFO	8.2	8.2	-
		Münster	SFO	8.2	8.2	-
		Sarotti (SLS)	SFO	5.8	5.4	-
Geometric mean				9.4		-
Arithmetic mean				-		1

a – Metabolite M-20 is formed from M-05 with an arithmetic mean formation fraction of 0.559 and from M-02 (PCA) with an arithmetic mean formation fraction of 0.021 ([M-685680-01-1](#), [redacted] 2020). As shown above, metabolite M-14 is formed from M-20 with a formation fraction of 1.0. The overall formation fractions of M-14 were therefore set to 0.559 and 0.021, respectively, from M-05 from M-02. Metabolite M-26 was not included in the simulations.

Plant uptake

As the metabolite M-14 (AE 1388273) has not been detected in the plants from rotational crop studies, the uptake factor was set to a conservative default of 0.

Adsorption

The adsorption and desorption of M-14 has been investigated by OECD 121 and in nine soils by [M-223531-01-2](#), [redacted] (2004), [M-572869-01-1](#), [redacted] (2016) and [M-686386-01-1](#), [redacted] (2020c). A summary of the sorption parameters derived for M-14 is given in Table 9.2.4- 24.

A geometric mean K_f value of **9.9 mL/g** corresponding to a K_{OM} value of **5.7 mL/g** (K_{OM} = K_{OC} ÷ 1.724) was used for M-14 in the modelling, with an arithmetic mean 1/n value of **0.942**.

Table 9.2.4- 24: Summary of sorption parameters derived for M-14

Report reference	Soil	Texture	pH (CaCl ₂)	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
M-223531-01-2 [redacted] (2004)	n/a	n/a	6	n/a	n/a	1.28*	n/a
	n/a	n/a	2.5	n/a	n/a	2.13*	n/a
M-572869-01-1 [redacted] (2016)	[redacted]	Loam	5	1.8	0.1765	9.8	0.964
	[redacted]	Silt loam	6.1	1.9	0.2834	14.9	0.937
	Dollendorf II	Clay loam	7.3	4.8	0.5601	11.7	0.941
	[redacted]	Sandy loam	6.5	1.5	0.1848	12.3	0.956

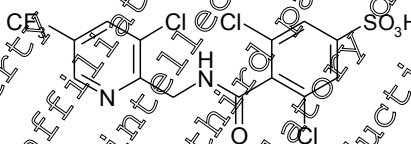
Report reference	Soil	Texture	pH (CaCl ₂)	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
M-686386-01-1 [REDACTED] (2020c)	LUFA 2.1	Sand	5.2	0.59	0.031	5.3	1.022
	LUFA 2.3	Sandy loam	6.2	0.61	0.028	4.6	0.908
	LUFA 5M	Sandy loam	7.1	1.1	0.117	10.7	0.892
	LUFA 6S	Clay loam	7.3	1.78	0.23	16.9	0.956
	Frankenforst	Silt loam	6.9	2.4	0.238	8.9	0.923
Geometric mean						9.9	
Arithmetic mean						9.9	0.942

* Excluded from calculations

M-15 (AE 1413903)

Physico-Chemical Properties

Structural formula



Common name

M-15 (AE 1413903, BCS-BA91072)

Chemical name (IUPAC)

3,5-dichloro-4-[[3-chloro-5-(trifluoromethyl)pyridine-2-yl]methyl]carbamoylbenzenesulfonic acid

Molar mass

463.64 g mol⁻¹

Water solubility

16000 mg L⁻¹ at 20 °C (M-63347-01-1, [REDACTED], 2018)

Vapour pressure

Assumed 0 Pa as worst case for modelling

Degradation in Aerobic Soil

The aerobic degradation and metabolism of M-15 in soil was investigated in the laboratory by M-585202-01-1, [REDACTED] (2016d).

A summary of the modelling endpoints derived for M-15 (KCA 7.1.2.1.1/10, M-685680-01-1, [REDACTED]) is given in Table 9.2.4-25. A geometric mean DegT₅₀ value of **145 days** was used in the modelling for M-15.

A molar formation fraction of **0.0016** from flupicolide was estimated by inverse modelling of a lysimeter study (M-687165-01-1, [REDACTED], 2020c) based on a fixed DT₅₀ of 145 days.

Table 9.2.4- 25: Summary of modelling endpoints derived for M-15 under laboratory conditions (after [M-685680-01-1](#), [REDACTED], 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)
M-15	M-585202-01-1 [REDACTED] 2016d	[REDACTED]	DFOP	172.5 ^a	172.5 ^a
		[REDACTED]	DFOP	137.9 ^a	137.9 ^a
		[REDACTED]	DFOP	139.6 ^a	139.6 ^a
		[REDACTED]	DFOP	132.4 ^a	132.4 ^a
Geometric mean				144	144

a – Pseudo-SFO value based on slow phase of decline (calculated as ln(2)/k₂)

Plant uptake

As the metabolite M-15 (AE 1413903) has not been detected in the plants from rotational crop studies, the uptake factor was set to a conservative default of 0.

Adsorption

The adsorption and desorption of M-15 has been investigated in four soils by [M-585208-01-1](#), [REDACTED] (2017). A summary of the sorption parameters derived for M-15 is given in Table 9.2.4- 26.

A geometric mean K_{oc} value of **18.8 mL/g**, corresponding to a K_{om} value of **10.9 mL/g** (K_{om} = K_{oc} ÷ 1.724), was used for M-15 in the modelling, with an arithmetic mean 1/n value of **0.937**.

Table 9.2.4- 26: Summary of sorption parameters derived for M-15

Report reference	Soil	Texture	OM (CaCl ₂)	OC [%]	C _s (mL/g)	K _{oc} (mL/g)	1/n
M-585208-01-1 [REDACTED] (2017)	[REDACTED]	loamy sand	5.4	1.8	0.431	23.9	0.953
	Dollendorf II	clay loam	7.1	5.2	0.728	14.0	0.920
	[REDACTED]	silt loam	6.0	2.4	0.500	20.8	0.923
	[REDACTED]	sandy loam	5.1	2.1	0.380	18.1	0.950
Geometric mean						18.8	-
Arithmetic mean						-	0.937

* Excluded from calculations

II. Results and Discussion

Modelling reports utilising the core info document should have the substance data presented in the form as shown in Table 9.2.4- 27 and Table 9.2.4- 28.

Table 9.2.4- 27: Compound input parameters for fluopicolide and its metabolites – without aged sorption

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03* (AE 0608000)	M-05 (AE 1344122)
Common						
Molar mass	(g/mol)	383.59	190.03	225.56	399.58	253.2
Solubility	(mg/L)	2.8	2220	115000	10	120000
at temp.	(°C)	20	20	20	20	20
Vapour pressure	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
at temp.	(°C)	20	20	20	20	20
Freundlich exponent	(-)	0.888	0.91	0.888	0.97	0.9
Plant uptake factor	(-)	0.5	0.5	0.5	0.5	0.5
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	FLC	M01	M02	M03	M05
DT50	(days)	182.0	146.0	18	17.9	23.2
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	155.3	14.0	3.3	62.0	8.1
PELMO parameters						
Substance code	(-)	Fluopicolide	M-01	M-02	M-03	M-05
Rate constant	(1/day)	0.003809	0.004748	0.433217	0.038722	0.027506
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	267.7	24.0	5.0	106.5	14.0
MACRO parameters						
Substance code	(-)	Fluopicolide	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948
Parameter	Unit	M-10 (AE 1344123)	M-11/12 (AE 1344119/ AE 1344120)	M-13 (Fluopicolide- P3)	M-14 (AE 1388273)	M-15 (AE 1413903)
Common						
Molar mass	(g/mol)	271.17	287.1	241.85	241.19	463.64
Solubility	(mg/L)	100000	1600	1000	15800	160000
at temp.	(°C)	20	20	20	20	20
Vapour pressure	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
at temp.	(°C)	20	20	20	20	20
Freundlich exponent	(-)	1.0	1.0	1.0	0.942	0.937
Plant uptake factor	(-)	0	0	0	0	0
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	M10	M11-2	M13	M14	M15
DT50	(days)	35.4	87.6	20.7	9.4	145.0
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	11	0	0	5.7	10.9
PELMO parameters						
Substance code	(-)	M-10	M-11/12	M-13	M-14	M-15
Rate constant	(1/day)	0.019540	0.007913	0.033485	0.073739	0.004780
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	1.8	0	0	9.9	18.8
MACRO parameters						
Substance code	(-)	-	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948

* Metabolite M-03 not simulated in alkaline soils

Table 9.2.4- 28: Compound input parameters for fluopicolide and metabolites – with aged sorption

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03* (AE 0608000)	M-05 (AE 1344122)
Common						
Molar mass	(g/mol)	383.59	190.03	225.56	399.58	253.2
Solubility	(mg/L)	2.8	2220	115000	10	120000
at temp.	(°C)	20	20	20	20	20
Vapour pressure	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
at temp.	(°C)	20	20	20	20	20
Freundlich exponent	(-)	0.888	0.91	0.888	0.97	0.9
Plant uptake factor	(-)	0.5	0.5	0.5	0.5	0.5
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	FLC	M01	M02	M03	M05
DT50	(days)	121.0	146.0	146.0	17.9	27.2
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	155.3	14.0	3.3	62.0	8.1
k _{des}	(1/day)	0.0356	0	0	0	0
F _{ne}	(-)	0.508	0	0	0	0
PELMO parameters						
Substance code	(-)	Fluopicolide	M-01	M-02	M-03	M-05
Rate constant	(1/day)	0.005728	0.004748	0.43217	0.038223	0.027506
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	267.7	24.1	5.7	206.9	14.0
MACRO parameters						
Substance code	(-)	Fluopicolide	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/g)	0.0948	0.0948	0.0948	0.0948	0.0948
Parameter	Unit	M-10 (AE 1344123)	M-11/12 (AE 1344119/ AE 1344120)	M-13 (Fluopicolide- P3)	M-14 (AE 1388273)	M-15 (AE 1413903)
Common						
Molar mass	(g/mol)	271.17	271.17	241.55	241.19	463.64
Solubility	(mg/L)	200000	1000	1000	15800	160000
at temp.	(°C)	20	20	20	20	20
Vapour pressure	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
at temp.	(°C)	20	20	20	20	20
Freundlich exponent	(-)	1.0	1.0	1.0	0.942	0.937
Plant uptake factor	(-)	0	0	0	0	0
Walker exponent	(-)	0.7	0	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	M10	M11-2	M13	M14	M15
DT50	(days)	35.7	87.6	20.7	9.4	145.0
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	1.1	0	0	5.7	10.9
k _{des}	(1/day)	0	0	0	0	0
F _{ne}	(-)	0	0	0	0	0
PELMO parameters						
Substance code	(-)	M-10	M-11/12	M-13	M-14	M-15
Rate constant	(1/day)	0.019580	0.007913	0.033485	0.073739	0.004780
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	1.8	0	0	9.9	18.8

MACRO parameters						
Substance code	(-)	-	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948

* Metabolite M-03 not simulated in alkaline soils

III. Conclusion

For the groundwater risk assessment of fluopicolide and its metabolites M-01, M-02, M-03, M-05, M-10, M-11/M-12, M-13, M-14, and M-15 the input parameters presented in this summary should be used in all calculations.

Assessment and conclusion by applicant:

This core modelling report was conducted according to FOCUS Degradation Kinetics (2006, 2014) and is considered valid to assess trigger and modelling endpoints for fluopicolide and its metabolites in groundwater under laboratory conditions.

Data Point:	KCP 9.2.4-07
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (FLC) and metabolites, PECgw FOCUS PEARL, PELMO and MACRO. Use as foliar application in potatoes in Europe
Report No:	NC/19/01N
Document No:	M-688510-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	Not applicable
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

Predicted environmental concentrations of the active substance fluopicolide and its metabolites M-01, M-02, M-03, M-05, M-10, M-11/M-12, M-13, M-14, and M-15 in groundwater recharge (PECgw) were calculated for the use in potatoes in Europe using the simulation models FOCUS PEARL 4.4.4 (Leistra *et al.* 2001), FOCUS PELMO 5.3 (Gene 1998; Klein 1995, 1999, 2011), and FOCUS MACRO 5.5.4 (Jarvis 1994; Jarvis and Larson 2012). PECgw were evaluated as the 80th percentile of the mean annual leachate concentration at 1 m soil depth. Model parameters and scenarios consisting of weather, soil and crop data were used as proposed by FOCUS (2014b).

I. Materials and Methods

Detailed application parameters are presented in Table 9.2.4- 29.

Table 9.2.4- 29: Application data of fluopicolide according to the use pattern in Europe

Individual crop	FOCUS crop	Rate g/ha	Interval (days)	Plant interception (%)	BBCH stage (-)	Amount reaching soil g/ha
Potatoes 1:2 years	Potatoes	4 x 100	7	60 - 85	21-89	40 - 15
Potatoes 1:3 years	Potatoes	4 x 100	7	60 - 85	21-89	40 - 15
Potatoes 1:1 years	Potatoes	3 x 100	7	60 - 85	21-89	40 - 15
Potatoes 1:2 years	Potatoes	3 x 100	7	60 - 85	21-89	40 - 15
Potatoes 1:3 years	Potatoes	3 x 100	7	60 - 85	21-89	40 - 15
Potatoes 1:1 years	Potatoes	2 x 100	7	60 - 85	21-89	40 - 15
Potatoes 1:2 years	Potatoes	2 x 100	7	60 - 85	21-89	40 - 15
Potatoes 1:3 years	Potatoes	2 x 100	7	60 - 85	21-89	40 - 15
Potatoes 1:1 years	Potatoes	1 x 100	-	60 - 85	21-89	40 - 15
Potatoes 1:2 years	Potatoes	1 x 100	-	60 - 85	21-89	40 - 15
Potatoes 1:3 years	Potatoes	1 x 100	-	60 - 85	21-89	40 - 15

The calculations were based on the maximum intended application rate together with the maximum intended number of applications per season and the minimum interval between applications (where applicable). Evaluations were conducted for annual, 2 year and 1.5 year crop rotations.

The application dates for this assessment were set with the help of the tool AppDate (Klein 2018), which proposes dates for specific crop stages (given as BBCH code) based on the crop development as defined in the FOCUS model scenarios for groundwater and surface water.

Due to the wide application window (BBCH 21-89), simulations for both Early (after emergence) and Late (before harvest) timings were evaluated (Table 9.2.4- 30).

For potatoes, BBCH21 is on average reached 19 days after crop emergence according to AppDate. Therefore, applications for the Early window were timed to start 19 days after emergence i.e. timed at 19, 26, 33 and 40 days after emergence for the 4x application GAP.

BBCH89 is on average reached 2 days before harvest according to AppDate. Therefore, applications for the Late window were timed to end 2 days before harvest i.e. timed at 23, 16, 9 and 2 days before harvest for the 4x application GAP.

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Table 9.2.4- 30: Application timing and plant intercept data of fluopicolide

Individual crop / rotation	Window	Application timing	Rate g/ha	Interval (days)	Plant interception (%)	Amount reaching soil g/ha
Potatoes 1:2 years	Early	1 st application 19 days after emergence	4 x 100	7	60/60/85/85	40/40/15/15
Potatoes 1:2 years	Late	Last application 2 days before harvest	4 x 100	7	85/85/85/85	15/15/15/15
Potatoes 1:3 years	Early	1 st application 19 days after emergence	4 x 100	7	60/60/85/85	40/40/15/15
Potatoes 1:3 years	Late	Last application 2 days before harvest	4 x 100	7	85/85/85/85	15/15/15/15
Potatoes 1:1 years	Early	1 st application 19 days after emergence	3 x 100	7	60/60/85	40/40/15
Potatoes 1:1 years	Late	Last application 2 days before harvest	3 x 100	7	85/85/85	15/15/15
Potatoes 1:2 years	Early	1 st application 19 days after emergence	3 x 100	7	60/60/85	40/40/15
Potatoes 1:2 years	Late	Last application 2 days before harvest	3 x 100	7	85/85/85	15/15/15
Potatoes 1:3 years	Early	1 st application 19 days after emergence	3 x 100	7	60/60/85	40/40/15
Potatoes 1:3 years	Late	Last application 2 days before harvest	3 x 100	7	85/85/85	15/15/15
Potatoes 1:1 years	Early	1 st application 19 days after emergence	2 x 100	7	60/60	40/40
Potatoes 1:1 years	Late	Last application 2 days before harvest	2 x 100	7	85/85	15/15
Potatoes 1:2 years	Early	1 st application 19 days after emergence	2 x 100	7	60/60	40/40
Potatoes 1:2 years	Late	Last application 2 days before harvest	2 x 100	7	85/85	15/15
Potatoes 1:3 years	Early	1 st application 19 days after emergence	2 x 100	7	60/60	40/40
Potatoes 1:3 years	Late	Last application 2 days before harvest	2 x 100	7	85/85	15/15
Potatoes 1:1 years	Early	1 st application 19 days after emergence	1 x 100	-	60	40
Potatoes 1:1 years	Late	Last application 2 days before harvest	1 x 100	-	85	15
Potatoes 1:2 years	Early	1 st application 19 days after emergence	1 x 100	-	60	40
Potatoes 1:2 years	Late	Last application 2 days before harvest	1 x 100	-	85	15
Potatoes 1:3 years	Early	1 st application 19 days after emergence	1 x 100	-	60	40
Potatoes 1:3 years	Late	Last application 2 days before harvest	1 x 100	-	85	15

Input parameter for PEC groundwater modelling are fully evaluated and derived in the Core Modelling Information document (KCP 9.2.4/06) and are summarised in Table 9.2.4- 31 and Table 9.2.4- 32.

Table 9.2.4- 31: Input parameters related to active substance fluopicolide and metabolites for PEC_{gw} calculations – with aged-sorption

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03* (AE 0608000)	M-05 (AE 1344122)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58	453.2
Solubility at temp.	(mg/L)	2.8	2220	115000	10	120000
Vapour pressure at temp.	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
Freundlich exponent	(-)	0.888	0.914	0.889	0.971	0.942
Plant uptake factor	(-)	0.5	0.5	0	0	0
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	FLC	M01	M02	M03	M05
DT50	(days)	121.0	146	1.6	17	25.2
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	155.3	4.0	3.3	2.0	8.1
k _{des}	(1/day)	0.0356	0	0	0	0
F _{ne}	(-)	0.508	0	0	0	0
PELMO parameters						
Substance code	(-)	Fluopicolide	M-01	M-02	M-03	M-05
Rate constant	(1/day)	0.005728	0.004743	0.43327	0.03873	0.027506
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	267.7	24.1	7	106.9	14.0
MACRO parameters						
Substance code	(-)	Fluopicolide	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temp	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948
Parameter	Unit	M-10 (AE 1344123)	M-11/12 (AE 1344119/ AE 1344120)	M-13 (Fluopicolide- P3)	M-14 (AE 1388273)	M-15 (AE 1413903)
Molar mass	(g/mol)	271.17	287.17	241.55	241.19	463.64
Solubility at temp.	(mg/L)	100000	1000	1000	15800	160000
Vapour pressure at temp.	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
Freundlich exponent	(-)	1.7	1.0	1.0	0.942	0.937
Plant uptake factor	(-)	0	0	0	0	0
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	M10	M11/12	M13	M14	M15
DT50	(days)	35.4	87.6	20.7	9.4	145.0
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	1.1	0	0	5.7	10.9
k _{des}	(1/day)	0	0	0	0	0
F _{ne}	(-)	0	0	0	0	0
PELMO parameters						
Substance code	(-)	M-10	M-11/12	M-13	M-14	M-15
Rate constant	(1/day)	0.019580	0.007913	0.033485	0.073739	0.004780
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	1.8	0	0	9.9	18.8
MACRO parameters						
Substance code	(-)	-	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temp	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948

* Metabolite M-03 not simulated in alkaline soils



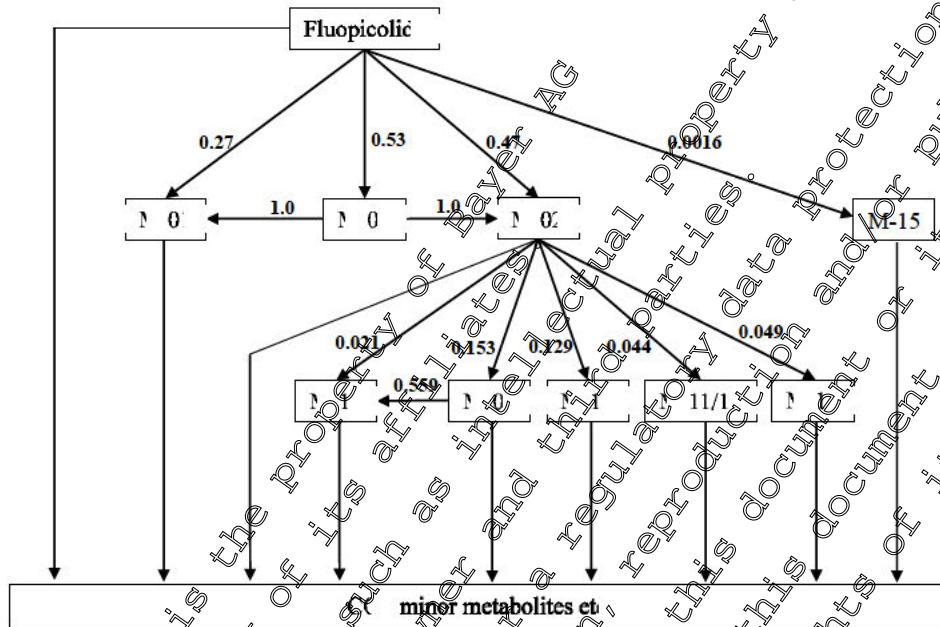
Table 9.2.4- 32: Input parameters related to active substance fluopicolide and metabolites for PECgw calculations – without aged-sorption

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03* (AE 0608000)	M-05 (AE 1344122)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58	453.2
Solubility at temp.	(mg/L) (°C)	2.8 20	2220 20	115000 20	10 20	120000 20
Vapour pressure at temp.	(Pa) (°C)	0 (default) 20	0 (default) 20	0 (default) 20	0 (default) 20	0 (default) 20
Freundlich exponent	(-)	0.888	0.914	0.889	0.971	0.947
Plant uptake factor	(-)	0.5	0.5	0	0	0
Walker exponent	(-)	0.7	0	0	0	0
PEARL parameters						
Substance code	(-)	FLC	M01	M02	M03	M05
DT50	(days)	182.0	146.6	1.6	17.6	25.2
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	155.3	14.0	3.3	62.0	8.1
PELMO parameters						
Substance code	(-)	Fluopicolide	M-01	M-02	M-03	M-05
Rate constant	(1/day)	0.003809	0.004748	0.43217	0.038723	0.027506
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	267.7	24.1	5.7	106.9	14.0
MACRO parameters						
Substance code	(-)	Fluopicolide	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948
Parameter	Unit	M-10 (AE 1344123)	M-11/12 (AE 1344119/ AE 1344120)	M-13 (Fluopicolide- P)	M-14 (AE 1388273)	M-15 (AE 1413903)
Molar mass	(g/mol)	201.17	281.17	231.55	241.19	463.64
Solubility at temp.	(mg/L) (°C)	100000 20	1000 20	1000 20	15800 20	160000 20
Vapour pressure at temp.	(Pa) (°C)	0 (default) 20	0 (default) 20	0 (default) 20	0 (default) 20	0 (default) 20
Freundlich exponent	(-)	1.0	1.0	1.0	0.942	0.937
Plant uptake factor	(-)	0	0	0	0	0
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	M10	M11	M13	M14	M15
DT50	(days)	35.7	87.6	20.7	9.4	145.0
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	1.1	0	0	5.7	10.9
PELMO parameters						
Substance code	(-)	M-10	M-11/12	M-13	M-14	M-15
Rate constant	(1/day)	0.009580	0.007913	0.033485	0.073739	0.004780
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	1.8	0	0	9.9	18.8
MACRO parameters						
Substance code	(-)	-	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948

* Metabolite M-03 not simulated in alkaline soils

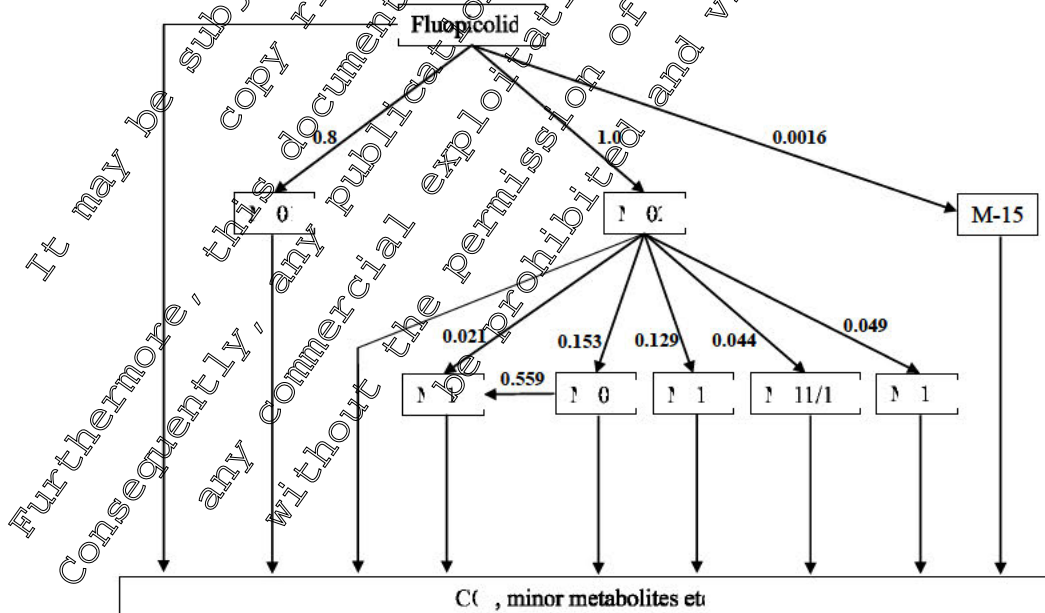
In acidic soils, the principle breakdown of fluopicolide in soil proceeds via formation of the M-03 metabolite, which splits to form the M-01 and M-02 metabolites, with M-01 and M-02 additionally being formed direct from fluopicolide [Figure 9.2.4- 6].

Figure 9.2.4- 5: Degradation pathway for fluopicolide in acidic soils



In alkaline soils, degradation of M-03 is very rapid ($DT_{50} < 1$ day) and no kinetic formation information can be derived. Therefore, simulations for alkaline soil conditions are made assuming only direct formation of M-01 and M-02 from fluopicolide [Figure 9.2.4- 7].

Figure 9.2.4- 6: Degradation pathway for fluopicolide in alkaline soils



These two pathways can be fully parameterised directly in FOCUS PEARL 4.4.4. However, due to the pathway limitations in FOCUS PELMO 5.5.3, three separate evaluations are required for each. Aged-sorption is significant for fluopicolide, and thus two sets of evaluations are conducted – with/without the use of aged-sorption. Thus, for PEARL four sets of model evaluations are conducted per MAP, whereas twelve sets of model evaluations are required for PELMO.

Table 9.2.4- 33: Degradation pathway related parameters for fluopicolide and its metabolites

Degradation fraction from → to (-) (FOCUS PEARL): acidic soils	FLC → M01: 0.27 FLC → M02: 0.47 FLC → M03: 0.53 FLC → M10: 0.0016 M03 → M01: 1.0 M03 → M02: 1.0 M02 → M05: 0.153 M02 → M10: 0.129 M02 → M11-2: 0.044 M02 → M13: 0.049 M02 → M14: 0.021 M05 → M14: 0.559
Degradation fraction from → to (-) (FOCUS PEARL): alkaline soils	FLC → M01: 0.8 FLC → M02: 1.0 FLC → M10: 0.0016 M02 → M05: 0.153 M02 → M10: 0.129 M02 → M11-2: 0.044 M02 → M13: 0.049 M02 → M14: 0.021 M05 → M14: 0.559
Partial DT ₅₀ /Degradation rate from → to (day or 1/day) (FOCUS PELMO): acidic soils	Pathway 1: Active Substance → M-02: 387.234 / 0.0017900 Active Substance → M-03: 343.396 / 0.0020190 Active Substance (TDS) → M-02: 257.447 / 0.0026920 Active Substance (TDS) → M-03: 228.302 / 0.0030360 Active Substance → BR/CO2: 0 M-03 → M-02: 17.9 / 0.0387230 M-02 → M-05: 10.458 / 0.0662790 M-02 → M-10: 12.403 / 0.0558850 M-02 → M-14: 76.190 / 0.0090980 M-02 → BR/CO2: 2.296 / 0.3018930 M-05 → M-10: 45.081 / 0.0153760 M-05 → BR/CO2: 57.143 / 0.0121300 M-10 → BR/CO2: 35.4 / 0.0195800 M-14 → BR/CO2: 9.4 / 0.0737390 Pathway 2: Active Substance → M-02: 387.234 / 0.0017900 Active Substance → M-03: 343.396 / 0.0020190 Active Substance (TDS) → M-02: 257.447 / 0.0026920 Active Substance (TDS) → M-03: 228.302 / 0.0030360 Active Substance → BR/CO2: 0 M-03 → M-02: 17.9 / 0.0387230 M-02 → M-11/12: 36.364 / 0.0190610 M-02 → M-13: 32.653 / 0.0212280 M-02 → BR/CO2: 1.764 / 0.3929410 M-11/12 → BR/CO2: 87.6 / 0.0079130 M-13 → BR/CO2: 20.7 / 0.0737390

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	<p>Pathway 3: Active Substance → M-01: 674.074 / 0.0010280 Active Substance → M-03: 343.396 / 0.0020190 Active Substance → M-15: 113750 / 6.09E-06 Active Substance → BR/CO2: 917.339 / 0.000756 Active Substance (TDS) → M-01: 448.148 / 0.0015470 Active Substance (TDS) → M-03: 228.302 / 0.0030366 Active Substance (TDS) → M-15: 75625 / 9.17E-06 Active Substance (TDS) → BR/CO2: 609.879 / 0.0011370 M-03 → M-01: 17.9 / 0.0387230 M-01 → BR/CO2: 146 / 0.0047480 M-15 → BR/CO2: 145 / 0.0047800</p>
<p>Partial DT₅₀/Degradation rate from → to (day or 1/day) (FOCUS PELMO)^a: alkaline soils</p>	<p>Pathway 1: Active Substance → M-02: 182 / 0.0038090 Active Substance (TDS) → M-02: 121 / 0.0057280 Active Substance → BR/CO2: 0 M-02 → M-05: 10.458 / 0.0662790 M-02 → M-10: 2.403 / 0.0558850 M-02 → M-14: 76.190 / 0.0090980 M-02 → BR/CO2: 2.296 / 0.3018930 M-05 → M-14: 45.081 / 0.0153760 M-05 → BR/CO2: 57.445 / 0.0421300 M-10 → BR/CO2: 35.3 / 0.0495800 M-14 → BR/CO2: 9.4 / 0.0737390</p> <p>Pathway 2: Active Substance → M-02: 182 / 0.0038090 Active Substance (TDS) → M-02: 121 / 0.0057280 Active Substance → BR/CO2: 0 M-02 → M-11/12: 36.364 / 0.0190610 M-02 → M-13: 32.600 / 0.0212280 M-02 → BR/CO2: 1.764 / 0.3929470 M-11/12 → BR/CO2: 87.8 / 0.0079130 M-13 → BR/CO2: 20.0 / 0.0737390</p> <p>Pathway 3: Active Substance → M-01: 227.500 / 0.0030470 Active Substance → M-15: 113750 / 6.09E-06 Active Substance → BR/CO2: 917.339 / 0.000756 Active Substance (TDS) → M-01: 151.250 / 0.0045830 Active Substance (TDS) → M-15: 75625 / 9.17E-06 Active Substance (TDS) → BR/CO2: 609.879 / 0.0011370 M-01 → BR/CO2: 146 / 0.0047480 M-15 → BR/CO2: 145 / 0.0047800</p>
<p>Conversion factor from → to (-) (FOCUS MACRO)^b: acidic soils</p>	
<p>Conversion factor from → to (-) (FOCUS MACRO)^b: alkaline soils</p>	

^a Calculated as $(2) / DT_{50} \times \text{formation fraction}$

^b Calculated as $\text{molar mass} / \text{molar mass predecessor} \times \text{formation fraction}$

Plant uptake parameters, in different leaching models, define the ability of plant roots to transport a solute into the plant, in comparison to the water uptake (that is, the ratio between pesticide mass uptake flux and water volume uptake flux, normalised to the aqueous concentration of the pesticide outside the root). For fluopicolide and M-01 the plant uptake factor was set to the value of 0.5; for all the other metabolites the plant uptake factors were set at 0.

M-11/12 is a mixture of two isomers M-11 and M-12 in the ratio M-11:M-12 ≈ 60:40. PEC_{gw} calculations are conducted for M-11/12 and the results then split in the ratio 60:40 to derive PEC_{gw} values for M-11 and M-12. Groundwater simulations using MACRO 5.5.4 was carried out for flupicolide only.

Following the proposal of the FOCUS working group on groundwater scenarios (FOCUS 2014b), the concentrations in the percolate at 1 m depth were evaluated. This shallow depth reflects a worst case with respect to the assessment of a potential groundwater contamination. The effective long-term groundwater concentrations will be even lower due to dilution in the upper groundwater layer.

II. Results and Discussion

Overview of the PEC_{gw} values obtained with individual FOCUS models is given in Table 9.2.4- 34 to Table 9.2.4- 37 (PEARL), Table 9.2.4- 38 to Table 9.2.4- 41 (PELMO).

Table 9.2.4- 34: Maximum FOCUS PEARL PEC_{gw} results of flupicolide and its metabolites in µg/L for the uses assessed – acidic soils, with aged-sorption

Use pattern	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
	FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
4X Early 1:2 years	0.042	3.453	0.013	0.040	0.288	0.962	0.442	0.275	0.231	0.093	0.022
4X Late 1:2 years	0.018	1.785	0.005	0.020	0.152	0.532	0.237	0.158	0.125	0.050	0.012
4X Early 1:3 years	0.023	2.195	0.008	0.024	0.185	0.599	0.237	0.158	0.148	0.061	0.014
4X Late 1:3 years	0.010	1.189	0.004	0.012	0.100	0.334	0.133	0.087	0.081	0.032	0.007
3X Early 1:1 years	0.096	6.099	0.021	0.080	0.516	1.699	0.740	0.493	0.423	0.166	0.040
3X Late 1:1 years	0.034	2.790	0.009	0.034	0.237	0.802	0.351	0.234	0.193	0.076	0.019
3X Early 1:2 years	0.033	2.962	0.011	0.034	0.246	0.829	0.355	0.237	0.199	0.080	0.019
3X Late 1:2 years	0.011	1.316	0.004	0.014	0.112	0.398	0.178	0.119	0.093	0.036	0.009
3X Early 1:3 years	0.018	1.879	0.006	0.020	0.158	0.517	0.205	0.137	0.128	0.052	0.012
3X Late 1:3 years	0.006	0.880	0.003	0.008	0.074	0.250	0.098	0.065	0.061	0.024	0.006
2X Early 1:1 years	0.073	5.095	0.017	0.064	0.428	1.429	0.623	0.415	0.356	0.138	0.034
2X Late 1:1 years	0.028	1.818	0.005	0.020	0.152	0.533	0.236	0.156	0.128	0.050	0.012
2X Early 1:2 years	0.025	2.470	0.008	0.027	0.205	0.690	0.299	0.199	0.167	0.066	0.016
2X Late 1:2 years	0.006	0.858	0.002	0.008	0.072	0.264	0.119	0.079	0.062	0.024	0.006
2X Early 1:3 years	0.024	1.566	0.005	0.016	0.131	0.435	0.173	0.115	0.108	0.043	0.010
2X Late 1:3 years	0.003	0.375	0.001	0.005	0.047	0.166	0.065	0.043	0.040	0.016	0.004
1X Early 1:1 years	0.025	2.438	0.007	0.027	0.205	0.712	0.312	0.208	0.177	0.066	0.016
1X Late 1:1 years	0.005	0.876	0.002	0.008	0.071	0.265	0.117	0.078	0.064	0.024	0.006
1X Early 1:2 years	0.008	1.486	0.003	0.011	0.097	0.346	0.149	0.099	0.083	0.032	0.008
1X Late 1:2 years	0.002	0.416	0.001	0.003	0.034	0.131	0.059	0.040	0.031	0.011	0.003
1X Early 1:3 years	0.004	0.751	0.002	0.007	0.061	0.217	0.086	0.057	0.054	0.021	0.005
1X Late 1:3 years	0.001	0.271	0.001	0.002	0.022	0.083	0.033	0.022	0.020	0.007	0.002

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Table 9.2.4- 35: Maximum FOCUS PEARL PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – acidic soils, without aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL										
	FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
4X Early 1:2 years	0.243	3.501	0.021	0.088	0.310	0.988	0.413	0.275	0.239	0.098	0.021
4X Late 1:2 years	0.118	1.825	0.010	0.045	0.166	0.544	0.236	0.158	0.127	0.052	0.012
4X Early 1:3 years	0.143	2.236	0.012	0.052	0.203	0.602	0.236	0.458	0.150	0.065	0.014
4X Late 1:3 years	0.068	1.215	0.006	0.028	0.109	0.337	0.130	0.087	0.083	0.034	0.008
3X Early 1:1 years	0.500	6.188	0.039	0.163	0.548	0.737	0.737	0.491	0.425	0.175	0.041
3X Late 1:1 years	0.201	2.878	0.017	0.071	0.256	0.823	0.351	0.234	0.194	0.080	0.019
3X Early 1:2 years	0.197	3.008	0.017	0.074	0.265	0.851	0.356	0.237	0.206	0.084	0.019
3X Late 1:2 years	0.079	1.348	0.007	0.032	0.121	0.407	0.177	0.118	0.095	0.039	0.009
3X Early 1:3 years	0.116	1.920	0.010	0.043	0.174	0.518	0.204	0.136	0.129	0.055	0.012
3X Late 1:3 years	0.046	0.901	0.004	0.019	0.080	0.252	0.098	0.065	0.062	0.023	0.006
2X Early 1:1 years	0.394	5.179	0.032	0.132	0.456	1.460	0.621	0.404	0.358	0.146	0.034
2X Late 1:1 years	0.115	1.883	0.010	0.044	0.166	0.546	0.234	0.156	0.129	0.052	0.012
2X Early 1:2 years	0.154	2.512	0.014	0.059	0.220	0.715	0.299	0.200	0.173	0.070	0.016
2X Late 1:2 years	0.045	0.880	0.004	0.019	0.078	0.270	0.118	0.070	0.063	0.025	0.006
2X Early 1:3 years	0.091	1.605	0.008	0.035	0.144	0.436	0.172	0.115	0.109	0.046	0.010
2X Late 1:3 years	0.026	0.590	0.002	0.012	0.052	0.188	0.065	0.043	0.041	0.016	0.004
1X Early 1:1 years	0.152	2.509	0.013	0.056	0.218	0.724	0.310	0.207	0.178	0.070	0.016
1X Late 1:1 years	0.043	0.903	0.004	0.019	0.079	0.271	0.117	0.078	0.063	0.025	0.006
1X Early 1:2 years	0.059	1.210	0.005	0.025	0.105	0.355	0.140	0.100	0.085	0.034	0.008
1X Late 1:2 years	0.016	0.425	0.002	0.008	0.037	0.124	0.059	0.039	0.031	0.012	0.003
1X Early 1:3 years	0.034	0.776	0.003	0.015	0.068	0.218	0.086	0.057	0.054	0.022	0.005
1X Late 1:3 years	0.009	0.286	0.001	0.005	0.025	0.083	0.032	0.020	0.020	0.008	0.002

Table 9.2.4- 36: Maximum FOCUS PEARL PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – alkaline soils, with aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL										
	FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
4X Early 1:2 years	0.042	3.346	0.009	0.268	0.088	0.405	0.270	0.227	0.950	0.022	
4X Late 1:2 years	0.018	1.739	0.004	0.144	0.048	0.237	0.158	0.125	0.530	0.012	
4X Early 1:3 years	0.023	2.407	0.006	0.172	0.058	0.237	0.158	0.148	0.599	0.014	
4X Late 1:3 years	0.010	0.748	0.003	0.094	0.051	0.174	0.087	0.080	0.327	0.007	
3X Early 1:1 years	0.096	2.887	0.012	0.477	0.157	0.740	0.493	0.424	1.701	0.040	
3X Late 1:1 years	0.034	2.706	0.005	0.222	0.073	0.349	0.233	0.195	0.792	0.019	
3X Early 1:2 years	0.033	2.808	0.007	0.228	0.075	0.349	0.233	0.195	0.818	0.019	
3X Late 1:2 years	0.017	1.281	0.003	0.105	0.036	0.178	0.119	0.094	0.396	0.009	
3X Early 1:3 years	0.018	1.803	0.004	0.146	0.049	0.205	0.137	0.128	0.517	0.012	
3X Late 1:3 years	0.006	0.847	0.002	0.069	0.023	0.098	0.065	0.060	0.245	0.006	
2X Early 1:1 years	0.073	4.906	0.009	0.395	0.131	0.623	0.415	0.356	1.431	0.034	
2X Late 1:1 years	0.008	1.764	0.003	0.143	0.048	0.233	0.155	0.129	0.526	0.012	
2X Early 1:2 years	0.025	2.393	0.006	0.190	0.062	0.294	0.196	0.164	0.688	0.016	
2X Late 1:2 years	0.006	0.833	0.002	0.068	0.023	0.119	0.079	0.062	0.263	0.006	
2X Early 1:3 years	0.014	1.502	0.004	0.121	0.041	0.173	0.115	0.107	0.435	0.010	
2X Late 1:3 years	0.003	0.551	0.001	0.044	0.015	0.065	0.043	0.040	0.163	0.004	
1X Early 1:1 years	0.025	2.356	0.003	0.185	0.063	0.311	0.208	0.177	0.714	0.016	
1X Late 1:1 years	0.005	0.848	0.001	0.067	0.023	0.116	0.078	0.064	0.262	0.006	
1X Early 1:2 years	0.008	1.148	0.002	0.090	0.030	0.146	0.098	0.081	0.342	0.008	
1X Late 1:2 years	0.002	0.402	0.001	0.032	0.011	0.060	0.040	0.031	0.131	0.003	
1X Early 1:3 years	0.004	0.722	0.001	0.057	0.019	0.086	0.057	0.053	0.217	0.005	
1X Late 1:3 years	0.001	0.266	0.000	0.021	0.007	0.033	0.022	0.020	0.081	0.002	

Table 9.2.4- 37: Maximum FOCUS PEARL PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – alkaline soils, without aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL									
	FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
4X Early 1:2 years	0.243	3.415	0.016	0.290	0.975	0.406	0.271	0.234	0.094	0.020
4X Late 1:2 years	0.118	1.782	0.008	0.157	0.541	0.238	0.158	0.128	0.051	0.002
4X Early 1:3 years	0.143	2.172	0.009	0.190	0.602	0.237	0.158	0.149	0.062	0.014
4X Late 1:3 years	0.068	1.186	0.004	0.104	0.331	0.130	0.087	0.081	0.033	0.008
3X Early 1:1 years	0.500	6.035	0.026	0.517	1.700	0.737	0.491	0.427	0.167	0.049
3X Late 1:1 years	0.201	2.797	0.011	0.244	0.841	0.349	0.233	0.195	0.070	0.019
3X Early 1:2 years	0.197	2.928	0.013	0.248	0.840	0.350	0.233	0.202	0.080	0.019
3X Late 1:2 years	0.079	1.314	0.005	0.115	0.404	0.173	0.119	0.095	0.037	0.009
3X Early 1:3 years	0.116	1.864	0.007	0.162	0.519	0.204	0.136	0.129	0.053	0.014
3X Late 1:3 years	0.046	0.878	0.003	0.026	0.248	0.098	0.065	0.060	0.020	0.006
2X Early 1:1 years	0.394	5.042	0.021	0.430	1.452	0.621	0.414	0.369	0.139	0.034
2X Late 1:1 years	0.115	1.821	0.007	0.157	0.538	0.233	0.155	0.129	0.050	0.012
2X Early 1:2 years	0.154	2.445	0.010	0.207	0.700	0.294	0.196	0.169	0.067	0.016
2X Late 1:2 years	0.045	0.856	0.003	0.070	0.268	0.149	0.079	0.063	0.020	0.006
2X Early 1:3 years	0.091	1.555	0.006	0.134	0.437	0.172	0.115	0.100	0.044	0.010
2X Late 1:3 years	0.026	0.574	0.002	0.049	0.165	0.065	0.043	0.040	0.016	0.004
1X Early 1:1 years	0.152	2.427	0.009	0.205	0.720	0.290	0.207	0.179	0.067	0.016
1X Late 1:1 years	0.043	0.874	0.003	0.074	0.267	0.116	0.078	0.064	0.023	0.006
1X Early 1:2 years	0.059	1.177	0.004	0.098	0.350	0.147	0.098	0.080	0.032	0.008
1X Late 1:2 years	0.016	0.442	0.001	0.035	0.133	0.060	0.040	0.031	0.012	0.003
1X Early 1:3 years	0.034	0.747	0.002	0.063	0.218	0.086	0.057	0.054	0.021	0.005
1X Late 1:3 years	0.009	0.275	0.001	0.023	0.082	0.032	0.022	0.020	0.008	0.002

Table 9.2.4- 38: Maximum FOCUS PELMO PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – acidic soils, with aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
	FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
4X Early 1:2 years	0.036	3.897	0.023	0.037	0.253	0.824	0.363	0.242	0.095	0.082	0.019
4X Late 1:2 years	0.016	2.050	0.012	0.019	0.136	0.460	0.202	0.135	0.052	0.043	0.010
4X Early 1:3 years	0.020	2.543	0.014	0.023	0.165	0.553	0.198	0.132	0.064	0.053	0.012
4X Late 1:3 years	0.009	1.345	0.007	0.012	0.088	0.293	0.107	0.072	0.035	0.028	0.007
3X Early 1:1 years	0.082	0.980	0.036	0.078	0.451	1.548	0.634	0.423	0.173	0.143	0.033
3X Late 1:1 years	0.030	3.214	0.015	0.034	0.269	0.722	0.299	0.200	0.081	0.067	0.015
3X Early 1:2 years	0.029	2.163	0.019	0.031	0.216	0.712	0.313	0.209	0.082	0.070	0.010
3X Late 1:2 years	0.010	1.114	0.008	0.013	0.099	0.345	0.152	0.101	0.039	0.032	0.007
3X Early 1:3 years	0.016	2.158	0.012	0.019	0.141	0.478	0.171	0.114	0.055	0.046	0.010
3X Late 1:3 years	0.006	0.996	0.005	0.008	0.065	0.219	0.080	0.054	0.026	0.021	0.005
2X Early 1:1 years	0.063	5.856	0.029	0.063	0.275	1.304	0.535	0.356	0.146	0.119	0.028
2X Late 1:1 years	0.016	2.703	0.009	0.021	0.136	0.481	0.200	0.134	0.054	0.043	0.010
2X Early 1:2 years	0.022	2.790	0.015	0.025	0.180	0.600	0.263	0.176	0.069	0.058	0.013
2X Late 1:2 years	0.005	0.990	0.003	0.008	0.064	0.230	0.101	0.068	0.026	0.021	0.005
2X Early 1:3 years	0.010	1.807	0.009	0.015	0.117	0.402	0.144	0.096	0.047	0.038	0.009
2X Late 1:3 years	0.003	0.653	0.003	0.005	0.042	0.146	0.053	0.036	0.017	0.013	0.003
1X Early 1:1 years	0.021	0.829	0.012	0.026	0.179	0.652	0.268	0.179	0.073	0.058	0.013
1X Late 1:1 years	0.005	1.017	0.004	0.008	0.065	0.240	0.100	0.067	0.027	0.021	0.005
1X Early 1:2 years	0.007	1.339	0.008	0.010	0.086	0.300	0.132	0.088	0.034	0.028	0.007
1X Late 1:2 years	0.002	0.476	0.002	0.003	0.030	0.115	0.051	0.034	0.013	0.010	0.002
1X Early 1:3 years	0.004	0.878	0.004	0.006	0.056	0.202	0.073	0.048	0.023	0.018	0.004
1X Late 1:3 years	0.001	0.316	0.001	0.002	0.020	0.073	0.027	0.018	0.009	0.007	0.002

Table 9.2.4- 39: Maximum FOCUS PELMO PECgw results of flupicolide and its metabolites in µg/L for the uses assessed – acidic soils, without aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
	FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
4X Early 1:2 years	0.209	3.836	0.031	0.074	0.268	0.814	0.358	0.238	0.095	0.084	0.019
4X Late 1:2 years	0.104	2.027	0.015	0.039	0.143	0.458	0.196	0.101	0.051	0.045	0.010
4X Early 1:3 years	0.125	2.484	0.018	0.046	0.175	0.541	0.193	0.128	0.064	0.055	0.012
4X Late 1:3 years	0.061	1.336	0.009	0.025	0.093	0.286	0.104	0.069	0.034	0.030	0.007
3X Early 1:1 years	0.428	6.870	0.055	0.147	0.473	1.519	0.619	0.413	0.178	0.146	0.035
3X Late 1:1 years	0.177	3.190	0.024	0.067	0.221	0.712	0.293	0.195	0.090	0.069	0.015
3X Early 1:2 years	0.169	3.291	0.026	0.062	0.229	0.703	0.308	0.206	0.082	0.072	0.016
3X Late 1:2 years	0.070	1.499	0.010	0.028	0.105	0.343	0.148	0.098	0.038	0.034	0.007
3X Early 1:3 years	0.102	2.134	0.015	0.039	0.149	0.468	0.166	0.111	0.055	0.047	0.010
3X Late 1:3 years	0.040	0.991	0.006	0.018	0.069	0.214	0.078	0.052	0.026	0.022	0.005
2X Early 1:1 years	0.338	5.750	0.045	0.120	0.394	1.299	0.522	0.348	0.145	0.122	0.027
2X Late 1:1 years	0.101	2.093	0.015	0.042	0.143	0.475	0.196	0.130	0.053	0.045	0.010
2X Early 1:2 years	0.133	2.749	0.020	0.050	0.190	0.592	0.259	0.173	0.069	0.060	0.013
2X Late 1:2 years	0.039	0.980	0.006	0.017	0.068	0.229	0.098	0.068	0.025	0.022	0.005
2X Early 1:3 years	0.080	1.787	0.012	0.031	0.124	0.394	0.140	0.094	0.046	0.040	0.009
2X Late 1:3 years	0.023	0.650	0.004	0.011	0.044	0.143	0.052	0.035	0.017	0.014	0.003
1X Early 1:1 years	0.130	2.801	0.019	0.053	0.189	0.642	0.262	0.175	0.072	0.059	0.013
1X Late 1:1 years	0.038	1.016	0.006	0.018	0.068	0.238	0.098	0.068	0.025	0.022	0.005
1X Early 1:2 years	0.050	1.336	0.008	0.021	0.091	0.295	0.130	0.086	0.034	0.029	0.007
1X Late 1:2 years	0.015	0.478	0.003	0.007	0.032	0.114	0.050	0.033	0.013	0.010	0.002
1X Early 1:3 years	0.030	0.871	0.005	0.013	0.059	0.198	0.070	0.047	0.020	0.019	0.004
1X Late 1:3 years	0.008	0.315	0.002	0.008	0.021	0.071	0.026	0.018	0.009	0.007	0.002

Table 9.2.4- 40: Maximum FOCUS PELMO PECgw results of flupicolide and its metabolites in µg/L for the uses assessed – alkaline soils, with aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
	FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
4X Early 1:2 years	0.030	3.810	0.01	0.236	0.806	0.559	0.239	0.093	0.077	0.019	
4X Late 1:2 years	0.016	2.809	0.009	0.131	0.456	0.203	0.135	0.053	0.042	0.010	
4X Early 1:3 years	0.020	2.441	0.012	0.151	0.555	0.201	0.134	0.063	0.050	0.012	
4X Late 1:3 years	0.009	1.310	0.006	0.085	0.229	0.107	0.072	0.036	0.027	0.007	
3X Early 1:1 years	0.082	6.807	0.038	0.120	1.542	0.636	0.424	0.170	0.137	0.033	
3X Late 1:1 years	0.030	3.140	0.011	0.199	0.720	0.298	0.198	0.081	0.064	0.015	
3X Early 1:2 years	0.029	3.269	0.014	0.201	0.705	0.310	0.206	0.080	0.065	0.016	
3X Late 1:2 years	0.010	1.482	0.006	0.085	0.302	0.152	0.102	0.039	0.031	0.007	
3X Early 1:3 years	0.010	2.096	0.010	0.129	0.479	0.174	0.116	0.054	0.043	0.010	
3X Late 1:3 years	0.006	0.970	0.004	0.062	0.219	0.080	0.054	0.027	0.020	0.005	
2X Early 1:1 years	0.063	5.685	0.020	0.349	1.298	0.536	0.357	0.143	0.115	0.028	
2X Late 1:1 years	0.016	2.053	0.006	0.129	0.479	0.199	0.132	0.054	0.042	0.010	
2X Early 1:2 years	0.022	2.707	0.011	0.167	0.593	0.260	0.174	0.067	0.054	0.013	
2X Late 1:2 years	0.005	0.964	0.004	0.061	0.228	0.101	0.068	0.026	0.020	0.005	
2X Early 1:3 years	0.012	1.754	0.008	0.107	0.404	0.147	0.098	0.046	0.036	0.009	
2X Late 1:3 years	0.003	0.633	0.003	0.040	0.146	0.052	0.035	0.017	0.013	0.003	
1X Early 1:1 years	0.021	2.754	0.007	0.166	0.651	0.363	0.242	0.071	0.056	0.013	
1X Late 1:1 years	0.005	0.992	0.002	0.062	0.239	0.100	0.066	0.027	0.020	0.005	
1X Early 1:2 years	0.007	1.326	0.005	0.080	0.296	0.130	0.087	0.033	0.026	0.007	
1X Late 1:2 years	0.002	0.463	0.001	0.027	0.110	0.051	0.034	0.013	0.009	0.002	
1X Early 1:3 years	0.004	0.852	0.003	0.051	0.202	0.130	0.087	0.033	0.017	0.004	
1X Late 1:3 years	0.001	0.307	0.001	0.017	0.076	0.027	0.018	0.009	0.006	0.002	

Table 9.2.4- 41: Maximum FOCUS PELMO PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – alkaline soils, without aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
	FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
4X Early 1:2 years	0.209	3.762	0.024	0.250	0.814	0.353	0.236	0.092	0.080	0.018
4X Late 1:2 years	0.104	1.990	0.013	0.138	0.454	0.197	0.131	0.052	0.044	0.010
4X Early 1:3 years	0.125	2.422	0.015	0.163	0.544	0.196	0.130	0.063	0.053	0.011
4X Late 1:3 years	0.061	1.306	0.008	0.090	0.286	0.104	0.070	0.035	0.028	0.007
3X Early 1:1 years	0.428	6.729	0.040	0.250	1.512	0.621	0.414	0.170	0.139	0.033
3X Late 1:1 years	0.177	3.127	0.017	0.209	0.709	0.291	0.194	0.080	0.067	0.015
3X Early 1:2 years	0.169	3.226	0.020	0.214	0.703	0.305	0.203	0.080	0.069	0.016
3X Late 1:2 years	0.070	1.470	0.009	0.107	0.340	0.148	0.098	0.038	0.032	0.007
3X Early 1:3 years	0.102	2.080	0.012	0.099	0.470	0.169	0.113	0.054	0.045	0.010
3X Late 1:3 years	0.040	0.968	0.005	0.066	0.214	0.079	0.052	0.026	0.021	0.005
2X Early 1:1 years	0.338	5.627	0.032	0.369	1.274	0.521	0.340	0.147	0.116	0.027
2X Late 1:1 years	0.101	2.049	0.010	0.136	0.402	0.194	0.130	0.053	0.044	0.010
2X Early 1:2 years	0.133	2.694	0.016	0.178	0.591	0.256	0.171	0.067	0.057	0.013
2X Late 1:2 years	0.039	0.960	0.005	0.065	0.227	0.099	0.066	0.026	0.021	0.005
2X Early 1:3 years	0.080	1.741	0.010	0.115	0.396	0.149	0.095	0.045	0.038	0.009
2X Late 1:3 years	0.023	0.634	0.003	0.043	0.143	0.052	0.035	0.017	0.014	0.003
1X Early 1:1 years	0.130	2.797	0.013	0.177	0.639	0.263	0.175	0.071	0.056	0.013
1X Late 1:1 years	0.038	0.993	0.004	0.065	0.236	0.098	0.065	0.026	0.021	0.005
1X Early 1:2 years	0.050	1.308	0.006	0.085	0.295	0.128	0.086	0.033	0.027	0.007
1X Late 1:2 years	0.015	0.465	0.002	0.039	0.110	0.044	0.030	0.013	0.010	0.002
1X Early 1:3 years	0.030	0.847	0.004	0.055	0.198	0.072	0.048	0.023	0.018	0.004
1X Late 1:3 years	0.008	0.307	0.001	0.019	0.074	0.026	0.018	0.008	0.006	0.002

Detailed results for 4 scenarios for FOCUS PEARL, FOCUS PELMO and FOCUS MACRO are listed in the following subsections Table 9.2.4- 42 to Table 9.2.4- 49.

**Potatoes 4 x 100 g/ha
1:2 year rotation – Early window**

Table 9.2.4- 42: FOCUS PEARL, PECgw results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.004	2.779	0.001	0.007	0.127	0.433	0.288	0.192	0.071	0.043	0.020
	Hamburg	0.036	3.457	0.041	0.040	0.288	0.883	0.342	0.228	0.193	0.093	0.022
	Jokioinen	0.001	2.970	0.013	0.005	0.237	0.962	0.412	0.275	0.231	0.082	0.018
	Kremsmünster	0.021	2.609	0.004	0.021	0.159	0.465	0.208	0.139	0.088	0.051	0.016
	Okehampton	0.047	2.473	0.009	0.040	0.206	0.457	0.178	0.119	0.099	0.064	0.014
	Piacenza	0.026	2.072	0.005	0.026	0.136	0.315	0.175	0.116	0.058	0.042	0.015
	Porto	0.008	1.895	0.006	0.015	0.096	0.229	0.109	0.072	0.045	0.030	0.009
	Steville	0.000	1.644	0.000	0.000	0.036	0.160	0.132	0.088	0.024	0.013	0.010
	Thiva	0.001	2.189	0.001	0.003	0.057	0.221	0.230	0.153	0.027	0.019	0.018

Table 9.2.4- 43: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:2 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.089	2.900	0.006	0.032	0.148	0.454	0.292	0.195	0.076	0.048	0.021
	Hamburg	0.243	3.501	0.020	0.088	0.310	0.891	0.337	0.224	0.198	0.098	0.022
	Jokioinen	0.035	3.093	0.021	0.019	0.257	0.988	0.413	0.275	0.239	0.086	0.018
	Kremsmunster	0.176	2.678	0.010	0.055	0.175	0.472	0.207	0.138	0.091	0.054	0.016
	Okehampton	0.242	2.495	0.017	0.083	0.249	0.460	0.175	0.117	0.107	0.067	0.014
	Piacenza	0.171	2.138	0.011	0.057	0.148	0.323	0.174	0.116	0.061	0.044	0.015
	Porto	0.080	1.756	0.013	0.039	0.108	0.247	0.110	0.073	0.049	0.033	0.009
	Seville	0.002	1.708	0.001	0.002	0.041	0.167	0.132	0.088	0.026	0.014	0.010
	Thiva	0.027	2.283	0.003	0.011	0.070	0.239	0.230	0.151	0.031	0.022	0.018

Table 9.2.4- 44: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:2 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.004	3.666	0.001	0.113	0.039	0.285	0.190	0.060	0.415	0.020
	Hamburg	0.036	3.346	0.006	0.268	0.088	0.339	0.228	0.186	0.862	0.022
	Jokioinen	0.001	2.891	0.009	0.026	0.079	0.405	0.070	0.227	0.950	0.018
	Kremsmunster	0.021	2.513	0.002	0.146	0.047	0.204	0.136	0.084	0.452	0.016
	Okehampton	0.042	2.396	0.004	0.191	0.060	0.176	0.117	0.094	0.442	0.014
	Piacenza	0.026	1.968	0.002	0.129	0.039	0.170	0.113	0.054	0.303	0.015
	Porto	0.008	1.626	0.003	0.085	0.027	0.106	0.070	0.041	0.214	0.009
	Seville	0.000	1.559	0.000	0.032	0.011	0.129	0.086	0.023	0.150	0.010
	Thiva	0.001	2.058	0.000	0.050	0.017	0.222	0.151	0.025	0.208	0.018

Table 9.2.4- 45: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:2 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.089	2.800	0.004	0.133	0.437	0.288	0.192	0.071	0.044	0.021
	Hamburg	0.243	3.415	0.013	0.290	0.873	0.335	0.224	0.192	0.094	0.022
	Jokioinen	0.035	3.015	0.015	0.244	0.975	0.406	0.271	0.234	0.083	0.018
	Kremsmunster	0.176	2.588	0.007	0.062	0.461	0.204	0.136	0.088	0.051	0.016
	Okehampton	0.242	2.427	0.011	0.207	0.448	0.173	0.116	0.097	0.064	0.014
	Piacenza	0.171	2.040	0.007	0.136	0.312	0.170	0.113	0.058	0.042	0.015
	Porto	0.080	1.685	0.005	0.098	0.232	0.107	0.072	0.045	0.030	0.009
	Seville	0.002	1.608	0.001	0.037	0.157	0.129	0.086	0.024	0.013	0.010
	Thiva	0.027	2.142	0.001	0.061	0.223	0.226	0.151	0.028	0.020	0.018

Table 9.2.4- 46: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	3.404	0.001	0.004	0.097	0.334	0.223	0.148	0.012	0.032	0.016
	Hamburg	0.020	3.897	0.016	0.031	0.253	0.694	0.281	0.187	0.056	0.082	0.019
	Jokioinen	0.001	3.241	0.023	0.004	0.229	0.824	0.363	0.242	0.095	0.076	0.016
	Kremsmunster	0.013	3.135	0.005	0.016	0.160	0.459	0.205	0.137	0.027	0.051	0.015
	Okehampton	0.036	2.663	0.011	0.037	0.197	0.428	0.154	0.102	0.036	0.061	0.011
	Piacenza	0.021	2.597	0.008	0.025	0.152	0.287	0.146	0.097	0.020	0.041	0.012
	Porto	0.013	1.855	0.017	0.029	0.125	0.266	0.112	0.075	0.025	0.038	0.009
	Seville	0.000	2.083	0.001	0.000	0.036	0.166	0.128	0.085	0.008	0.013	0.010
	Thiva	0.000	2.941	0.001	0.001	0.045	0.178	0.174	0.116	0.046	0.015	0.014

Table 9.2.4- 47: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.047	3.078	0.004	0.019	0.112	0.340	0.248	0.186	0.014	0.036	0.016
	Hamburg	0.170	3.836	0.026	0.069	0.268	0.691	0.272	0.182	0.059	0.084	0.018
	Jokioinen	0.023	3.212	0.031	0.015	0.238	0.814	0.358	0.238	0.095	0.078	0.015
	Kremsmunster	0.115	3.095	0.011	0.046	0.170	0.450	0.200	0.130	0.019	0.053	0.015
	Okehampton	0.209	2.594	0.019	0.074	0.205	0.419	0.148	0.098	0.037	0.062	0.012
	Piacenza	0.151	2.578	0.013	0.056	0.142	0.292	0.142	0.095	0.022	0.043	0.012
	Porto	0.106	1.853	0.027	0.056	0.130	0.275	0.109	0.073	0.026	0.039	0.009
	Seville	0.000	2.068	0.001	0.001	0.039	0.168	0.125	0.083	0.008	0.014	0.010
	Thiva	0.013	2.904	0.003	0.008	0.052	0.182	0.170	0.114	0.007	0.017	0.014

Table 9.2.4- 48: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.002	3.297	0.000	0.087	0.325	0.221	0.147	0.010	0.030	0.016	
	Hamburg	0.020	3.812	0.010	0.236	0.669	0.276	0.184	0.052	0.077	0.019	
	Jokioinen	0.001	3.186	0.017	0.220	0.816	0.359	0.239	0.093	0.074	0.016	
	Kremsmunster	0.013	3.060	0.001	0.117	0.445	0.203	0.135	0.025	0.048	0.015	
	Okehampton	0.036	2.586	0.006	0.082	0.415	0.154	0.102	0.033	0.057	0.013	
	Piacenza	0.021	2.507	0.006	0.121	0.274	0.142	0.094	0.018	0.038	0.012	
	Porto	0.013	1.797	0.010	0.113	0.252	0.110	0.073	0.022	0.035	0.009	
	Seville	0.000	2.061	0.001	0.033	0.159	0.126	0.084	0.008	0.012	0.010	
	Thiva	0.000	2.841	0.000	0.039	0.167	0.172	0.115	0.006	0.013	0.014	

Table 9.2.4- 49: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.047	3.279	0.002	0.101	0.331	0.217	0.144	0.012	0.03	0.016
	Hamburg	0.170	3.762	0.019	0.250	0.669	0.269	0.179	0.055	0.080	0.018
	Jokioinen	0.023	3.161	0.024	0.228	0.814	0.353	0.236	0.092	0.076	0.015
	Kremsmunster	0.135	3.036	0.007	0.159	0.446	0.198	0.132	0.027	0.050	0.016
	Okehampton	0.209	2.535	0.014	0.192	0.409	0.148	0.099	0.034	0.053	0.022
	Piacenza	0.151	2.493	0.010	0.132	0.279	0.158	0.092	0.020	0.040	0.012
	Porto	0.106	1.788	0.020	0.20	0.262	0.107	0.072	0.024	0.037	0.009
	Seville	0.000	1.974	0.001	0.036	0.161	0.122	0.081	0.007	0.013	0.020
	Thiva	0.013	2.807	0.004	0.046	0.177	0.16	0.111	0.006	0.025	0.014

Table 9.2.4- 50: FOCUS MACRO, PECgw results of fluopicolide – 4 x 100 g/ha 1:2 year early application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0,0074

1:2 year rotation – late window

Table 9.2.4- 51: FOCUS PEARL, PECgw results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.429	0.001	0.003	0.067	0.234	0.155	0.103	0.040	0.023	0.011
	Hamburg	0.015	1.785	0.005	0.019	0.152	0.490	0.189	0.126	0.106	0.050	0.012
	Jokioinen	0.000	1.540	0.006	0.002	0.127	0.532	0.237	0.158	0.125	0.044	0.010
	Kremsmunster	0.007	1.389	0.002	0.009	0.087	0.260	0.117	0.078	0.049	0.027	0.009
	Okehampton	0.018	1.325	0.004	0.020	0.111	0.259	0.097	0.065	0.057	0.035	0.008
	Piacenza	0.012	1.101	0.003	0.014	0.080	0.190	0.109	0.073	0.036	0.024	0.008
	Porto	0.003	0.930	0.003	0.007	0.055	0.130	0.061	0.041	0.026	0.017	0.005
	Seville	0.000	0.905	0.000	0.000	0.020	0.097	0.074	0.049	0.015	0.007	0.005
	Thiva	0.000	1.242	0.000	0.001	0.037	0.133	0.128	0.085	0.018	0.012	0.011

Table 9.2.4- 52: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:2 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.033	1.489	0.003	0.014	0.078	0.245	0.157	0.104	0.043	0.026	0.011
	Hamburg	0.114	1.825	0.010	0.045	0.166	0.494	0.186	0.124	0.109	0.052	0.021
	Jokioinen	0.013	1.597	0.010	0.008	0.134	0.544	0.236	0.158	0.127	0.046	0.010
	Kremsmunster	0.076	1.432	0.005	0.027	0.095	0.264	0.116	0.078	0.051	0.029	0.009
	Okehampton	0.118	1.343	0.009	0.043	0.149	0.261	0.096	0.064	0.059	0.036	0.008
	Piacenza	0.090	1.146	0.006	0.030	0.085	0.192	0.110	0.073	0.037	0.025	0.008
	Porto	0.032	0.968	0.006	0.018	0.062	0.140	0.063	0.042	0.029	0.019	0.005
	Seville	0.000	0.935	0.000	0.001	0.022	0.101	0.075	0.050	0.016	0.008	0.006
	Thiva	0.009	1.308	0.001	0.005	0.044	0.141	0.128	0.081	0.040	0.014	0.001

Table 9.2.4- 53: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:2 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	0.368	0.000	0.061	0.021	0.154	0.105	0.021	0.227	0.011
	Hamburg	0.015	1.739	0.003	0.144	0.048	0.181	0.126	0.105	0.486	0.012
	Jokioinen	0.000	1.496	0.004	0.077	0.042	0.237	0.158	0.125	0.530	0.010
	Kremsmunster	0.007	1.346	0.001	0.079	0.026	0.116	0.078	0.048	0.253	0.009
	Okehampton	0.018	1.291	0.002	0.105	0.034	0.097	0.065	0.056	0.255	0.008
	Piacenza	0.010	1.073	0.001	0.075	0.023	0.107	0.071	0.035	0.187	0.008
	Porto	0.003	0.890	0.001	0.149	0.016	0.060	0.040	0.024	0.122	0.005
	Seville	0.000	0.866	0.000	0.018	0.006	0.073	0.049	0.014	0.091	0.005
	Thiva	0.000	1.190	0.000	0.032	0.011	0.125	0.085	0.017	0.126	0.011

Table 9.2.4- 54: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:2 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.033	1.429	0.002	0.072	0.236	0.156	0.104	0.041	0.024	0.011
	Hamburg	0.114	1.782	0.007	0.157	0.490	0.187	0.124	0.107	0.051	0.012
	Jokioinen	0.013	1.545	0.008	0.108	0.541	0.238	0.158	0.128	0.044	0.010
	Kremsmunster	0.076	1.388	0.003	0.088	0.259	0.116	0.077	0.050	0.027	0.009
	Okehampton	0.118	1.314	0.006	0.113	0.259	0.096	0.064	0.058	0.035	0.008
	Piacenza	0.090	1.112	0.004	0.082	0.190	0.108	0.072	0.036	0.024	0.008
	Porto	0.032	0.932	0.004	0.056	0.133	0.061	0.041	0.026	0.018	0.005
	Seville	0.000	0.896	0.000	0.020	0.095	0.074	0.049	0.015	0.007	0.006
	Thiva	0.009	1.241	0.001	0.039	0.135	0.127	0.085	0.019	0.013	0.011

Table 9.2.4- 55: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.809	0.000	0.001	0.049	0.186	0.116	0.078	0.007	0.017	0.009
	Hamburg	0.008	2.050	0.008	0.015	0.136	0.389	0.155	0.103	0.033	0.043	0.010
	Jokioinen	0.000	1.710	0.012	0.002	0.117	0.460	0.202	0.135	0.052	0.041	0.008
	Kremsmunster	0.005	1.636	0.002	0.007	0.086	0.254	0.115	0.077	0.015	0.027	0.008
	Okehampton	0.016	1.439	0.006	0.019	0.109	0.243	0.086	0.058	0.021	0.034	0.007
	Piacenza	0.010	1.376	0.005	0.012	0.077	0.178	0.092	0.061	0.014	0.023	0.007
	Porto	0.005	0.997	0.008	0.013	0.070	0.153	0.063	0.042	0.015	0.021	0.005
	Seville	0.000	1.129	0.000	0.000	0.020	0.098	0.071	0.048	0.005	0.007	0.005
	Thiva	0.000	1.640	0.000	0.001	0.029	0.114	0.103	0.064	0.004	0.010	0.003

Table 9.2.4- 56: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 0 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.016	1.789	0.001	0.007	0.053	0.188	0.143	0.075	0.008	0.018	0.009
	Hamburg	0.078	2.027	0.014	0.035	0.143	0.387	0.151	0.100	0.034	0.045	0.010
	Jokioinen	0.009	1.703	0.015	0.007	0.124	0.458	0.196	0.131	0.051	0.042	0.008
	Kremsmunster	0.037	1.618	0.005	0.021	0.091	0.250	0.112	0.076	0.016	0.028	0.008
	Okehampton	0.104	1.399	0.010	0.039	0.113	0.239	0.083	0.056	0.022	0.034	0.007
	Piacenza	0.079	1.367	0.008	0.029	0.081	0.176	0.089	0.060	0.014	0.024	0.007
	Porto	0.041	1.002	0.013	0.026	0.072	0.153	0.062	0.041	0.015	0.022	0.005
	Seville	0.000	1.133	0.001	0.000	0.020	0.099	0.070	0.046	0.005	0.007	0.005
	Thiva	0.003	1.598	0.001	0.002	0.032	0.115	0.097	0.065	0.005	0.010	0.008

Table 9.2.4- 57: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.001	1.751	0.000	0.014	0.180	0.117	0.078	0.006	0.015	0.009	
	Hamburg	0.008	2.009	0.005	0.131	0.385	0.153	0.102	0.032	0.042	0.010	
	Jokioinen	0.000	1.671	0.009	0.112	0.456	0.203	0.135	0.053	0.040	0.008	
	Kremsmunster	0.005	1.589	0.007	0.079	0.251	0.113	0.076	0.014	0.026	0.008	
	Okehampton	0.016	1.413	0.003	0.003	0.238	0.086	0.058	0.021	0.033	0.007	
	Piacenza	0.010	1.350	0.004	0.074	0.176	0.090	0.060	0.013	0.022	0.007	
	Porto	0.005	0.973	0.004	0.064	0.146	0.062	0.041	0.013	0.020	0.005	
	Seville	0.000	1.092	0.000	0.018	0.094	0.070	0.047	0.005	0.007	0.005	
	Thiva	0.000	1.571	0.000	0.025	0.107	0.098	0.065	0.004	0.008	0.008	

Table 9.2.4- 58: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:2 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.016	1.731	0.001	0.050	0.181	0.113	0.078	0.007	0.01	0.009
	Hamburg	0.078	1.990	0.010	0.138	0.384	0.150	0.100	0.034	0.044	0.010
	Jokioinen	0.009	1.669	0.013	0.118	0.454	0.197	0.131	0.052	0.041	0.008
	Kremsmunster	0.057	1.578	0.003	0.085	0.249	0.110	0.074	0.015	0.027	0.006
	Okehampton	0.104	1.391	0.007	0.109	0.236	0.083	0.056	0.021	0.035	0.007
	Piacenza	0.079	1.342	0.006	0.077	0.174	0.088	0.059	0.014	0.023	0.007
	Porto	0.041	0.972	0.009	0.067	0.147	0.061	0.040	0.014	0.020	0.005
	Seville	0.000	1.078	0.000	0.019	0.095	0.068	0.046	0.005	0.007	0.005
	Thiva	0.003	1.536	0.004	0.028	0.110	0.091	0.063	0.004	0.009	0.008

Table 9.2.4- 59: FOCUS MACRO, PEC_{gw} results of fluopicolide – 4 x 100 g/ha 1:2 year late application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0.0042

1:3 year rotation – Early window

Table 9.2.4- 60: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 0 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	1.810	0.001	0.004	0.08	0.28	0.182	0.121	0.048	0.028	0.013
	Hamburg	0.019	2.195	0.006	0.023	0.185	0.531	0.199	0.133	0.119	0.061	0.014
	Jokioinen	0.001	1.975	0.008	0.004	0.151	0.599	0.237	0.158	0.148	0.053	0.012
	Kremsmunster	0.010	1.730	0.002	0.013	0.107	0.318	0.143	0.096	0.059	0.033	0.011
	Okehampton	0.023	1.597	0.005	0.024	0.152	0.298	0.115	0.076	0.065	0.042	0.009
	Piacenza	0.015	1.349	0.003	0.017	0.092	0.205	0.119	0.079	0.039	0.028	0.009
	Porto	0.004	1.092	0.003	0.009	0.064	0.147	0.068	0.046	0.029	0.020	0.006
	Seville	0.000	0.982	0.000	0.000	0.023	0.109	0.088	0.059	0.017	0.008	0.006
	Thiva	0.000	1.491	0.000	0.001	0.038	0.161	0.155	0.103	0.021	0.013	0.013

Table 9.2.4- 61: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:3 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.050	1.880	0.004	0.019	0.097	0.293	0.182	0.122	0.052	0.032	0.014
	Hamburg	0.138	2.236	0.012	0.052	0.203	0.535	0.197	0.161	0.122	0.065	0.014
	Jokioinen	0.018	2.020	0.012	0.013	0.163	0.602	0.236	0.158	0.150	0.055	0.012
	Kremsmunster	0.097	1.809	0.006	0.035	0.113	0.322	0.143	0.095	0.062	0.036	0.011
	Okehampton	0.143	1.609	0.010	0.051	0.144	0.301	0.112	0.075	0.06	0.044	0.009
	Piacenza	0.101	1.373	0.007	0.037	0.101	0.214	0.108	0.079	0.041	0.030	0.010
	Porto	0.043	1.131	0.008	0.022	0.072	0.157	0.069	0.046	0.032	0.022	0.006
	Seville	0.001	1.013	0.001	0.001	0.026	0.115	0.088	0.059	0.018	0.009	0.006
	Thiva	0.015	1.569	0.001	0.007	0.046	0.169	0.154	0.10	0.023	0.015	0.013

Table 9.2.4- 62: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:3 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	0.737	0.000	0.073	0.025	0.180	0.126	0.04	0.272	0.013
	Hamburg	0.019	2.107	0.003	0.172	0.058	0.19	0.12	0.14	0.18	0.014
	Jokioinen	0.001	1.92	0.006	0.12	0.050	0.237	0.158	0.148	0.599	0.012
	Kremsmunster	0.011	1.661	0.001	0.095	0.031	0.143	0.095	0.057	0.312	0.011
	Okehampton	0.023	1.536	0.003	0.122	0.039	0.114	0.076	0.062	0.289	0.009
	Piacenza	0.016	1.283	0.00	0.083	0.026	0.106	0.078	0.037	0.196	0.009
	Porto	0.004	1.044	0.001	0.057	0.018	0.067	0.044	0.026	0.140	0.006
	Seville	0.000	0.929	0.000	0.021	0.007	0.086	0.057	0.016	0.104	0.006
	Thiva	0.000	1.389	0.000	0.034	0.011	0.153	0.10	0.019	0.152	0.013

Table 9.2.4- 63: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:3 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.050	1.813	0.003	0.087	0.284	0.181	0.120	0.049	0.029	0.014
	Hamburg	0.138	2.172	0.008	0.190	0.524	0.196	0.131	0.117	0.062	0.014
	Jokioinen	0.018	1.980	0.009	0.13	0.602	0.237	0.158	0.149	0.053	0.012
	Kremsmunster	0.097	1.732	0.005	0.05	0.318	0.142	0.095	0.059	0.034	0.011
	Okehampton	0.143	1.560	0.007	0.134	0.293	0.113	0.075	0.064	0.042	0.009
	Piacenza	0.101	1.319	0.005	0.093	0.203	0.116	0.077	0.039	0.028	0.010
	Porto	0.043	1.090	0.005	0.065	0.149	0.068	0.045	0.029	0.020	0.006
	Seville	0.001	0.959	0.000	0.023	0.108	0.086	0.057	0.017	0.008	0.006
	Thiva	0.015	1.476	0.001	0.041	0.159	0.151	0.101	0.021	0.013	0.013

Table 9.2.4- 64: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	2.259	0.001	0.002	0.060	0.226	0.143	0.096	0.007	0.020	0.011
	Hamburg	0.010	2.513	0.010	0.017	0.165	0.439	0.170	0.114	0.038	0.053	0.008
	Jokioinen	0.001	2.108	0.014	0.003	0.147	0.553	0.198	0.132	0.064	0.051	0.010
	Kremsmunster	0.007	2.080	0.003	0.011	0.104	0.303	0.135	0.090	0.017	0.033	0.010
	Okehampton	0.020	1.717	0.006	0.023	0.130	0.277	0.102	0.068	0.023	0.049	0.008
	Piacenza	0.012	1.664	0.005	0.016	0.089	0.198	0.098	0.065	0.014	0.027	0.008
	Porto	0.006	1.214	0.010	0.015	0.085	0.174	0.072	0.048	0.017	0.025	0.006
	Seville	0.000	1.272	0.001	0.000	0.029	0.118	0.083	0.056	0.006	0.010	0.006
	Thiva	0.000	2.124	0.001	0.001	0.032	0.135	0.114	0.078	0.005	0.011	0.010

Table 9.2.4- 65: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4x100 g/ha 1:3 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.026	2.259	0.002	0.001	0.070	0.228	0.140	0.094	0.008	0.023	0.011
	Hamburg	0.092	2.484	0.017	0.040	0.175	0.337	0.066	0.110	0.039	0.055	0.012
	Jokioinen	0.012	2.083	0.018	0.009	0.154	0.541	0.193	0.128	0.064	0.052	0.010
	Kremsmunster	0.015	2.050	0.007	0.020	0.111	0.300	0.131	0.088	0.018	0.035	0.010
	Okehampton	0.125	1.674	0.012	0.046	0.136	0.274	0.098	0.066	0.025	0.041	0.008
	Piacenza	0.091	1.636	0.009	0.035	0.096	0.197	0.095	0.064	0.015	0.028	0.008
	Porto	0.059	1.209	0.017	0.037	0.089	0.178	0.071	0.047	0.019	0.026	0.006
	Seville	0.000	1.251	0.001	0.000	0.030	0.118	0.080	0.050	0.006	0.010	0.006
	Thiva	0.007	2.096	0.001	0.004	0.036	0.139	0.112	0.074	0.005	0.012	0.010

Table 9.2.4- 66: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.001	2.194	0.000	0.003	0.218	0.140	0.094	0.006	0.018	0.011	
	Hamburg	0.010	2.441	0.006	0.151	0.425	0.169	0.112	0.035	0.050	0.012	
	Jokioinen	0.001	2.064	0.012	0.139	0.555	0.201	0.134	0.063	0.049	0.010	
	Kremsmunster	0.007	2.020	0.001	0.085	0.291	0.134	0.089	0.016	0.031	0.010	
	Okehampton	0.020	1.670	0.004	0.19	0.269	0.101	0.067	0.021	0.038	0.008	
	Piacenza	0.012	1.603	0.003	0.081	0.191	0.097	0.064	0.012	0.025	0.008	
	Porto	0.006	1.179	0.006	0.077	0.165	0.070	0.047	0.015	0.023	0.006	
	Seville	0.000	1.231	0.000	0.026	0.112	0.081	0.054	0.005	0.009	0.006	
	Thiva	0.000	2.053	0.000	0.029	0.127	0.112	0.075	0.004	0.010	0.010	

Table 9.2.4- 67: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.026	2.204	0.002	0.062	0.220	0.138	0.092	0.008	0.02	0.01
	Hamburg	0.092	2.422	0.012	0.163	0.425	0.164	0.109	0.037	0.053	0.012
	Jokioinen	0.012	2.057	0.015	0.146	0.544	0.196	0.130	0.063	0.050	0.010
	Kremsmunster	0.075	2.008	0.005	0.103	0.293	0.131	0.087	0.017	0.035	0.016
	Okehampton	0.125	1.640	0.008	0.127	0.267	0.092	0.065	0.023	0.039	0.008
	Piacenza	0.091	1.581	0.006	0.088	0.191	0.094	0.063	0.013	0.027	0.008
	Porto	0.059	1.176	0.012	0.082	0.170	0.069	0.046	0.017	0.025	0.006
	Seville	0.000	1.208	0.001	0.027	0.113	0.079	0.052	0.005	0.009	0.006
	Thiva	0.007	2.030	0.002	0.032	0.137	0.119	0.073	0.005	0.011	0.010

Table 9.2.4- 68: FOCUS MACRO, PEC_{gw} results of fluopicolide – 4 x 100 g/ha 1:3 year early application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0.0049

1:3 year rotation – late window

Table 9.2.4- 69: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	0.934	0.000	0.002	0.043	0.155	0.098	0.065	0.026	0.015	0.007
	Hamburg	0.008	1.189	0.003	0.012	0.100	0.293	0.108	0.072	0.067	0.032	0.007
	Jokioinen	0.009	1.014	0.004	0.002	0.078	0.334	0.131	0.087	0.081	0.028	0.006
	Kremsmunster	0.004	0.936	0.001	0.006	0.034	0.169	0.076	0.051	0.033	0.018	0.006
	Okehampton	0.010	0.867	0.003	0.012	0.073	0.169	0.065	0.043	0.037	0.023	0.005
	Piacenza	0.007	0.742	0.002	0.009	0.051	0.123	0.070	0.047	0.025	0.016	0.005
	Porto	0.001	0.598	0.001	0.004	0.036	0.083	0.039	0.026	0.017	0.012	0.003
	Seville	0.000	0.534	0.000	0.000	0.012	0.065	0.051	0.034	0.010	0.005	0.003
	Thiva	0.000	0.783	0.000	0.001	0.024	0.104	0.090	0.060	0.014	0.008	0.007

Table 9.2.4- 70: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:3 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.018	0.980	0.002	0.008	0.051	0.161	0.099	0.066	0.028	0.017	0.007
	Hamburg	0.065	1.215	0.006	0.028	0.109	0.295	0.107	0.072	0.068	0.034	0.009
	Jokioinen	0.007	1.043	0.006	0.006	0.084	0.337	0.130	0.087	0.083	0.030	0.006
	Kremsmunster	0.043	0.975	0.003	0.017	0.060	0.172	0.076	0.050	0.034	0.019	0.006
	Okehampton	0.068	0.879	0.005	0.027	0.079	0.170	0.064	0.043	0.038	0.024	0.005
	Piacenza	0.049	0.783	0.004	0.020	0.055	0.127	0.070	0.047	0.025	0.016	0.006
	Porto	0.017	0.621	0.004	0.010	0.041	0.089	0.039	0.026	0.019	0.013	0.003
	Seville	0.000	0.551	0.000	0.000	0.014	0.068	0.051	0.034	0.011	0.005	0.003
	Thiva	0.005	0.831	0.001	0.003	0.029	0.108	0.093	0.063	0.045	0.009	0.007

Table 9.2.4- 71: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:3 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	0.895	0.000	0.039	0.014	0.097	0.064	0.027	0.152	0.007
	Hamburg	0.008	1.148	0.002	0.094	0.031	0.108	0.072	0.066	0.291	0.007
	Jokioinen	0.000	0.984	0.003	0.074	0.037	0.131	0.087	0.080	0.327	0.006
	Kremsmunster	0.004	0.895	0.000	0.050	0.017	0.076	0.051	0.033	0.167	0.006
	Okehampton	0.010	0.844	0.001	0.069	0.022	0.064	0.043	0.036	0.167	0.005
	Piacenza	0.007	0.713	0.000	0.048	0.015	0.069	0.046	0.024	0.121	0.005
	Porto	0.001	0.573	0.001	0.032	0.011	0.038	0.025	0.015	0.078	0.003
	Seville	0.000	0.508	0.000	0.011	0.004	0.050	0.033	0.009	0.061	0.003
	Thiva	0.000	0.755	0.000	0.021	0.007	0.083	0.058	0.013	0.099	0.007

Table 9.2.4- 72: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 4 x 100 g/ha 1:3 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.018	0.938	0.001	0.046	0.158	0.098	0.065	0.027	0.016	0.007
	Hamburg	0.065	1.186	0.004	0.104	0.293	0.107	0.072	0.068	0.033	0.008
	Jokioinen	0.007	1.015	0.004	0.080	0.331	0.130	0.087	0.081	0.028	0.006
	Kremsmunster	0.043	0.935	0.002	0.056	0.171	0.076	0.050	0.034	0.018	0.006
	Okehampton	0.068	0.861	0.004	0.075	0.169	0.064	0.042	0.037	0.023	0.005
	Piacenza	0.049	0.753	0.003	0.052	0.125	0.069	0.046	0.025	0.016	0.006
	Porto	0.017	0.600	0.002	0.037	0.084	0.039	0.026	0.017	0.012	0.003
	Seville	0.000	0.524	0.000	0.013	0.064	0.050	0.034	0.010	0.005	0.003
	Thiva	0.005	0.792	0.000	0.026	0.105	0.088	0.059	0.014	0.008	0.007

Table 9.2.4- 73: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	1.155	0.000	0.001	0.032	0.125	0.077	0.051	0.004	0.010	0.006
	Hamburg	0.004	1.345	0.005	0.009	0.088	0.249	0.095	0.064	0.022	0.028	0.007
	Jokioinen	0.000	1.088	0.007	0.001	0.073	0.293	0.107	0.072	0.035	0.026	0.005
	Kremsmunster	0.002	1.098	0.001	0.005	0.054	0.164	0.073	0.049	0.010	0.017	0.005
	Okehampton	0.009	0.943	0.003	0.012	0.071	0.156	0.052	0.038	0.012	0.023	0.005
	Piacenza	0.005	0.897	0.003	0.009	0.051	0.120	0.037	0.038	0.009	0.015	0.004
	Porto	0.002	0.651	0.005	0.007	0.048	0.100	0.040	0.027	0.010	0.014	0.003
	Seville	0.000	0.694	0.000	0.000	0.016	0.070	0.048	0.032	0.004	0.006	0.003
	Thiva	0.000	1.076	0.000	0.000	0.019	0.086	0.067	0.043	0.003	0.007	0.005

Table 9.2.4- 74: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 0 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.008	1.130	0.001	0.005	0.038	0.125	0.077	0.050	0.005	0.012	0.006
	Hamburg	0.044	1.336	0.008	0.021	0.093	0.246	0.093	0.062	0.023	0.030	0.007
	Jokioinen	0.005	1.100	0.009	0.004	0.076	0.286	0.104	0.069	0.034	0.027	0.005
	Kremsmunster	0.039	1.098	0.003	0.013	0.058	0.163	0.071	0.048	0.014	0.018	0.005
	Okehampton	0.061	0.928	0.006	0.025	0.074	0.153	0.053	0.036	0.015	0.023	0.005
	Piacenza	0.040	0.893	0.005	0.018	0.053	0.118	0.056	0.037	0.010	0.016	0.004
	Porto	0.022	0.652	0.008	0.015	0.050	0.102	0.040	0.026	0.011	0.015	0.003
	Seville	0.000	0.696	0.000	0.000	0.016	0.070	0.046	0.032	0.004	0.006	0.003
	Thiva	0.002	1.044	0.001	0.001	0.021	0.085	0.065	0.043	0.004	0.007	0.005

Table 9.2.4- 75: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	1.128	0.000	0.009	0.122	0.076	0.051	0.004	0.010	0.006
	Hamburg	0.004	1.310	0.003	0.085	0.244	0.095	0.063	0.022	0.027	0.007
	Jokioinen	0.000	1.064	0.006	0.070	0.293	0.107	0.072	0.036	0.026	0.005
	Kremsmunster	0.002	1.064	0.001	0.051	0.164	0.073	0.049	0.010	0.017	0.005
	Okehampton	0.009	0.920	0.002	0.067	0.155	0.056	0.038	0.014	0.021	0.005
	Piacenza	0.005	0.872	0.002	0.048	0.119	0.056	0.038	0.009	0.015	0.004
	Porto	0.002	0.629	0.002	0.044	0.095	0.040	0.026	0.009	0.014	0.003
	Seville	0.000	0.668	0.000	0.014	0.067	0.047	0.031	0.003	0.005	0.003
	Thiva	0.000	1.055	0.000	0.017	0.081	0.065	0.044	0.003	0.006	0.005

Table 9.2.4- 76: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 4 x 100 g/ha 1:3 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.008	1.112	0.001	0.033	0.123	0.074	0.050	0.004	0.01	0.006
	Hamburg	0.044	1.306	0.006	0.090	0.244	0.092	0.062	0.022	0.028	0.007
	Jokioinen	0.005	1.076	0.008	0.074	0.286	0.104	0.070	0.035	0.026	0.005
	Kremsmunster	0.031	1.064	0.002	0.054	0.162	0.071	0.047	0.010	0.017	0.005
	Okehampton	0.061	0.912	0.004	0.070	0.153	0.055	0.036	0.014	0.022	0.005
	Piacenza	0.040	0.868	0.004	0.051	0.118	0.055	0.036	0.010	0.016	0.004
	Porto	0.022	0.633	0.005	0.046	0.097	0.039	0.026	0.010	0.014	0.003
	Seville	0.000	0.649	0.000	0.015	0.067	0.045	0.030	0.004	0.005	0.003
	Thiva	0.002	1.025	0.000	0.018	0.087	0.067	0.042	0.003	0.006	0.005

Table 9.2.4- 77: FOCUS MACRO, PEC_{gw} results of fluopicolide – 4 x 100 g/ha 1:3 year, late application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0,0026

Potatoes 3 x 100 g/ha

1:1 year rotation – Early window

Table 9.2.4- 78: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1-year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.011	4.934	0.003	0.014	0.234	0.750	0.482	0.321	0.129	0.079	0.035
	Hamburg	0.000	6.099	0.024	0.074	0.511	1.666	0.656	0.437	0.365	0.166	0.040
	Jokioinen	0.000	5.047	0.016	0.010	0.035	1.699	0.740	0.493	0.423	0.152	0.030
	Kremsmunster	0.048	4.665	0.007	0.039	0.296	0.806	0.371	0.248	0.154	0.094	0.029
	Okehampton	0.090	4.332	0.010	0.080	0.362	0.834	0.335	0.223	0.172	0.111	0.025
	Piacenza	0.052	3.587	0.010	0.051	0.238	0.554	0.321	0.214	0.100	0.072	0.026
	Porto	0.020	3.074	0.012	0.032	0.172	0.421	0.206	0.137	0.078	0.054	0.016
	Seville	0.000	3.190	0.001	0.001	0.070	0.287	0.232	0.154	0.046	0.025	0.018
	Thiva	0.003	3.824	0.000	0.005	0.095	0.449	0.380	0.253	0.057	0.033	0.034

Table 9.2.4- 79: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 3 x 100 g/ha 1:1 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.200	5.099	0.012	0.061	0.274	0.775	0.482	0.321	0.137	0.089	0.036
	Hamburg	0.498	6.188	0.039	0.163	0.548	1.673	0.646	0.460	0.371	0.175	0.041
	Jokioinen	0.037	5.124	0.033	0.034	0.467	1.737	0.737	0.491	0.425	0.156	0.030
	Kremsmunster	0.365	4.723	0.020	0.108	0.320	0.816	0.367	0.244	0.159	0.100	0.029
	Okehampton	0.500	4.368	0.031	0.157	0.380	0.842	0.328	0.219	0.178	0.115	0.025
	Piacenza	0.358	3.650	0.020	0.107	0.259	0.570	0.320	0.214	0.005	0.077	0.026
	Porto	0.180	3.149	0.027	0.074	0.192	0.444	0.207	0.138	0.087	0.059	0.016
	Seville	0.005	3.280	0.001	0.004	0.080	0.298	0.231	0.154	0.049	0.027	0.018
	Thiva	0.071	4.004	0.005	0.025	0.118	0.477	0.379	0.255	0.063	0.039	0.034

Table 9.2.4- 80: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 3 x 100 g/ha 1:1 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.011	0.743	0.001	0.210	0.072	0.477	0.318	0.110	0.718	0.035
	Hamburg	0.080	5.887	0.012	0.477	0.157	0.653	0.484	0.353	1.632	0.040
	Jokioinen	0.000	4.909	0.001	0.495	0.049	0.740	0.093	0.424	1.701	0.030
	Kremsmunster	0.048	4.516	0.004	0.273	0.088	0.369	0.246	0.147	0.784	0.029
	Okehampton	0.096	4.227	0.009	0.333	0.104	0.332	0.221	0.164	0.807	0.025
	Piacenza	0.062	3.404	0.003	0.215	0.066	0.304	0.209	0.095	0.528	0.026
	Porto	0.020	2.991	0.006	0.154	0.049	0.202	0.135	0.071	0.397	0.016
	Seville	0.000	0.015	0.000	0.063	0.022	0.226	0.150	0.042	0.271	0.018
	Thiva	0.003	3.602	0.001	0.084	0.029	0.379	0.248	0.052	0.426	0.034

Table 9.2.4- 81: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 3 x 100 g/ha 1:1 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	4.905	0.009	0.248	0.745	0.477	0.318	0.128	0.082	0.036
	Hamburg	0.498	6.035	0.026	0.517	1.646	0.643	0.429	0.361	0.167	0.041
	Jokioinen	0.037	5.026	0.025	0.447	1.727	0.737	0.491	0.427	0.153	0.030
	Kremsmunster	0.365	4.588	0.014	0.299	0.797	0.365	0.243	0.153	0.094	0.029
	Okehampton	0.500	4.262	0.022	0.356	0.819	0.326	0.218	0.171	0.109	0.025
	Piacenza	0.358	3.484	0.013	0.237	0.547	0.314	0.209	0.099	0.071	0.026
	Porto	0.180	3.039	0.019	0.175	0.422	0.204	0.136	0.081	0.054	0.016
	Seville	0.005	3.106	0.001	0.073	0.281	0.225	0.150	0.045	0.025	0.018
	Thiva	0.071	3.773	0.003	0.106	0.453	0.371	0.247	0.058	0.035	0.034

Table 9.2.4- 82: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.005	6.373	0.002	0.006	0.183	0.619	0.373	0.249	0.022	0.062	0.030
	Hamburg	0.039	6.980	0.033	0.053	0.451	1.194	0.487	0.305	0.098	0.143	0.026
	Jokioinen	0.000	5.421	0.033	0.008	0.418	1.548	0.634	0.423	0.173	0.141	0.026
	Kremsmunster	0.032	5.559	0.008	0.033	0.296	0.810	0.356	0.238	0.048	0.095	0.026
	Okehampton	0.082	4.620	0.021	0.078	0.348	0.782	0.296	0.197	0.067	0.104	0.021
	Piacenza	0.055	4.439	0.016	0.051	0.229	0.519	0.270	0.180	0.035	0.070	0.021
	Porto	0.033	3.333	0.036	0.055	0.226	0.476	0.209	0.140	0.042	0.068	0.016
	Seville	0.000	3.807	0.002	0.001	0.074	0.301	0.227	0.151	0.015	0.026	0.018
	Thiva	0.001	5.596	0.001	0.001	0.088	0.381	0.293	0.195	0.014	0.030	0.026

Table 9.2.4- 83: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 0 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.114	6.371	0.007	0.034	0.203	0.601	0.365	0.247	0.026	0.067	0.030
	Hamburg	0.354	6.870	0.053	0.123	0.473	1.193	0.472	0.314	0.103	0.146	0.033
	Jokioinen	0.031	5.356	0.043	0.027	0.429	1.519	0.619	0.413	0.173	0.140	0.026
	Kremsmunster	0.288	5.495	0.020	0.086	0.316	0.803	0.346	0.230	0.051	0.097	0.026
	Okehampton	0.428	4.497	0.036	0.147	0.353	0.767	0.284	0.189	0.064	0.105	0.021
	Piacenza	0.330	4.395	0.026	0.105	0.244	0.521	0.265	0.176	0.037	0.072	0.021
	Porto	0.255	3.235	0.055	0.113	0.234	0.477	0.204	0.136	0.045	0.069	0.015
	Seville	0.001	3.730	0.002	0.002	0.082	0.304	0.222	0.148	0.016	0.027	0.018
	Thiva	0.040	5.534	0.004	0.016	0.101	0.388	0.284	0.189	0.015	0.034	0.026

Table 9.2.4- 84: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.005	6.185	0.001	0.164	0.594	0.368	0.246	0.019	0.056	0.030	
	Hamburg	0.039	6.807	0.021	0.420	1.160	0.481	0.320	0.090	0.134	0.033	
	Jokioinen	0.000	5.384	0.026	0.397	1.542	0.636	0.424	0.170	0.137	0.026	
	Kremsmunster	0.032	5.409	0.001	0.274	0.784	0.352	0.235	0.044	0.089	0.026	
	Okehampton	0.082	4.596	0.013	0.072	0.759	0.293	0.196	0.057	0.098	0.022	
	Piacenza	0.055	4.314	0.011	0.208	0.495	0.266	0.178	0.032	0.065	0.021	
	Porto	0.033	3.234	0.020	0.206	0.453	0.206	0.138	0.038	0.063	0.016	
	Seville	0.000	3.636	0.001	0.066	0.283	0.222	0.148	0.013	0.023	0.018	
	Thiva	0.001	5.474	0.001	0.079	0.360	0.285	0.190	0.012	0.027	0.026	

Table 9.2.4- 85: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.114	6.182	0.005	0.101	0.607	0.361	0.240	0.023	0.06	0.030
	Hamburg	0.354	6.729	0.038	0.250	1.163	0.467	0.311	0.096	0.139	0.033
	Jokioinen	0.031	5.323	0.035	0.228	1.512	0.621	0.114	0.170	0.136	0.026
	Kremsmunster	0.288	5.350	0.015	0.159	0.783	0.343	0.229	0.047	0.092	0.027
	Okehampton	0.428	4.416	0.027	0.192	0.748	0.283	0.188	0.060	0.100	0.021
	Piacenza	0.330	4.282	0.019	0.132	0.500	0.260	0.173	0.034	0.067	0.021
	Porto	0.255	3.159	0.040	0.020	0.456	0.201	0.134	0.041	0.065	0.015
	Seville	0.001	3.622	0.001	0.036	0.286	0.216	0.144	0.014	0.025	0.048
	Thiva	0.040	5.356	0.009	0.046	0.367	0.270	0.184	0.014	0.031	0.026

Table 9.2.4- 86: FOCUS MACRO, PEC_{gw} results of fluopicolide – 3 x 100 g/ha 1:1 year, early application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0,0199

1:1 year rotation – late window

Table 9.2.4- 87: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	2.255	0.001	0.004	0.108	0.359	0.229	0.153	0.062	0.037	0.016
	Hamburg	0.026	2.790	0.009	0.030	0.237	0.780	0.309	0.206	0.172	0.076	0.019
	Jokioinen	0.006	2.311	0.006	0.004	0.188	0.802	0.351	0.234	0.193	0.068	0.014
	Kremsmunster	0.005	2.106	0.003	0.015	0.120	0.384	0.177	0.118	0.073	0.042	0.013
	Okehampton	0.034	2.917	0.007	0.034	0.072	0.403	0.162	0.108	0.085	0.052	0.012
	Piacenza	0.024	1.676	0.005	0.023	0.120	0.290	0.161	0.107	0.056	0.037	0.013
	Porto	0.009	1.455	0.003	0.012	0.083	0.211	0.100	0.066	0.039	0.027	0.007
	Seville	0.000	1.515	0.000	0.000	0.034	0.160	0.116	0.077	0.024	0.012	0.009
	Thiva	0.000	0.784	0.000	0.001	0.047	0.235	0.192	0.128	0.032	0.016	0.016

Table 9.2.4- 88: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 3 x 100 g/ha 1:1 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.065	2.346	0.004	0.022	0.124	0.370	0.231	0.154	0.066	0.041	0.017
	Hamburg	0.194	2.878	0.017	0.071	0.256	0.783	0.305	0.203	0.174	0.080	0.019
	Jokioinen	0.007	2.358	0.012	0.012	0.204	0.823	0.351	0.234	0.194	0.070	0.014
	Kremsmunster	0.136	2.217	0.008	0.044	0.144	0.390	0.175	0.117	0.076	0.045	0.014
	Okehampton	0.201	2.017	0.014	0.071	0.180	0.408	0.160	0.107	0.087	0.056	0.012
	Piacenza	0.155	1.713	0.010	0.052	0.150	0.294	0.160	0.107	0.056	0.039	0.013
	Porto	0.062	1.493	0.011	0.029	0.094	0.226	0.101	0.067	0.044	0.029	0.008
	Seville	0.001	1.560	0.000	0.007	0.038	0.165	0.116	0.078	0.026	0.013	0.009
	Thiva	0.021	1.894	0.002	0.009	0.057	0.245	0.194	0.127	0.034	0.019	0.017

Table 9.2.4- 89: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 3 x 100 g/ha 1:1 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	0.162	0.000	0.098	0.034	0.226	0.154	0.066	0.349	0.016
	Hamburg	0.026	2.706	0.005	0.222	0.073	0.308	0.203	0.172	0.280	0.019
	Jokioinen	0.000	2.245	0.004	0.198	0.065	0.349	0.233	0.195	0.792	0.014
	Kremsmunster	0.015	2.090	0.001	0.123	0.040	0.176	0.117	0.077	0.379	0.013
	Okehampton	0.034	1.980	0.004	0.164	0.051	0.162	0.108	0.083	0.398	0.012
	Piacenza	0.026	1.625	0.001	0.114	0.036	0.161	0.107	0.055	0.288	0.013
	Porto	0.005	1.401	0.002	0.075	0.024	0.097	0.065	0.036	0.199	0.007
	Seville	0.000	0.459	0.000	0.030	0.011	0.114	0.076	0.023	0.152	0.009
	Thiva	0.000	1.707	0.000	0.042	0.015	0.196	0.127	0.030	0.226	0.016

Table 9.2.4- 90: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 3 x 100 g/ha 1:1 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.065	2.253	0.003	0.113	0.360	0.228	0.152	0.064	0.038	0.017
	Hamburg	0.194	2.797	0.011	0.244	0.782	0.305	0.203	0.174	0.077	0.019
	Jokioinen	0.007	2.296	0.009	0.193	0.811	0.349	0.233	0.195	0.068	0.014
	Kremsmunster	0.136	2.151	0.006	0.056	0.385	0.174	0.116	0.074	0.043	0.014
	Okehampton	0.201	1.980	0.010	0.173	0.404	0.160	0.107	0.086	0.054	0.012
	Piacenza	0.155	1.655	0.006	0.124	0.292	0.160	0.107	0.056	0.038	0.013
	Porto	0.062	1.446	0.001	0.086	0.216	0.099	0.066	0.041	0.027	0.008
	Seville	0.001	1.505	0.000	0.034	0.157	0.115	0.077	0.024	0.012	0.009
	Thiva	0.021	1.799	0.001	0.051	0.236	0.191	0.127	0.033	0.018	0.017

Table 9.2.4- 91: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	2.848	0.001	0.002	0.084	0.292	0.173	0.116	0.011	0.028	0.013
	Hamburg	0.012	3.214	0.015	0.022	0.209	0.559	0.232	0.154	0.050	0.067	0.015
	Jokioinen	0.000	2.447	0.013	0.003	0.186	0.722	0.299	0.200	0.081	0.065	0.012
	Kremsmunster	0.009	2.545	0.003	0.013	0.130	0.384	0.169	0.112	0.024	0.042	0.012
	Okehampton	0.030	2.182	0.009	0.034	0.170	0.379	0.142	0.094	0.033	0.059	0.016
	Piacenza	0.020	2.049	0.008	0.023	0.149	0.277	0.136	0.090	0.022	0.036	0.010
	Porto	0.009	1.571	0.015	0.020	0.111	0.236	0.100	0.067	0.022	0.034	0.007
	Seville	0.000	1.811	0.001	0.000	0.033	0.154	0.115	0.076	0.008	0.012	0.009
	Thiva	0.000	2.634	0.001	0.001	0.045	0.209	0.133	0.108	0.048	0.016	0.012

Table 9.2.4- 92: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 0 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.032	2.831	0.002	0.001	0.092	0.291	0.169	0.113	0.023	0.031	0.013
	Hamburg	0.136	3.190	0.024	0.055	0.221	0.562	0.225	0.150	0.051	0.069	0.015
	Jokioinen	0.007	2.414	0.017	0.010	0.191	0.712	0.293	0.195	0.080	0.064	0.012
	Kremsmunster	0.109	2.506	0.008	0.034	0.142	0.379	0.164	0.109	0.025	0.044	0.012
	Okehampton	0.177	2.149	0.016	0.067	0.172	0.372	0.138	0.091	0.034	0.051	0.010
	Piacenza	0.136	2.046	0.013	0.048	0.124	0.274	0.130	0.087	0.022	0.036	0.010
	Porto	0.080	1.525	0.022	0.044	0.113	0.234	0.098	0.066	0.023	0.034	0.007
	Seville	0.000	1.736	0.001	0.000	0.030	0.155	0.112	0.074	0.008	0.013	0.008
	Thiva	0.008	2.777	0.001	0.004	0.048	0.208	0.146	0.097	0.009	0.016	0.012

Table 9.2.4- 93: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.001	2.762	0.000	0.076	0.286	0.172	0.114	0.010	0.026	0.013	
	Hamburg	0.012	3.140	0.009	0.199	0.548	0.231	0.154	0.050	0.064	0.015	
	Jokioinen	0.000	2.413	0.011	0.179	0.720	0.298	0.198	0.081	0.063	0.012	
	Kremsmunster	0.009	2.477	0.002	0.120	0.381	0.168	0.112	0.024	0.040	0.012	
	Okehampton	0.030	2.132	0.006	0.060	0.374	0.142	0.094	0.031	0.049	0.010	
	Piacenza	0.020	2.085	0.004	0.114	0.274	0.135	0.090	0.021	0.036	0.010	
	Porto	0.009	1.527	0.007	0.102	0.226	0.098	0.066	0.020	0.031	0.007	
	Seville	0.000	1.734	0.000	0.030	0.145	0.112	0.074	0.007	0.011	0.009	
	Thiva	0.000	2.539	0.000	0.040	0.199	0.148	0.099	0.007	0.014	0.012	

Table 9.2.4- 94: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:1 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.032	2.741	0.002	0.084	0.284	0.167	0.112	0.012	0.023	0.017
	Hamburg	0.136	3.127	0.017	0.209	0.552	0.224	0.150	0.051	0.067	0.015
	Jokioinen	0.007	2.394	0.014	0.184	0.709	0.291	0.194	0.080	0.063	0.012
	Kremsmunster	0.103	2.448	0.006	0.132	0.376	0.163	0.108	0.024	0.042	0.013
	Okehampton	0.177	2.123	0.012	0.168	0.369	0.136	0.091	0.033	0.049	0.010
	Piacenza	0.136	1.983	0.009	0.120	0.272	0.157	0.087	0.022	0.036	0.010
	Porto	0.080	1.497	0.015	0.005	0.226	0.096	0.064	0.021	0.032	0.007
	Seville	0.000	1.720	0.000	0.032	0.146	0.109	0.072	0.007	0.011	0.008
	Thiva	0.008	2.487	0.004	0.044	0.199	0.141	0.095	0.008	0.015	0.012

Table 9.2.4- 95: FOCUS MACRO, PEC_{gw} results of fluopicolide – 3 x 100 g/ha 1:1 year, late application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0,0078

1:2 year rotation – Early window

Table 9.2.4- 96: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.003	2.379	0.001	0.006	0.108	0.393	0.249	0.166	0.061	0.037	0.017
	Hamburg	0.028	2.962	0.009	0.033	0.246	0.762	0.295	0.197	0.166	0.080	0.019
	Jokioinen	0.002	2.544	0.011	0.004	0.202	0.829	0.355	0.237	0.199	0.070	0.016
	Kremsmunster	0.036	2.229	0.003	0.018	0.136	0.401	0.179	0.119	0.075	0.043	0.014
	Okehampton	0.033	2.120	0.007	0.034	0.177	0.394	0.154	0.102	0.085	0.055	0.012
	Piacenza	0.021	1.775	0.004	0.022	0.116	0.271	0.150	0.100	0.050	0.036	0.013
	Porto	0.006	1.455	0.003	0.013	0.082	0.197	0.094	0.062	0.038	0.026	0.007
	Seville	0.000	1.402	0.000	0.000	0.031	0.138	0.114	0.076	0.021	0.011	0.008
	Thiva	0.001	1.875	0.001	0.002	0.048	0.190	0.199	0.132	0.023	0.016	0.016

Table 9.2.4- 97: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.071	2.487	0.005	0.026	0.126	0.391	0.252	0.168	0.066	0.041	0.018
	Hamburg	0.197	3.008	0.016	0.074	0.265	0.768	0.291	0.194	0.171	0.084	0.019
	Jokioinen	0.027	2.637	0.017	0.015	0.218	0.851	0.356	0.237	0.206	0.074	0.016
	Kremsmunster	0.143	2.299	0.008	0.046	0.150	0.407	0.179	0.119	0.079	0.046	0.014
	Okehampton	0.197	2.143	0.014	0.069	0.188	0.397	0.151	0.101	0.087	0.057	0.012
	Piacenza	0.139	1.832	0.009	0.047	0.127	0.278	0.130	0.100	0.053	0.038	0.013
	Porto	0.065	1.506	0.011	0.032	0.092	0.212	0.095	0.063	0.042	0.028	0.008
	Seville	0.001	1.457	0.001	0.002	0.035	0.144	0.114	0.076	0.023	0.012	0.009
	Thiva	0.021	1.956	0.002	0.009	0.059	0.205	0.193	0.137	0.047	0.019	0.016

Table 9.2.4- 98: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.003	2.282	0.000	0.097	0.033	0.246	0.164	0.057	0.358	0.017
	Hamburg	0.028	2.868	0.005	0.228	0.075	0.293	0.195	0.180	0.243	0.019
	Jokioinen	0.001	2.402	0.007	0.193	0.067	0.349	0.233	0.195	0.818	0.016
	Kremsmunster	0.016	2.156	0.001	0.124	0.040	0.176	0.117	0.077	0.389	0.014
	Okehampton	0.033	2.055	0.004	0.164	0.052	0.152	0.101	0.081	0.381	0.012
	Piacenza	0.021	1.683	0.001	0.105	0.033	0.147	0.098	0.047	0.261	0.013
	Porto	0.006	1.393	0.002	0.073	0.023	0.091	0.061	0.035	0.184	0.007
	Seville	0.000	0.327	0.000	0.028	0.010	0.111	0.074	0.019	0.130	0.008
	Thiva	0.001	1.762	0.000	0.042	0.014	0.196	0.137	0.022	0.179	0.016

Table 9.2.4- 99: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.071	2.399	0.004	0.113	0.376	0.249	0.166	0.061	0.038	0.018
	Hamburg	0.197	2.928	0.011	0.248	0.753	0.290	0.193	0.165	0.080	0.019
	Jokioinen	0.027	2.569	0.013	0.208	0.840	0.350	0.233	0.202	0.071	0.016
	Kremsmunster	0.143	2.231	0.006	0.058	0.397	0.176	0.117	0.076	0.044	0.014
	Okehampton	0.197	2.083	0.010	0.177	0.386	0.150	0.100	0.083	0.055	0.012
	Piacenza	0.139	1.748	0.006	0.117	0.269	0.146	0.098	0.049	0.036	0.013
	Porto	0.065	1.444	0.008	0.084	0.199	0.093	0.062	0.039	0.026	0.008
	Seville	0.001	1.375	0.000	0.032	0.135	0.111	0.074	0.021	0.011	0.009
	Thiva	0.021	1.835	0.001	0.052	0.191	0.196	0.130	0.024	0.017	0.016

Table 9.2.4- 100: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.935	0.001	0.003	0.083	0.288	0.193	0.128	0.010	0.028	0.009
	Hamburg	0.016	2.158	0.013	0.026	0.216	0.598	0.242	0.161	0.048	0.070	0.010
	Jokioinen	0.001	1.807	0.019	0.004	0.196	0.712	0.313	0.209	0.082	0.065	0.009
	Kremsmunster	0.010	1.787	0.004	0.013	0.136	0.396	0.177	0.118	0.023	0.043	0.009
	Okehampton	0.029	1.475	0.009	0.031	0.169	0.369	0.133	0.089	0.037	0.052	0.007
	Piacenza	0.017	1.428	0.007	0.021	0.143	0.247	0.126	0.084	0.017	0.035	0.007
	Porto	0.011	1.042	0.014	0.024	0.107	0.229	0.097	0.064	0.021	0.032	0.005
	Seville	0.000	1.090	0.001	0.000	0.030	0.143	0.110	0.074	0.007	0.011	0.005
	Thiva	0.000	1.819	0.001	0.003	0.038	0.153	0.133	0.100	0.005	0.012	0.009

Table 9.2.4- 101: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.037	2.000	0.093	0.045	0.096	0.293	0.189	0.126	0.012	0.031	0.014
	Hamburg	0.137	2.291	0.021	0.057	0.229	0.596	0.235	0.157	0.051	0.072	0.016
	Jokioinen	0.018	2.755	0.026	0.012	0.203	0.703	0.308	0.206	0.082	0.067	0.013
	Kremsmunster	0.109	2.652	0.009	0.038	0.140	0.390	0.173	0.116	0.017	0.045	0.013
	Okehampton	0.169	2.230	0.016	0.062	0.176	0.352	0.138	0.085	0.032	0.053	0.011
	Piacenza	0.122	2.216	0.011	0.046	0.122	0.251	0.122	0.082	0.019	0.036	0.010
	Porto	0.084	1.590	0.023	0.047	0.112	0.237	0.094	0.063	0.023	0.034	0.008
	Seville	0.000	1.721	0.001	0.001	0.039	0.145	0.108	0.079	0.007	0.012	0.008
	Thiva	0.010	2.484	0.002	0.006	0.044	0.137	0.147	0.098	0.006	0.014	0.012

Table 9.2.4- 102: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.007	2.828	0.000	0.074	0.280	0.191	0.127	0.009	0.025	0.014	
	Hamburg	0.016	2.269	0.008	0.201	0.576	0.238	0.159	0.044	0.065	0.016	
	Jokioinen	0.001	2.730	0.014	0.187	0.705	0.310	0.206	0.080	0.064	0.013	
	Kremsmunster	0.010	2.625	0.007	0.125	0.383	0.175	0.116	0.021	0.041	0.013	
	Okehampton	0.029	2.220	0.005	0.056	0.358	0.133	0.088	0.028	0.049	0.011	
	Piacenza	0.017	2.154	0.005	0.103	0.236	0.122	0.082	0.015	0.032	0.011	
	Porto	0.011	1.542	0.008	0.097	0.217	0.095	0.063	0.019	0.030	0.008	
	Seville	0.000	1.716	0.000	0.028	0.137	0.109	0.073	0.006	0.010	0.008	
	Thiva	0.000	2.429	0.000	0.033	0.144	0.149	0.099	0.005	0.011	0.012	

Table 9.2.4- 103: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.037	2.813	0.002	0.086	0.286	0.187	0.124	0.010	0.023	0.019
	Hamburg	0.137	3.226	0.015	0.214	0.577	0.232	0.154	0.047	0.069	0.016
	Jokioinen	0.018	2.710	0.020	0.195	0.703	0.305	0.203	0.080	0.065	0.013
	Kremsmunster	0.107	2.601	0.006	0.136	0.384	0.171	0.114	0.023	0.043	0.012
	Okehampton	0.169	2.178	0.011	0.164	0.353	0.129	0.085	0.029	0.050	0.021
	Piacenza	0.122	2.144	0.008	0.113	0.240	0.149	0.080	0.017	0.034	0.010
	Porto	0.084	1.534	0.016	0.003	0.226	0.092	0.062	0.021	0.031	0.008
	Seville	0.000	1.694	0.001	0.030	0.139	0.106	0.070	0.007	0.011	0.008
	Thiva	0.010	2.400	0.004	0.039	0.144	0.144	0.096	0.005	0.043	0.012

Table 9.2.4- 104: FOCUS MACRO, PEC_{gw} results of fluopicolide – 3 x 100 g/ha 1:2 year, early application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0,0057

1:2 year rotation – Late window

Table 9.2.4- 105: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.059	0.000	0.002	0.049	0.195	0.116	0.077	0.030	0.017	0.008
	Hamburg	0.009	0.316	0.004	0.013	0.112	0.367	0.141	0.094	0.079	0.036	0.009
	Jokioinen	0.000	1.143	0.004	0.002	0.088	0.398	0.178	0.119	0.093	0.032	0.007
	Kremsmunster	0.004	1.021	0.001	0.006	0.06	0.194	0.088	0.058	0.037	0.020	0.006
	Okehampton	0.011	0.981	0.003	0.014	0.082	0.194	0.073	0.049	0.043	0.026	0.006
	Piacenza	0.008	0.813	0.002	0.009	0.058	0.142	0.082	0.055	0.027	0.018	0.006
	Porto	0.002	0.684	0.002	0.005	0.041	0.098	0.046	0.031	0.019	0.013	0.004
	Seville	0.000	0.666	0.000	0.000	0.014	0.073	0.056	0.037	0.011	0.005	0.004
	Thiva	0.000	0.915	0.000	0.001	0.027	0.100	0.096	0.064	0.014	0.009	0.008

Table 9.2.4- 106: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.021	1.103	0.002	0.009	0.057	0.183	0.117	0.078	0.032	0.019	0.008
	Hamburg	0.075	1.348	0.007	0.032	0.121	0.370	0.140	0.093	0.082	0.039	0.009
	Jokioinen	0.008	1.179	0.006	0.006	0.097	0.407	0.177	0.118	0.095	0.034	0.007
	Kremsmunster	0.050	1.060	0.003	0.019	0.070	0.198	0.087	0.058	0.038	0.022	0.007
	Okehampton	0.079	0.995	0.006	0.030	0.088	0.196	0.072	0.048	0.047	0.027	0.006
	Piacenza	0.060	0.842	0.004	0.022	0.062	0.143	0.083	0.055	0.027	0.018	0.006
	Porto	0.021	0.718	0.004	0.013	0.046	0.105	0.047	0.031	0.021	0.014	0.004
	Seville	0.000	0.689	0.000	0.000	0.016	0.076	0.056	0.037	0.012	0.006	0.004
	Thiva	0.005	0.965	0.001	0.007	0.033	0.106	0.095	0.067	0.015	0.011	0.003

Table 9.2.4- 107: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	0.014	0.000	0.044	0.015	0.115	0.075	0.029	0.170	0.008
	Hamburg	0.009	1.281	0.002	0.105	0.033	0.101	0.094	0.078	0.363	0.009
	Jokioinen	0.008	1.003	0.003	0.085	0.031	0.178	0.119	0.094	0.396	0.007
	Kremsmunster	0.004	0.990	0.000	0.058	0.019	0.087	0.058	0.036	0.190	0.006
	Okehampton	0.011	0.956	0.001	0.077	0.025	0.075	0.049	0.042	0.192	0.006
	Piacenza	0.009	0.788	0.001	0.055	0.017	0.081	0.054	0.026	0.140	0.006
	Porto	0.002	0.660	0.001	0.036	0.012	0.045	0.030	0.018	0.092	0.004
	Seville	0.000	0.638	0.000	0.013	0.005	0.055	0.037	0.010	0.069	0.004
	Thiva	0.000	0.885	0.000	0.024	0.008	0.095	0.063	0.013	0.095	0.008

Table 9.2.4- 108: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.021	1.058	0.001	0.052	0.177	0.117	0.078	0.031	0.018	0.008
	Hamburg	0.075	1.314	0.005	0.115	0.367	0.140	0.093	0.080	0.037	0.009
	Jokioinen	0.008	1.139	0.007	0.093	0.404	0.178	0.119	0.095	0.032	0.007
	Kremsmunster	0.050	1.027	0.002	0.065	0.194	0.087	0.058	0.038	0.020	0.007
	Okehampton	0.079	0.975	0.004	0.084	0.194	0.072	0.048	0.043	0.026	0.006
	Piacenza	0.060	0.817	0.003	0.060	0.142	0.081	0.054	0.027	0.018	0.006
	Porto	0.020	0.699	0.003	0.042	0.100	0.046	0.031	0.020	0.013	0.004
	Seville	0.000	0.680	0.000	0.015	0.072	0.056	0.037	0.011	0.005	0.004
	Thiva	0.005	0.923	0.000	0.029	0.101	0.095	0.064	0.014	0.009	0.008

Table 9.2.4- 109: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	1.339	0.000	0.001	0.036	0.140	0.087	0.058	0.005	0.012	0.006
	Hamburg	0.005	1.514	0.006	0.010	0.099	0.291	0.116	0.078	0.024	0.032	0.007
	Jokioinen	0.000	1.251	0.008	0.001	0.086	0.345	0.152	0.101	0.039	0.030	0.006
	Kremsmunster	0.003	1.211	0.002	0.005	0.063	0.190	0.086	0.058	0.011	0.020	0.006
	Okehampton	0.010	1.069	0.004	0.013	0.080	0.181	0.065	0.043	0.016	0.025	0.005
	Piacenza	0.006	1.019	0.004	0.008	0.057	0.133	0.069	0.046	0.010	0.017	0.005
	Porto	0.003	0.739	0.006	0.009	0.052	0.115	0.047	0.032	0.011	0.016	0.004
	Seville	0.000	0.841	0.000	0.000	0.015	0.074	0.054	0.036	0.004	0.005	0.004
	Thiva	0.000	1.217	0.000	0.000	0.021	0.086	0.076	0.050	0.003	0.007	0.006

Table 9.2.4- 110: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 0 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.010	1.325	0.001	0.005	0.040	0.140	0.085	0.056	0.006	0.013	0.006
	Hamburg	0.050	1.499	0.010	0.025	0.105	0.290	0.113	0.075	0.025	0.034	0.007
	Jokioinen	0.005	1.259	0.010	0.004	0.091	0.343	0.148	0.098	0.038	0.031	0.006
	Kremsmunster	0.036	1.200	0.003	0.014	0.067	0.188	0.085	0.056	0.016	0.021	0.006
	Okehampton	0.070	1.040	0.007	0.028	0.084	0.179	0.062	0.042	0.017	0.025	0.005
	Piacenza	0.052	1.011	0.005	0.020	0.059	0.132	0.068	0.045	0.011	0.018	0.005
	Porto	0.026	0.740	0.009	0.018	0.054	0.115	0.046	0.031	0.012	0.016	0.004
	Seville	0.000	0.825	0.000	0.000	0.015	0.075	0.052	0.035	0.004	0.005	0.004
	Thiva	0.002	1.186	0.001	0.002	0.024	0.087	0.073	0.049	0.004	0.008	0.006

Table 9.2.4- 111: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	1.295	0.000	0.032	0.135	0.088	0.058	0.005	0.011	0.006
	Hamburg	0.005	1.482	0.004	0.096	0.288	0.115	0.077	0.024	0.031	0.007
	Jokioinen	0.000	1.221	0.006	0.082	0.342	0.152	0.102	0.039	0.029	0.006
	Kremsmunster	0.003	1.175	0.007	0.058	0.188	0.085	0.057	0.011	0.019	0.006
	Okehampton	0.010	1.050	0.002	0.076	0.179	0.065	0.043	0.015	0.024	0.005
	Piacenza	0.006	0.995	0.002	0.055	0.132	0.068	0.045	0.010	0.017	0.005
	Porto	0.003	0.722	0.003	0.048	0.110	0.046	0.031	0.010	0.015	0.004
	Seville	0.000	0.809	0.000	0.013	0.071	0.053	0.035	0.004	0.005	0.004
	Thiva	0.000	1.167	0.000	0.019	0.081	0.074	0.049	0.003	0.006	0.006

Table 9.2.4- 112: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:2 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.010	1.283	0.001	0.036	0.136	0.085	0.056	0.005	0.01	0.006
	Hamburg	0.050	1.470	0.007	0.101	0.288	0.113	0.075	0.025	0.032	0.007
	Jokioinen	0.005	1.230	0.009	0.086	0.340	0.148	0.098	0.038	0.030	0.006
	Kremsmunster	0.036	1.169	0.002	0.062	0.186	0.083	0.056	0.011	0.020	0.006
	Okehampton	0.070	1.035	0.005	0.086	0.178	0.063	0.042	0.016	0.025	0.005
	Piacenza	0.052	0.989	0.004	0.057	0.131	0.067	0.044	0.010	0.017	0.005
	Porto	0.026	0.722	0.006	0.050	0.111	0.046	0.030	0.011	0.015	0.004
	Seville	0.000	0.794	0.000	0.014	0.072	0.052	0.034	0.004	0.005	0.004
	Thiva	0.002	1.138	0.004	0.021	0.087	0.077	0.048	0.003	0.007	0.006

Table 9.2.4- 113: FOCUS MACRO, PEC_{gw} results of fluopicolide – 3 x 100 g/ha 1:2 year, late application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0,0026

1:3 year rotation – Early window

Table 9.2.4- 114: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	1.552	0.001	0.004	0.069	0.242	0.157	0.105	0.041	0.024	0.011
	Hamburg	0.015	1.879	0.005	0.019	0.158	0.458	0.172	0.115	0.102	0.052	0.012
	Jokioinen	0.006	1.690	0.006	0.003	0.128	0.517	0.205	0.137	0.128	0.045	0.010
	Kremsmunster	0.008	1.487	0.002	0.011	0.085	0.274	0.124	0.083	0.051	0.028	0.009
	Okehampton	0.018	1.371	0.004	0.020	0.143	0.257	0.099	0.066	0.056	0.036	0.008
	Piacenza	0.011	1.157	0.003	0.014	0.079	0.177	0.102	0.068	0.034	0.024	0.008
	Porto	0.003	0.933	0.003	0.007	0.054	0.127	0.059	0.039	0.025	0.017	0.005
	Seville	0.000	0.857	0.000	0.000	0.019	0.094	0.076	0.051	0.014	0.007	0.005
	Thiva	0.000	1.275	0.000	0.001	0.033	0.139	0.134	0.089	0.018	0.011	0.011

Table 9.2.4- 115: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.039	1.614	0.003	0.016	0.083	0.253	0.157	0.105	0.044	0.027	0.012
	Hamburg	0.111	1.920	0.010	0.043	0.174	0.462	0.170	0.114	0.105	0.055	0.012
	Jokioinen	0.014	1.730	0.010	0.011	0.139	0.518	0.204	0.136	0.129	0.047	0.010
	Kremsmunster	0.078	1.547	0.005	0.029	0.097	0.278	0.123	0.082	0.057	0.037	0.016
	Okehampton	0.116	1.384	0.009	0.042	0.123	0.260	0.098	0.065	0.058	0.038	0.008
	Piacenza	0.081	1.179	0.006	0.031	0.086	0.184	0.102	0.068	0.035	0.026	0.008
	Porto	0.034	0.969	0.007	0.019	0.062	0.135	0.060	0.040	0.027	0.019	0.005
	Seville	0.001	0.863	0.000	0.001	0.022	0.099	0.076	0.051	0.016	0.007	0.005
	Thiva	0.011	1.340	0.001	0.005	0.039	0.145	0.133	0.089	0.020	0.013	0.011

Table 9.2.4- 116: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.007	1.489	0.000	0.062	0.022	0.156	0.104	0.039	0.035	0.011
	Hamburg	0.015	1.803	0.003	0.196	0.049	0.191	0.114	0.098	0.446	0.012
	Jokioinen	0.000	1.654	0.004	0.120	0.043	0.205	0.137	0.128	0.517	0.010
	Kremsmunster	0.008	1.420	0.001	0.081	0.026	0.123	0.082	0.049	0.269	0.009
	Okehampton	0.018	1.319	0.002	0.104	0.033	0.098	0.066	0.054	0.249	0.008
	Piacenza	0.011	1.099	0.002	0.071	0.022	0.100	0.067	0.032	0.169	0.008
	Porto	0.003	0.895	0.001	0.048	0.016	0.057	0.038	0.023	0.120	0.005
	Seville	0.000	0.791	0.000	0.017	0.006	0.076	0.049	0.013	0.089	0.005
	Thiva	0.006	1.168	0.000	0.029	0.020	0.131	0.087	0.017	0.131	0.011

Table 9.2.4- 117: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.039	1.555	0.002	0.074	0.245	0.156	0.104	0.042	0.025	0.012
	Hamburg	0.111	1.864	0.006	0.162	0.452	0.169	0.113	0.101	0.053	0.012
	Jokioinen	0.014	1.696	0.007	0.050	0.519	0.204	0.136	0.129	0.045	0.010
	Kremsmunster	0.078	1.481	0.004	0.090	0.274	0.123	0.082	0.051	0.029	0.010
	Okehampton	0.116	1.341	0.006	0.114	0.253	0.097	0.065	0.055	0.036	0.008
	Piacenza	0.080	1.132	0.004	0.079	0.174	0.100	0.066	0.033	0.024	0.008
	Porto	0.034	0.934	0.004	0.056	0.128	0.058	0.039	0.025	0.017	0.005
	Seville	0.001	0.817	0.000	0.020	0.093	0.074	0.049	0.014	0.007	0.005
	Thiva	0.011	1.261	0.001	0.035	0.137	0.130	0.087	0.018	0.011	0.011

Table 9.2.4- 118: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.935	0.000	0.002	0.051	0.195	0.124	0.082	0.006	0.017	0.009
	Hamburg	0.008	2.158	0.008	0.014	0.141	0.379	0.147	0.098	0.032	0.046	0.010
	Jokioinen	0.001	1.807	0.012	0.002	0.125	0.478	0.171	0.114	0.055	0.043	0.009
	Kremsmunster	0.005	1.787	0.002	0.009	0.089	0.261	0.116	0.078	0.015	0.029	0.009
	Okehampton	0.016	1.475	0.005	0.019	0.141	0.239	0.088	0.059	0.020	0.035	0.007
	Piacenza	0.009	1.428	0.004	0.013	0.076	0.170	0.085	0.056	0.012	0.023	0.007
	Porto	0.005	1.042	0.009	0.013	0.073	0.150	0.062	0.041	0.015	0.022	0.005
	Seville	0.000	1.090	0.001	0.000	0.024	0.101	0.072	0.048	0.005	0.008	0.005
	Thiva	0.000	1.819	0.001	0.001	0.027	0.116	0.093	0.066	0.004	0.009	0.009

Table 9.2.4- 119: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 0 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.020	1.935	0.002	0.009	0.059	0.195	0.123	0.087	0.007	0.020	0.009
	Hamburg	0.074	2.134	0.014	0.033	0.149	0.377	0.143	0.095	0.034	0.047	0.010
	Jokioinen	0.009	1.786	0.015	0.007	0.131	0.468	0.166	0.111	0.055	0.044	0.009
	Kremsmunster	0.060	1.761	0.006	0.024	0.091	0.262	0.113	0.076	0.016	0.030	0.009
	Okehampton	0.102	1.439	0.010	0.039	0.117	0.236	0.088	0.057	0.021	0.035	0.007
	Piacenza	0.073	1.406	0.007	0.029	0.082	0.170	0.083	0.055	0.013	0.024	0.007
	Porto	0.047	1.039	0.014	0.028	0.076	0.154	0.061	0.041	0.016	0.022	0.005
	Seville	0.000	1.067	0.001	0.000	0.020	0.102	0.070	0.046	0.005	0.009	0.005
	Thiva	0.006	1.795	0.001	0.003	0.030	0.119	0.096	0.064	0.005	0.010	0.009

Table 9.2.4- 120: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.007	1.880	0.000	0.025	0.188	0.121	0.081	0.005	0.016	0.009	
	Hamburg	0.008	2.096	0.005	0.129	0.367	0.145	0.097	0.030	0.043	0.010	
	Jokioinen	0.001	1.758	0.010	0.119	0.479	0.174	0.116	0.054	0.042	0.009	
	Kremsmunster	0.005	1.727	0.007	0.081	0.251	0.116	0.077	0.013	0.027	0.009	
	Okehampton	0.016	1.434	0.003	0.002	0.232	0.087	0.058	0.018	0.032	0.007	
	Piacenza	0.009	1.377	0.003	0.069	0.165	0.083	0.056	0.010	0.022	0.007	
	Porto	0.005	1.012	0.005	0.066	0.142	0.061	0.040	0.013	0.020	0.005	
	Seville	0.000	1.038	0.000	0.022	0.096	0.070	0.046	0.004	0.008	0.005	
	Thiva	0.000	1.738	0.000	0.024	0.110	0.097	0.065	0.004	0.008	0.009	

Table 9.2.4- 121: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.020	1.889	0.001	0.053	0.190	0.119	0.079	0.006	0.018	0.009	
	Hamburg	0.074	2.080	0.010	0.139	0.366	0.142	0.094	0.032	0.045	0.010	
	Jokioinen	0.009	1.759	0.012	0.124	0.470	0.169	0.113	0.054	0.043	0.009	
	Kremsmunster	0.060	1.725	0.004	0.088	0.252	0.113	0.075	0.014	0.028	0.009	

	Okehampton	0.102	1.409	0.007	0.108	0.230	0.084	0.056	0.020	0.033	0.007
	Piacenza	0.073	1.359	0.005	0.075	0.165	0.082	0.054	0.011	0.023	0.007
	Porto	0.047	1.010	0.010	0.070	0.146	0.060	0.040	0.015	0.021	0.005
	Seville	0.000	1.033	0.001	0.023	0.097	0.068	0.045	0.005	0.008	0.005
	Thiva	0.006	1.738	0.001	0.027	0.113	0.095	0.063	0.004	0.009	0.009

Table 9.2.4- 122: FOCUS MACRO, PEC_{gw} results of fluopicolide – 3 x 100 g/ha 1:3 year, early application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0.0039

1:3 year rotation – Late window

Table 9.2.4- 123: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.689	0.000	0.001	0.032	0.116	0.073	0.049	0.020	0.011	0.005
	Hamburg	0.005	0.880	0.003	0.005	0.074	0.219	0.081	0.054	0.050	0.024	0.006
	Jokioinen	0.000	0.747	0.003	0.001	0.029	0.239	0.098	0.061	0.020	0.005	
	Kremsmünster	0.002	0.694	0.001	0.004	0.040	0.126	0.057	0.038	0.024	0.013	0.004
	Okehampton	0.006	0.645	0.002	0.008	0.054	0.127	0.049	0.032	0.028	0.017	0.004
	Piacenza	0.004	0.545	0.001	0.004	0.035	0.092	0.051	0.035	0.018	0.012	0.004
	Porto	0.001	0.743	0.001	0.003	0.027	0.063	0.029	0.019	0.013	0.009	0.002
	Seville	0.000	0.395	0.000	0.000	0.009	0.049	0.038	0.025	0.008	0.003	0.002
	Thiva	0.000	0.579	0.000	0.000	0.018	0.078	0.068	0.045	0.011	0.006	0.005

Table 9.2.4- 124: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.724	0.000	0.000	0.037	0.120	0.074	0.049	0.021	0.012	0.005
	Hamburg	0.003	0.901	0.004	0.019	0.080	0.221	0.080	0.054	0.051	0.025	0.006
	Jokioinen	0.004	0.769	0.004	0.004	0.061	0.252	0.098	0.065	0.062	0.022	0.005
	Kremsmünster	0.028	0.720	0.002	0.012	0.044	0.129	0.057	0.038	0.025	0.014	0.004
	Okehampton	0.006	0.655	0.000	0.019	0.058	0.128	0.048	0.032	0.028	0.018	0.004
	Piacenza	0.032	0.576	0.003	0.014	0.040	0.095	0.053	0.035	0.018	0.012	0.004
	Porto	0.011	0.462	0.003	0.007	0.030	0.067	0.030	0.020	0.014	0.009	0.002
	Seville	0.000	0.408	0.000	0.000	0.010	0.051	0.039	0.026	0.008	0.004	0.002
	Thiva	0.003	0.613	0.000	0.002	0.021	0.081	0.068	0.046	0.011	0.007	0.005

Table 9.2.4- 125: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.662	0.000	0.029	0.010	0.073	0.048	0.019	0.114	0.005
	Hamburg	0.005	0.847	0.001	0.069	0.023	0.081	0.054	0.050	0.21	0.006
	Jokioinen	0.000	0.725	0.002	0.054	0.020	0.098	0.065	0.060	0.245	0.005
	Kremsmunster	0.002	0.664	0.000	0.037	0.012	0.057	0.038	0.024	0.125	0.004
	Okehampton	0.006	0.627	0.001	0.051	0.016	0.048	0.032	0.027	0.126	0.004
	Piacenza	0.004	0.524	0.001	0.035	0.011	0.052	0.035	0.018	0.091	0.004
	Porto	0.001	0.425	0.000	0.024	0.008	0.058	0.019	0.012	0.059	0.002
	Seville	0.000	0.373	0.000	0.008	0.003	0.038	0.025	0.007	0.046	0.002
	Thiva	0.000	0.557	0.000	0.016	0.005	0.066	0.044	0.014	0.075	0.005

Table 9.2.4- 126: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.011	0.694	0.001	0.034	0.018	0.073	0.049	0.020	0.011	0.005
	Hamburg	0.043	0.878	0.003	0.076	0.0219	0.081	0.054	0.05	0.024	0.006
	Jokioinen	0.004	0.748	0.003	0.058	0.0248	0.098	0.065	0.060	0.021	0.005
	Kremsmunster	0.028	0.693	0.00	0.041	0.128	0.057	0.038	0.025	0.013	0.004
	Okehampton	0.046	0.640	0.003	0.055	0.027	0.048	0.032	0.028	0.017	0.004
	Piacenza	0.032	0.553	0.002	0.039	0.093	0.052	0.035	0.019	0.012	0.004
	Porto	0.011	0.446	0.002	0.027	0.063	0.029	0.019	0.013	0.009	0.002
	Seville	0.006	0.353	0.000	0.009	0.008	0.038	0.025	0.007	0.003	0.002
	Thiva	0.003	0.586	0.000	0.019	0.079	0.067	0.044	0.011	0.006	0.005

Table 9.2.4- 127: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.009	0.852	0.000	0.001	0.020	0.094	0.058	0.038	0.003	0.008	0.004
	Hamburg	0.003	0.996	0.004	0.006	0.065	0.186	0.071	0.048	0.016	0.021	0.005
	Jokioinen	0.000	0.795	0.005	0.001	0.054	0.219	0.080	0.054	0.026	0.019	0.004
	Kremsmunster	0.002	0.814	0.001	0.003	0.040	0.123	0.055	0.037	0.008	0.013	0.004
	Okehampton	0.006	0.702	0.002	0.008	0.052	0.117	0.043	0.028	0.011	0.016	0.003
	Piacenza	0.003	0.666	0.002	0.006	0.037	0.090	0.043	0.029	0.007	0.011	0.003
	Porto	0.002	0.481	0.003	0.005	0.035	0.075	0.031	0.020	0.008	0.011	0.002
	Seville	0.000	0.517	0.000	0.000	0.011	0.053	0.036	0.024	0.003	0.004	0.003
	Thiva	0.000	0.92	0.000	0.000	0.014	0.065	0.050	0.034	0.003	0.005	0.004

Table 9.2.4- 128: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.005	0.844	0.001	0.003	0.027	0.094	0.056	0.038	0.003	0.009	0.004
	Hamburg	0.028	0.991	0.006	0.015	0.069	0.185	0.070	0.046	0.017	0.022	0.005
	Jokioinen	0.003	0.804	0.006	0.003	0.056	0.214	0.078	0.052	0.026	0.020	0.004
	Kremsmunster	0.019	0.809	0.002	0.009	0.042	0.122	0.053	0.036	0.008	0.013	0.004
	Okehampton	0.040	0.693	0.004	0.018	0.055	0.115	0.044	0.028	0.017	0.017	0.003
	Piacenza	0.026	0.662	0.004	0.013	0.038	0.089	0.042	0.028	0.007	0.012	0.003
	Porto	0.015	0.482	0.006	0.010	0.037	0.077	0.030	0.020	0.008	0.011	0.002
	Seville	0.000	0.504	0.000	0.000	0.012	0.053	0.035	0.024	0.003	0.004	0.002
	Thiva	0.001	0.768	0.000	0.001	0.015	0.064	0.049	0.03	0.003	0.005	0.004

Table 9.2.4- 129: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.830	0.000	0.021	0.092	0.057	0.038	0.007	0.007	0.004
	Hamburg	0.003	0.970	0.002	0.062	0.183	0.07	0.047	0.016	0.020	0.005
	Jokioinen	0.000	0.797	0.004	0.051	0.019	0.080	0.054	0.027	0.019	0.004
	Kremsmunster	0.002	0.786	0.000	0.038	0.122	0.055	0.036	0.007	0.012	0.004
	Okehampton	0.006	0.685	0.001	0.049	0.117	0.043	0.028	0.010	0.016	0.003
	Piacenza	0.003	0.646	0.002	0.035	0.089	0.043	0.028	0.007	0.011	0.003
	Porto	0.002	0.484	0.002	0.033	0.071	0.030	0.020	0.007	0.010	0.002
	Seville	0.000	0.495	0.000	0.010	0.050	0.035	0.024	0.002	0.004	0.003
	Thiva	0.000	0.780	0.000	0.013	0.062	0.049	0.033	0.002	0.004	0.004

Table 9.2.4- 130: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 3 x 100 g/ha 1:3 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.005	0.830	0.000	0.024	0.092	0.056	0.037	0.003	0.008	0.004
	Hamburg	0.028	0.968	0.004	0.066	0.183	0.070	0.046	0.017	0.021	0.005
	Jokioinen	0.003	0.786	0.005	0.053	0.214	0.079	0.052	0.026	0.019	0.004
	Kremsmunster	0.019	0.789	0.007	0.040	0.121	0.053	0.036	0.008	0.013	0.004
	Okehampton	0.040	0.680	0.003	0.052	0.115	0.041	0.028	0.011	0.016	0.003
	Piacenza	0.026	0.644	0.003	0.037	0.088	0.041	0.028	0.007	0.011	0.003
	Porto	0.015	0.468	0.004	0.034	0.073	0.029	0.020	0.007	0.011	0.002
	Seville	0.000	0.484	0.000	0.011	0.051	0.034	0.023	0.002	0.004	0.002
	Thiva	0.001	0.754	0.000	0.014	0.061	0.048	0.032	0.002	0.005	0.004

Table 9.2.4- 131: FOCUS MACRO, PECgw results of fluopicolide – 3 x 100 g/ha 1:3 year, late application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) – MACRO Fluopicolide
Potatoes	Chateaudun	0.0016

Potatoes 2 x 100 g / ha

1:1 year rotation – Early window

Table 9.2.4- 132: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.008	4.124	0.002	0.011	0.194	0.630	0.406	0.271	0.108	0.065	0.030
	Hamburg	0.060	5.085	0.017	0.059	0.228	1.401	0.522	0.368	0.306	0.138	0.034
	Jokioinen	0.000	4.219	0.013	0.008	0.361	1.429	0.623	0.415	0.356	0.127	0.025
	Kremsmunster	0.036	3.899	0.006	0.031	0.246	0.677	0.313	0.208	0.129	0.078	0.024
	Okehampton	0.073	3.627	0.013	0.064	0.302	0.701	0.282	0.188	0.145	0.099	0.021
	Piacenza	0.047	3.002	0.008	0.041	0.198	0.465	0.270	0.180	0.084	0.060	0.022
	Porto	0.015	2.569	0.010	0.025	0.143	0.353	0.173	0.115	0.065	0.045	0.013
	Seville	0.000	2.658	0.000	0.000	0.058	0.241	0.195	0.130	0.038	0.020	0.015
	Thiva	0.002	3.182	0.001	0.004	0.079	0.327	0.320	0.213	0.038	0.027	0.029

Table 9.2.4- 133: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.134	4.238	0.040	0.048	0.227	0.632	0.406	0.271	0.105	0.074	0.030
	Hamburg	0.394	4.179	0.032	0.132	0.456	1.408	0.544	0.363	0.312	0.146	0.034
	Jokioinen	0.025	4.286	0.026	0.026	0.387	1.460	0.621	0.414	0.358	0.130	0.025
	Kremsmunster	0.284	3.953	0.036	0.036	0.260	0.687	0.309	0.206	0.134	0.083	0.024
	Okehampton	0.293	3.657	0.025	0.128	0.317	0.708	0.277	0.185	0.150	0.096	0.021
	Piacenza	0.282	3.048	0.016	0.087	0.216	0.479	0.270	0.180	0.088	0.064	0.022
	Porto	0.140	2.633	0.023	0.051	0.159	0.373	0.174	0.116	0.073	0.049	0.013
	Seville	0.004	2.733	0.001	0.003	0.066	0.259	0.194	0.130	0.041	0.022	0.015
	Thiva	0.053	3.332	0.004	0.019	0.097	0.400	0.319	0.212	0.053	0.032	0.029

Table 9.2.4- 134: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.008	3.962	0.001	0.174	0.059	0.402	0.268	0.100	0.603	0.030	
	Hamburg	0.060	4.906	0.009	0.395	0.131	0.549	0.366	0.296	1.371	0.034	
	Jokioinen	0.000	4.109	0.008	0.343	0.124	0.623	0.415	0.356	1.431	0.025	
	Kremsmunster	0.036	3.773	0.003	0.227	0.073	0.311	0.207	0.123	0.659	0.024	
	Okehampton	0.073	3.530	0.007	0.277	0.087	0.279	0.186	0.137	0.678	0.021	
	Piacenza	0.047	2.848	0.004	0.178	0.055	0.264	0.176	0.080	0.443	0.022	
	Porto	0.015	2.466	0.004	0.128	0.041	0.170	0.113	0.060	0.333	0.013	
	Seville	0.000	2.511	0.000	0.052	0.018	0.190	0.127	0.035	0.227	0.015	
	Thiva	0.002	2.990	0.000	0.070	0.024	0.313	0.209	0.044	0.357	0.029	

Table 9.2.4- 135: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.154	4.102	0.007	0.206	0.626	0.402	0.266	0.107	0.065	0.030
	Hamburg	0.394	5.042	0.021	0.430	1.384	0.542	0.361	0.303	0.139	0.034
	Jokioinen	0.025	4.189	0.019	0.370	1.452	0.621	0.414	0.359	0.128	0.025
	Kremsmunster	0.284	3.838	0.011	0.249	0.670	0.308	0.205	0.128	0.079	0.024
	Okehampton	0.393	3.567	0.018	0.298	0.689	0.275	0.183	0.143	0.091	0.021
	Piacenza	0.282	2.908	0.011	0.198	0.460	0.264	0.176	0.083	0.059	0.022
	Porto	0.140	2.538	0.015	0.145	0.354	0.172	0.114	0.067	0.045	0.013
	Seville	0.004	2.587	0.001	0.060	0.236	0.190	0.126	0.034	0.021	0.015
	Thiva	0.053	3.138	0.009	0.087	0.370	0.317	0.208	0.049	0.029	0.019

Table 9.2.4- 136: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.003	5.308	0.001	0.005	0.152	0.320	0.314	0.210	0.019	0.051	0.025
	Hamburg	0.029	5.836	0.027	0.042	0.375	0.004	0.410	0.274	0.082	0.119	0.028
	Jokioinen	0.000	4.527	0.026	0.006	0.347	1.304	0.535	0.356	0.146	0.118	0.022
	Kremsmunster	0.023	4.658	0.006	0.026	0.246	0.680	0.300	0.200	0.040	0.079	0.022
	Okehampton	0.063	3.867	0.017	0.063	0.291	0.658	0.249	0.166	0.052	0.087	0.018
	Piacenza	0.042	3.707	0.013	0.041	0.191	0.436	0.227	0.152	0.030	0.059	0.017
	Porto	0.023	2.800	0.029	0.044	0.189	0.400	0.176	0.119	0.035	0.057	0.013
	Seville	0.000	2.182	0.001	0.001	0.061	0.233	0.191	0.127	0.012	0.021	0.015
	Thiva	0.001	4.667	0.001	0.002	0.073	0.320	0.246	0.164	0.011	0.025	0.022

Table 9.2.4- 137: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.087	5.311	0.005	0.027	0.170	0.531	0.308	0.206	0.021	0.056	0.025
	Hamburg	0.226	5.736	0.043	0.099	0.390	1.004	0.398	0.265	0.087	0.122	0.027
	Jokioinen	0.021	4.677	0.034	0.021	0.377	1.279	0.522	0.348	0.145	0.117	0.022
	Kremsmunster	0.225	4.593	0.016	0.068	0.265	0.676	0.292	0.194	0.043	0.081	0.022
	Okehampton	0.330	3.772	0.029	0.120	0.296	0.646	0.239	0.160	0.054	0.088	0.018
	Piacenza	0.259	3.624	0.027	0.085	0.203	0.438	0.223	0.148	0.031	0.060	0.017
	Porto	0.200	2.722	0.045	0.091	0.195	0.401	0.172	0.115	0.038	0.057	0.013
	Seville	0.001	3.151	0.002	0.001	0.068	0.256	0.187	0.124	0.013	0.023	0.015
	Thiva	0.029	4.615	0.003	0.012	0.083	0.326	0.239	0.159	0.013	0.028	0.022

Table 9.2.4- 138: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.003	5.149	0.000	0.136	0.499	0.310	0.207	0.016	0.047	0.025
	Hamburg	0.029	5.685	0.017	0.349	0.975	0.404	0.270	0.076	0.111	0.031
	Jokioinen	0.000	4.497	0.020	0.330	1.298	0.536	0.357	0.143	0.115	0.022
	Kremsmunster	0.023	4.536	0.004	0.227	0.659	0.296	0.198	0.037	0.075	0.022
	Okehampton	0.063	3.771	0.010	0.269	0.638	0.247	0.164	0.048	0.082	0.018
	Piacenza	0.042	3.601	0.009	0.173	0.416	0.220	0.150	0.027	0.054	0.027
	Porto	0.025	2.716	0.016	0.172	0.381	0.155	0.116	0.032	0.053	0.013
	Seville	0.000	3.056	0.001	0.055	0.238	0.187	0.124	0.011	0.019	0.015
	Thiva	0.001	4.513	0.001	0.065	0.302	0.240	0.160	0.014	0.023	0.022

Table 9.2.4- 139: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.087	5.153	0.004	0.153	0.510	0.300	0.202	0.019	0.051	0.025
	Hamburg	0.276	5.627	0.021	0.369	0.978	0.394	0.262	0.081	0.116	0.027
	Jokioinen	0.021	4.448	0.028	0.340	1.274	0.523	0.349	0.143	0.114	0.022
	Kremsmunster	0.225	4.481	0.012	0.247	0.658	0.289	0.193	0.039	0.077	0.022
	Okehampton	0.338	3.702	0.021	0.278	0.630	0.238	0.159	0.050	0.084	0.018
	Piacenza	0.259	3.577	0.015	0.185	0.420	0.219	0.146	0.028	0.056	0.017
	Porto	0.200	2.656	0.032	0.181	0.383	0.169	0.113	0.034	0.054	0.013
	Seville	0.001	3.027	0.001	0.061	0.241	0.182	0.121	0.012	0.021	0.015
	Thiva	0.029	4.465	0.003	0.055	0.308	0.233	0.155	0.011	0.025	0.022

Table 9.2.4- 140: FOCUS MACRO, PECgw results of fluopicolide – 2 x 100 g/ha 1:1 year, early application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0147

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1:1 year rotation – Late window

Table 9.2.4- 141: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.470	0.000	0.002	0.070	0.238	0.153	0.102	0.041	0.024	0.011
	Hamburg	0.013	1.818	0.005	0.018	0.152	0.518	0.206	0.137	0.114	0.050	0.012
	Jokioinen	0.000	1.510	0.003	0.002	0.120	0.533	0.234	0.156	0.128	0.044	0.009
	Kremsmunster	0.007	1.399	0.002	0.009	0.085	0.255	0.148	0.079	0.048	0.027	0.009
	Okehampton	0.018	1.323	0.004	0.020	0.112	0.268	0.108	0.072	0.056	0.034	0.008
	Piacenza	0.012	1.102	0.003	0.014	0.077	0.191	0.107	0.071	0.037	0.024	0.008
	Porto	0.002	0.949	0.003	0.007	0.054	0.140	0.066	0.044	0.026	0.017	0.005
	Seville	0.000	0.984	0.000	0.000	0.022	0.107	0.077	0.052	0.016	0.008	0.006
	Thiva	0.000	1.162	0.000	0.001	0.030	0.156	0.128	0.086	0.021	0.011	0.011

Table 9.2.4- 142: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.033	1.531	0.002	0.013	0.080	0.245	0.154	0.103	0.043	0.026	0.011
	Hamburg	0.109	1.883	0.010	0.043	0.160	0.520	0.204	0.136	0.115	0.052	0.012
	Jokioinen	0.003	1.544	0.007	0.007	0.130	0.546	0.234	0.156	0.129	0.046	0.009
	Kremsmunster	0.076	1.452	0.005	0.026	0.094	0.259	0.117	0.078	0.050	0.029	0.009
	Okehampton	0.115	1.329	0.008	0.044	0.117	0.271	0.107	0.071	0.058	0.036	0.008
	Piacenza	0.087	1.123	0.006	0.032	0.089	0.195	0.106	0.070	0.037	0.026	0.008
	Porto	0.032	0.979	0.006	0.017	0.062	0.131	0.068	0.045	0.029	0.019	0.005
	Seville	0.000	1.014	0.000	0.000	0.024	0.111	0.078	0.052	0.017	0.009	0.006
	Thiva	0.010	1.231	0.001	0.005	0.036	0.162	0.129	0.086	0.023	0.012	0.011

Table 9.2.4- 143: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.001	1.409	0.000	0.063	0.022	0.151	0.100	0.040	0.232	0.011	
	Hamburg	0.013	1.764	0.003	0.143	0.048	0.205	0.137	0.114	0.517	0.012	
	Jokioinen	0.000	1.465	0.002	0.114	0.042	0.233	0.155	0.129	0.526	0.009	
	Kremsmunster	0.007	1.354	0.001	0.079	0.026	0.117	0.078	0.047	0.252	0.009	
	Okehampton	0.018	1.293	0.002	0.107	0.033	0.108	0.072	0.055	0.265	0.008	
	Piacenza	0.012	1.067	0.001	0.074	0.023	0.107	0.071	0.036	0.190	0.008	
	Porto	0.002	0.909	0.001	0.049	0.016	0.065	0.043	0.024	0.133	0.005	
	Seville	0.000	0.949	0.000	0.020	0.007	0.076	0.051	0.015	0.102	0.006	
	Thiva	0.000	1.113	0.000	0.027	0.010	0.127	0.085	0.020	0.151	0.011	

Table 9.2.4- 144: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.033	1.471	0.002	0.073	0.239	0.152	0.102	0.042	0.02	0.01
	Hamburg	0.109	1.821	0.007	0.157	0.519	0.203	0.135	0.115	0.050	0.012
	Jokioinen	0.003	1.501	0.005	0.123	0.538	0.233	0.155	0.129	0.044	0.009
	Kremsmunster	0.076	1.409	0.003	0.088	0.256	0.116	0.078	0.049	0.028	0.005
	Okehampton	0.115	1.302	0.006	0.114	0.269	0.107	0.071	0.057	0.035	0.008
	Piacenza	0.087	1.087	0.004	0.080	0.193	0.106	0.071	0.037	0.025	0.008
	Porto	0.032	0.948	0.004	0.056	0.144	0.066	0.044	0.027	0.018	0.005
	Seville	0.000	0.978	0.000	0.022	0.105	0.077	0.051	0.014	0.008	0.006
	Thiva	0.010	1.169	0.002	0.033	0.15	0.11	0.085	0.022	0.01	0.011

Table 9.2.4- 145: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, late application – acidic soils with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	1.864	0.000	0.001	0.054	0.195	0.016	0.077	0.008	0.019	0.009
	Hamburg	0.006	2.103	0.009	0.013	0.136	0.372	0.155	0.103	0.033	0.043	0.010
	Jokioinen	0.000	1.60	0.007	0.002	0.12	0.48	0.200	0.134	0.054	0.042	0.008
	Kremsmunster	0.004	1.669	0.002	0.007	0.084	0.255	0.142	0.075	0.016	0.028	0.008
	Okehampton	0.016	1.432	0.006	0.021	0.111	0.252	0.095	0.063	0.022	0.033	0.007
	Piacenza	0.010	1.343	0.005	0.014	0.077	0.183	0.091	0.060	0.014	0.023	0.006
	Porto	0.003	1.037	0.000	0.012	0.079	0.133	0.067	0.045	0.015	0.022	0.005
	Seville	0.000	1.188	0.000	0.000	0.021	0.103	0.077	0.031	0.005	0.008	0.006
	Thiva	0.000	1.718	0.000	0.000	0.029	0.140	0.101	0.067	0.006	0.010	0.008

Table 9.2.4- 146: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.016	1.846	0.001	0.006	0.059	0.194	0.113	0.076	0.008	0.020	0.009
	Hamburg	0.01	2.093	0.015	0.033	0.14	0.374	0.151	0.100	0.034	0.045	0.010
	Jokioinen	0.003	1.588	0.010	0.006	0.123	0.475	0.196	0.130	0.053	0.042	0.008
	Kremsmunster	0.055	1.648	0.005	0.020	0.092	0.253	0.109	0.073	0.016	0.029	0.008
	Okehampton	0.10	1.416	0.010	0.042	0.113	0.248	0.091	0.061	0.022	0.033	0.007
	Piacenza	0.076	1.307	0.008	0.029	0.080	0.182	0.087	0.058	0.015	0.023	0.006
	Porto	0.045	1.013	0.014	0.027	0.075	0.157	0.066	0.044	0.015	0.023	0.005
	Seville	0.000	1.172	0.000	0.000	0.023	0.104	0.075	0.050	0.005	0.008	0.006
	Thiva	0.004	1.681	0.000	0.002	0.031	0.139	0.097	0.065	0.006	0.011	0.008

Table 9.2.4- 147: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	1.807	0.000	0.049	0.190	0.115	0.076	0.007	0.017	0.009
	Hamburg	0.006	2.053	0.005	0.129	0.364	0.154	0.105	0.033	0.042	0.010
	Jokioinen	0.000	1.578	0.006	0.115	0.479	0.199	0.132	0.054	0.041	0.008
	Kremsmunster	0.004	1.623	0.001	0.077	0.253	0.112	0.075	0.016	0.026	0.008
	Okehampton	0.016	1.405	0.003	0.104	0.249	0.094	0.063	0.021	0.033	0.007
	Piacenza	0.010	1.300	0.003	0.074	0.182	0.090	0.060	0.014	0.023	0.006
	Porto	0.005	1.008	0.004	0.067	0.152	0.066	0.044	0.013	0.021	0.005
	Seville	0.000	1.148	0.000	0.019	0.098	0.075	0.050	0.005	0.007	0.006
	Thiva	0.000	1.655	0.000	0.026	0.134	0.099	0.066	0.005	0.009	0.008

Table 9.2.4- 148: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:1 year, late application – alkaline soils, without aged sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.016	1.786	0.001	0.054	0.189	0.110	0.075	0.008	0.018	0.009
	Hamburg	0.073	2.049	0.010	0.136	0.367	0.150	0.100	0.034	0.044	0.010
	Jokioinen	0.003	1.562	0.008	0.118	0.472	0.194	0.130	0.053	0.041	0.008
	Kremsmunster	0.055	1.608	0.003	0.085	0.250	0.109	0.072	0.016	0.027	0.008
	Okehampton	0.101	1.393	0.001	0.110	0.246	0.091	0.061	0.022	0.032	0.007
	Piacenza	0.076	1.298	0.005	0.078	0.180	0.087	0.058	0.015	0.023	0.006
	Porto	0.045	0.991	0.009	0.070	0.151	0.064	0.043	0.014	0.021	0.005
	Seville	0.000	1.129	0.000	0.021	0.098	0.073	0.049	0.005	0.007	0.006
	Thiva	0.004	1.623	0.001	0.038	0.134	0.095	0.064	0.005	0.010	0.008

Table 9.2.4- 149: FOCUS MACRO, PEC_{gw} results of fluopicolide – 2 x 100 g/ha 1:1 year, late application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0039

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1:2 year rotation – Early window

Table 9.2.4- 150: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	1.981	0.001	0.005	0.090	0.313	0.210	0.140	0.051	0.030	0.014
	Hamburg	0.021	2.470	0.007	0.026	0.205	0.640	0.249	0.166	0.140	0.066	0.016
	Jokioinen	0.001	2.121	0.008	0.003	0.168	0.697	0.299	0.199	0.167	0.058	0.013
	Kremsmunster	0.012	1.872	0.002	0.014	0.143	0.337	0.131	0.100	0.063	0.036	0.002
	Okehampton	0.025	1.771	0.006	0.027	0.147	0.331	0.129	0.086	0.071	0.046	0.010
	Piacenza	0.015	1.480	0.003	0.017	0.096	0.228	0.127	0.084	0.042	0.030	0.011
	Porto	0.004	1.215	0.004	0.016	0.068	0.165	0.079	0.057	0.032	0.021	0.006
	Seville	0.000	1.165	0.000	0.000	0.025	0.116	0.096	0.064	0.018	0.009	0.007
	Thiva	0.000	1.565	0.001	0.002	0.040	0.160	0.167	0.112	0.020	0.013	0.013

Table 9.2.4- 151: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.053	2.076	0.004	0.021	0.104	0.328	0.212	0.142	0.055	0.034	0.015
	Hamburg	0.139	2.512	0.013	0.059	0.220	0.640	0.245	0.166	0.148	0.070	0.016
	Jokioinen	0.020	2.188	0.014	0.012	0.181	0.715	0.290	0.200	0.193	0.061	0.013
	Kremsmunster	0.112	1.923	0.007	0.037	0.124	0.342	0.151	0.100	0.066	0.039	0.012
	Okehampton	0.154	1.793	0.011	0.056	0.156	0.334	0.127	0.085	0.073	0.048	0.010
	Piacenza	0.109	1.529	0.007	0.038	0.100	0.234	0.126	0.084	0.044	0.032	0.011
	Porto	0.050	1.259	0.009	0.026	0.077	0.198	0.080	0.053	0.035	0.023	0.006
	Seville	0.001	1.210	0.001	0.001	0.029	0.121	0.096	0.064	0.019	0.010	0.007
	Thiva	0.017	1.633	0.002	0.003	0.049	0.172	0.163	0.111	0.022	0.016	0.013

Table 9.2.4. 152: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.002	1.900	0.000	0.080	0.028	0.207	0.138	0.048	0.300	0.014	
	Hamburg	0.021	2.393	0.004	0.190	0.062	0.247	0.164	0.134	0.625	0.016	
	Jokioinen	0.001	2.069	0.006	0.160	0.056	0.294	0.196	0.164	0.688	0.013	
	Kremsmunster	0.012	1.891	0.001	0.053	0.034	0.148	0.099	0.060	0.327	0.012	
	Okehampton	0.025	1.717	0.003	0.136	0.043	0.128	0.085	0.068	0.320	0.010	
	Piacenza	0.015	1.405	0.002	0.087	0.028	0.123	0.082	0.039	0.220	0.011	
	Porto	0.003	1.164	0.002	0.060	0.019	0.077	0.051	0.030	0.155	0.006	
	Seville	0.000	1.101	0.000	0.023	0.008	0.094	0.062	0.016	0.109	0.007	
	Thiva	0.000	1.471	0.000	0.035	0.012	0.165	0.110	0.018	0.150	0.013	

Table 9.2.4- 153: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.053	1.998	0.003	0.094	0.316	0.210	0.140	0.051	0.03	0.03
	Hamburg	0.153	2.445	0.009	0.207	0.633	0.244	0.183	0.139	0.067	0.016
	Jokioinen	0.020	2.130	0.010	0.172	0.705	0.294	0.196	0.169	0.059	0.013
	Kremsmunster	0.112	1.857	0.005	0.115	0.334	0.148	0.099	0.064	0.036	0.011
	Okehampton	0.154	1.743	0.008	0.148	0.325	0.120	0.084	0.070	0.046	0.040
	Piacenza	0.109	1.458	0.005	0.097	0.226	0.133	0.082	0.041	0.030	0.011
	Porto	0.050	1.207	0.006	0.069	0.167	0.078	0.052	0.032	0.021	0.006
	Seville	0.001	1.145	0.000	0.026	0.113	0.094	0.062	0.017	0.009	0.007
	Thiva	0.015	1.532	0.004	0.043	0.160	0.160	0.110	0.020	0.044	0.013

Table 9.2.4- 154: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	2.441	0.001	0.002	0.069	0.242	0.062	0.108	0.008	0.023	0.012
	Hamburg	0.012	2.790	0.011	0.020	0.180	0.502	0.203	0.136	0.040	0.058	0.013
	Jokioinen	0.004	2.321	0.015	0.003	0.160	0.600	0.263	0.176	0.069	0.054	0.011
	Kremsmunster	0.007	2.241	0.003	0.010	0.113	0.333	0.140	0.099	0.019	0.036	0.011
	Okehampton	0.022	2.913	0.007	0.025	0.140	0.310	0.112	0.075	0.026	0.043	0.009
	Piacenza	0.013	1.869	0.006	0.017	0.095	0.207	0.106	0.071	0.014	0.029	0.009
	Porto	0.008	1.336	0.002	0.018	0.089	0.192	0.082	0.054	0.018	0.027	0.006
	Seville	0.000	1.492	0.001	0.000	0.025	0.120	0.093	0.062	0.006	0.009	0.007
	Thiva	0.000	2.094	0.001	0.001	0.032	0.129	0.127	0.084	0.005	0.010	0.010

Table 9.2.4- 155: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.027	2.425	0.002	0.012	0.079	0.246	0.159	0.106	0.010	0.026	0.012
	Hamburg	0.106	2.749	0.010	0.046	0.190	0.501	0.198	0.132	0.042	0.060	0.013
	Jokioinen	0.013	2.301	0.020	0.009	0.169	0.592	0.259	0.173	0.069	0.056	0.011
	Kremsmunster	0.082	2.215	0.007	0.031	0.121	0.332	0.145	0.097	0.021	0.038	0.011
	Okehampton	0.130	1.868	0.013	0.050	0.147	0.305	0.107	0.072	0.027	0.044	0.009
	Piacenza	0.096	1.887	0.009	0.038	0.101	0.211	0.103	0.069	0.016	0.030	0.009
	Porto	0.065	1.330	0.018	0.038	0.093	0.199	0.080	0.053	0.019	0.028	0.006
	Seville	0.000	1.478	0.001	0.001	0.027	0.122	0.091	0.061	0.006	0.010	0.007
	Thiva	0.007	2.069	0.002	0.005	0.037	0.132	0.124	0.082	0.005	0.012	0.010

Table 9.2.4- 156: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	2.364	0.000	0.061	0.235	0.161	0.107	0.007	0.021	0.012
	Hamburg	0.012	2.727	0.006	0.167	0.484	0.200	0.134	0.037	0.051	0.011
	Jokioinen	0.001	2.279	0.011	0.156	0.593	0.260	0.174	0.067	0.053	0.011
	Kremsmunster	0.007	2.189	0.001	0.104	0.322	0.147	0.098	0.018	0.034	0.011
	Okehampton	0.022	1.856	0.004	0.130	0.301	0.112	0.075	0.023	0.041	0.008
	Piacenza	0.013	1.805	0.004	0.086	0.198	0.103	0.069	0.013	0.027	0.009
	Porto	0.008	1.293	0.006	0.081	0.182	0.088	0.053	0.016	0.025	0.006
	Seville	0.000	1.433	0.000	0.023	0.115	0.092	0.061	0.005	0.008	0.007
	Thiva	0.000	2.023	0.000	0.028	0.121	0.125	0.084	0.004	0.009	0.010

Table 9.2.4- 157: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.027	2.352	0.002	0.071	0.240	0.158	0.105	0.009	0.024	0.012
	Hamburg	0.106	2.694	0.002	0.198	0.485	0.195	0.130	0.039	0.057	0.013
	Jokioinen	0.013	2.263	0.016	0.162	0.591	0.256	0.171	0.067	0.054	0.011
	Kremsmunster	0.082	2.171	0.005	0.113	0.323	0.144	0.096	0.019	0.036	0.011
	Okehampton	0.133	1.824	0.002	0.137	0.297	0.108	0.072	0.025	0.042	0.009
	Piacenza	0.096	1.796	0.007	0.094	0.201	0.100	0.067	0.014	0.028	0.009
	Porto	0.065	0.283	0.013	0.085	0.189	0.078	0.052	0.017	0.026	0.006
	Seville	0.000	1.415	0.001	0.023	0.116	0.089	0.059	0.006	0.009	0.007
	Thiva	0.005	1.999	0.001	0.032	0.124	0.121	0.081	0.005	0.010	0.010

Table 9.2.4- 158: FOCUS MACRO, PEC_{gw} results of fluopicolide – 2 x 100 g/ha 1:2 year, early application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - MACRO Fluopicolide
Potatoes	Chateaudun	0.0042

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1:2 year rotation – Late window

Table 9.2.4- 159: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.693	0.000	0.001	0.032	0.116	0.077	0.051	0.020	0.011	0.005
	Hamburg	0.005	0.858	0.002	0.008	0.072	0.243	0.094	0.063	0.052	0.024	0.006
	Jokioinen	0.000	0.744	0.002	0.001	0.057	0.264	0.119	0.079	0.062	0.024	0.005
	Kremsmunster	0.002	0.662	0.001	0.004	0.041	0.129	0.038	0.039	0.024	0.013	0.004
	Okehampton	0.006	0.643	0.002	0.008	0.053	0.129	0.048	0.032	0.028	0.017	0.004
	Piacenza	0.004	0.534	0.001	0.005	0.038	0.094	0.055	0.037	0.018	0.012	0.004
	Porto	0.001	0.450	0.001	0.005	0.027	0.065	0.033	0.027	0.013	0.008	0.002
	Seville	0.000	0.432	0.000	0.000	0.009	0.049	0.037	0.025	0.007	0.003	0.003
	Thiva	0.000	0.594	0.000	0.000	0.018	0.067	0.064	0.042	0.009	0.006	0.005

Table 9.2.4- 160: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.011	0.722	0.001	0.005	0.037	0.121	0.078	0.052	0.021	0.012	0.005
	Hamburg	0.042	0.880	0.004	0.019	0.076	0.240	0.093	0.066	0.054	0.025	0.006
	Jokioinen	0.004	0.768	0.004	0.003	0.062	0.270	0.148	0.079	0.063	0.022	0.005
	Kremsmunster	0.027	0.690	0.002	0.011	0.045	0.132	0.058	0.039	0.025	0.014	0.004
	Okehampton	0.045	0.652	0.004	0.019	0.057	0.130	0.048	0.032	0.029	0.018	0.004
	Piacenza	0.034	0.553	0.002	0.015	0.040	0.095	0.055	0.033	0.018	0.012	0.004
	Porto	0.011	0.470	0.003	0.008	0.030	0.070	0.032	0.021	0.014	0.009	0.002
	Seville	0.000	0.445	0.000	0.000	0.011	0.051	0.038	0.025	0.008	0.004	0.003
	Thiva	0.002	0.626	0.000	0.002	0.024	0.073	0.064	0.043	0.010	0.007	0.005

Table 9.2.4- 161: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.000	0.663	0.000	0.029	0.010	0.077	0.051	0.019	0.113	0.005	
	Hamburg	0.005	0.833	0.001	0.068	0.023	0.094	0.063	0.052	0.241	0.006	
	Jokioinen	0.000	0.717	0.002	0.054	0.020	0.119	0.079	0.062	0.263	0.005	
	Kremsmunster	0.002	0.691	0.000	0.037	0.012	0.058	0.039	0.024	0.126	0.004	
	Okehampton	0.006	0.627	0.001	0.050	0.016	0.049	0.032	0.028	0.128	0.004	
	Piacenza	0.004	0.512	0.001	0.035	0.011	0.054	0.036	0.018	0.093	0.004	
	Porto	0.000	0.430	0.000	0.024	0.008	0.030	0.020	0.012	0.061	0.002	
	Seville	0.000	0.414	0.000	0.008	0.003	0.037	0.025	0.007	0.046	0.003	
	Thiva	0.000	0.576	0.000	0.016	0.005	0.063	0.042	0.009	0.064	0.005	

Table 9.2.4- 162: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 2 x 100 g/ha 1:2 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.011	0.691	0.001	0.033	0.118	0.077	0.052	0.020	0.01	0.005	0.005
	Hamburg	0.042	0.856	0.003	0.074	0.244	0.093	0.062	0.053	0.024	0.006	0.006
	Jokioinen	0.004	0.741	0.003	0.059	0.268	0.119	0.079	0.063	0.021	0.005	0.005
	Kremsmunster	0.027	0.669	0.001	0.042	0.129	0.058	0.039	0.025	0.015	0.004	0.004
	Okehampton	0.045	0.640	0.002	0.054	0.129	0.048	0.032	0.029	0.017	0.004	0.004
	Piacenza	0.034	0.532	0.002	0.039	0.094	0.054	0.036	0.018	0.012	0.004	0.004
	Porto	0.011	0.452	0.002	0.027	0.066	0.031	0.021	0.013	0.009	0.002	0.002
	Seville	0.000	0.428	0.000	0.009	0.048	0.037	0.025	0.007	0.003	0.003	0.003
	Thiva	0.002	0.601	0.000	0.019	0.067	0.067	0.042	0.009	0.006	0.005	0.005

Table 9.2.4- 163: FOCUS PELMO, PEC_{gw} results of flupicolide and its metabolites – 2 x 100 g/ha 1:2 year, late application – acidic soils with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.875	0.000	0.001	0.023	0.093	0.058	0.038	0.003	0.008	0.004
	Hamburg	0.003	0.990	0.003	0.006	0.064	0.193	0.077	0.052	0.016	0.021	0.005
	Jokioinen	0.000	0.804	0.005	0.004	0.057	0.230	0.101	0.068	0.026	0.020	0.004
	Kremsmunster	0.001	0.792	0.001	0.003	0.041	0.126	0.058	0.039	0.007	0.013	0.004
	Okehampton	0.005	0.702	0.002	0.008	0.052	0.121	0.043	0.029	0.011	0.016	0.003
	Piacenza	0.003	0.663	0.002	0.005	0.036	0.088	0.046	0.031	0.007	0.011	0.003
	Porto	0.002	0.486	0.003	0.005	0.034	0.077	0.032	0.019	0.007	0.010	0.002
	Seville	0.000	0.553	0.000	0.000	0.009	0.030	0.036	0.024	0.003	0.003	0.003
	Thiva	0.000	0.798	0.000	0.000	0.014	0.057	0.051	0.034	0.002	0.005	0.004

Table 9.2.4- 164: FOCUS PELMO, PEC_{gw} results of flupicolide and its metabolites – 2 x 100 g/ha 1:2 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.005	0.867	0.001	0.003	0.026	0.094	0.056	0.038	0.004	0.009	0.004
	Hamburg	0.003	0.989	0.006	0.015	0.060	0.193	0.076	0.050	0.017	0.022	0.005
	Jokioinen	0.003	0.810	0.006	0.003	0.058	0.229	0.098	0.066	0.025	0.020	0.004
	Kremsmunster	0.019	0.787	0.002	0.008	0.044	0.125	0.056	0.038	0.008	0.014	0.004
	Okehampton	0.039	0.683	0.004	0.017	0.054	0.119	0.042	0.028	0.011	0.017	0.003
	Piacenza	0.029	0.662	0.003	0.015	0.038	0.088	0.045	0.030	0.007	0.011	0.003
	Porto	0.014	0.484	0.006	0.011	0.036	0.077	0.031	0.021	0.008	0.011	0.002
	Seville	0.000	0.542	0.000	0.000	0.010	0.050	0.035	0.024	0.003	0.004	0.003
	Thiva	0.001	0.778	0.000	0.001	0.016	0.058	0.049	0.033	0.002	0.005	0.004

Table 9.2.4- 165: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.846	0.000	0.021	0.090	0.058	0.039	0.003	0.007	0.004
	Hamburg	0.003	0.964	0.002	0.061	0.192	0.077	0.054	0.016	0.020	0.005
	Jokioinen	0.000	0.784	0.004	0.052	0.228	0.101	0.068	0.026	0.019	0.004
	Kremsmunster	0.001	0.769	0.000	0.037	0.125	0.057	0.038	0.007	0.012	0.004
	Okehampton	0.005	0.691	0.001	0.050	0.120	0.043	0.029	0.010	0.016	0.003
	Piacenza	0.003	0.644	0.001	0.035	0.088	0.040	0.030	0.007	0.011	0.003
	Porto	0.002	0.475	0.002	0.032	0.073	0.051	0.021	0.007	0.010	0.002
	Seville	0.000	0.530	0.000	0.009	0.048	0.035	0.024	0.002	0.003	0.003
	Thiva	0.000	0.765	0.000	0.012	0.054	0.049	0.033	0.004	0.004	0.004

Table 9.2.4- 166: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 2 x 100 g/ha 1:2 year, late application – alkaline soils, without aged sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.005	0.839	0.000	0.024	0.091	0.056	0.038	0.003	0.008	0.004
	Hamburg	0.027	0.960	0.004	0.065	0.091	0.076	0.050	0.017	0.021	0.005
	Jokioinen	0.003	0.791	0.005	0.055	0.227	0.099	0.066	0.026	0.019	0.004
	Kremsmunster	0.019	0.766	0.001	0.040	0.124	0.056	0.037	0.007	0.013	0.004
	Okehampton	0.039	0.681	0.003	0.052	0.119	0.042	0.028	0.011	0.016	0.003
	Piacenza	0.029	0.647	0.002	0.037	0.087	0.044	0.030	0.007	0.011	0.003
	Porto	0.014	0.473	0.004	0.033	0.074	0.031	0.020	0.007	0.010	0.002
	Seville	0.000	0.518	0.000	0.009	0.048	0.035	0.023	0.002	0.003	0.003
	Thiva	0.001	0.741	0.000	0.014	0.056	0.048	0.032	0.002	0.005	0.004

Table 9.2.4- 167: FOCUS MACRO, PECgw results of fluopicolide – 2 x 100 g/ha 1:2 year, late application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0012

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1:3 year rotation – Early window

Table 9.2.4- 168: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.295	0.001	0.003	0.058	0.203	0.132	0.088	0.035	0.020	0.009
	Hamburg	0.011	1.566	0.004	0.015	0.131	0.385	0.145	0.097	0.086	0.043	0.010
	Jokioinen	0.000	1.409	0.005	0.002	0.106	0.435	0.173	0.115	0.108	0.037	0.008
	Kremsmunster	0.006	1.238	0.001	0.008	0.073	0.230	0.104	0.070	0.043	0.024	0.008
	Okehampton	0.014	1.147	0.003	0.016	0.094	0.216	0.083	0.056	0.047	0.030	0.007
	Piacenza	0.009	0.967	0.002	0.011	0.065	0.148	0.086	0.057	0.028	0.020	0.007
	Porto	0.002	0.781	0.002	0.005	0.045	0.106	0.030	0.023	0.021	0.014	0.004
	Seville	0.000	0.694	0.000	0.000	0.016	0.079	0.064	0.043	0.012	0.006	0.004
	Thiva	0.000	1.062	0.000	0.001	0.027	0.116	0.113	0.075	0.015	0.009	0.009

Table 9.2.4- 169: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.030	1.349	0.002	0.012	0.068	0.212	0.133	0.088	0.037	0.022	0.010
	Hamburg	0.086	1.605	0.008	0.032	0.149	0.388	0.143	0.096	0.088	0.046	0.010
	Jokioinen	0.010	1.442	0.008	0.008	0.115	0.436	0.172	0.115	0.109	0.039	0.009
	Kremsmunster	0.061	1.289	0.004	0.023	0.080	0.234	0.104	0.069	0.045	0.026	0.008
	Okehampton	0.091	1.160	0.007	0.034	0.102	0.218	0.082	0.055	0.048	0.031	0.007
	Piacenza	0.064	0.936	0.005	0.025	0.070	0.185	0.086	0.05	0.030	0.022	0.007
	Porto	0.026	0.809	0.005	0.015	0.051	0.113	0.030	0.034	0.023	0.016	0.004
	Seville	0.000	0.716	0.000	0.001	0.018	0.083	0.064	0.043	0.013	0.006	0.004
	Thiva	0.008	1.116	0.001	0.004	0.032	0.122	0.112	0.075	0.016	0.010	0.010

Table 9.2.4- 170: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.001	1.241	0.000	0.052	0.018	0.131	0.087	0.033	0.197	0.009	
	Hamburg	0.011	1.502	0.002	0.121	0.041	0.144	0.096	0.082	0.375	0.010	
	Jokioinen	0.000	1.378	0.004	0.100	0.036	0.173	0.115	0.107	0.435	0.008	
	Kremsmunster	0.006	1.182	0.001	0.067	0.022	0.104	0.069	0.041	0.226	0.008	
	Okehampton	0.014	1.103	0.002	0.087	0.028	0.083	0.055	0.045	0.210	0.007	
	Piacenza	0.009	0.918	0.001	0.059	0.019	0.084	0.056	0.027	0.142	0.007	
	Porto	0.002	0.740	0.001	0.040	0.013	0.048	0.032	0.019	0.101	0.004	
	Seville	0.000	0.635	0.000	0.014	0.005	0.062	0.041	0.011	0.075	0.004	
	Thiva	0.000	0.989	0.000	0.024	0.008	0.110	0.074	0.014	0.110	0.009	

Table 9.2.4- 171: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.030	1.298	0.002	0.061	0.206	0.131	0.086	0.035	0.020	0.016
	Hamburg	0.086	1.555	0.005	0.134	0.380	0.143	0.095	0.085	0.044	0.010
	Jokioinen	0.010	1.413	0.006	0.108	0.437	0.172	0.115	0.108	0.038	0.009
	Kremsmunster	0.061	1.233	0.003	0.074	0.231	0.103	0.069	0.043	0.024	0.006
	Okehampton	0.091	1.123	0.005	0.095	0.212	0.082	0.055	0.046	0.030	0.007
	Piacenza	0.064	0.946	0.003	0.066	0.146	0.084	0.056	0.028	0.020	0.007
	Porto	0.026	0.780	0.003	0.046	0.107	0.049	0.033	0.021	0.014	0.004
	Seville	0.000	0.677	0.000	0.016	0.078	0.062	0.041	0.014	0.006	0.004
	Thiva	0.008	1.050	0.002	0.029	0.111	0.110	0.073	0.015	0.009	0.010

Table 9.2.4- 172: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.613	0.000	0.001	0.042	0.164	0.004	0.069	0.005	0.014	0.008
	Hamburg	0.006	1.807	0.007	0.011	0.117	0.319	0.124	0.083	0.027	0.038	0.009
	Jokioinen	0.000	1.497	0.009	0.002	0.104	0.402	0.144	0.096	0.045	0.036	0.007
	Kremsmunster	0.004	1.494	0.002	0.007	0.074	0.219	0.098	0.066	0.012	0.024	0.007
	Okehampton	0.012	1.235	0.004	0.015	0.092	0.201	0.074	0.050	0.017	0.029	0.006
	Piacenza	0.007	1.193	0.004	0.011	0.064	0.143	0.071	0.048	0.010	0.019	0.006
	Porto	0.004	0.832	0.007	0.018	0.069	0.126	0.052	0.035	0.012	0.018	0.004
	Seville	0.000	0.910	0.000	0.000	0.020	0.085	0.061	0.040	0.004	0.007	0.004
	Thiva	0.000	1.519	0.000	0.001	0.023	0.098	0.083	0.055	0.003	0.008	0.007

Table 9.2.4- 173: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.015	1.621	0.001	0.007	0.049	0.166	0.102	0.068	0.006	0.016	0.008
	Hamburg	0.004	1.787	0.001	0.027	0.120	0.317	0.121	0.080	0.028	0.040	0.009
	Jokioinen	0.007	1.493	0.012	0.006	0.108	0.394	0.140	0.094	0.046	0.037	0.007
	Kremsmunster	0.047	1.474	0.004	0.019	0.079	0.220	0.096	0.064	0.013	0.025	0.007
	Okehampton	0.080	1.207	0.008	0.031	0.097	0.199	0.071	0.048	0.018	0.030	0.006
	Piacenza	0.056	1.129	0.008	0.024	0.069	0.143	0.070	0.046	0.011	0.020	0.006
	Porto	0.036	0.869	0.011	0.022	0.064	0.129	0.052	0.034	0.013	0.019	0.004
	Seville	0.000	0.891	0.001	0.000	0.021	0.086	0.059	0.039	0.004	0.007	0.004
	Thiva	0.004	1.497	0.000	0.003	0.025	0.100	0.081	0.054	0.004	0.008	0.007

Table 9.2.4- 174: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	1.567	0.000	0.038	0.158	0.102	0.068	0.005	0.013	0.008
	Hamburg	0.006	1.754	0.004	0.107	0.308	0.122	0.082	0.025	0.035	0.009
	Jokioinen	0.000	1.462	0.008	0.098	0.404	0.147	0.098	0.046	0.035	0.007
	Kremsmunster	0.004	1.437	0.001	0.067	0.210	0.097	0.065	0.011	0.022	0.007
	Okehampton	0.012	1.201	0.002	0.085	0.195	0.073	0.049	0.015	0.027	0.006
	Piacenza	0.007	1.150	0.002	0.058	0.138	0.070	0.047	0.009	0.018	0.006
	Porto	0.004	0.846	0.004	0.055	0.119	0.057	0.034	0.011	0.017	0.004
	Seville	0.000	0.881	0.000	0.018	0.081	0.059	0.039	0.004	0.006	0.004
	Thiva	0.000	1.467	0.000	0.020	0.092	0.082	0.054	0.004	0.007	0.007

Table 9.2.4- 175: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, early application alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.015	1.574	0.001	0.044	0.160	0.100	0.067	0.005	0.015	0.008
	Hamburg	0.057	1.701	0.008	0.195	0.307	0.119	0.080	0.026	0.038	0.009
	Jokioinen	0.007	1.466	0.010	0.103	0.396	0.143	0.095	0.044	0.035	0.007
	Kremsmunster	0.047	1.443	0.003	0.073	0.212	0.095	0.064	0.012	0.023	0.007
	Okehampton	0.080	1.182	0.002	0.090	0.194	0.071	0.047	0.016	0.028	0.006
	Piacenza	0.056	1.138	0.004	0.063	0.138	0.068	0.046	0.010	0.019	0.006
	Porto	0.036	0.844	0.008	0.059	0.122	0.050	0.034	0.012	0.018	0.004
	Seville	0.000	0.862	0.000	0.019	0.081	0.057	0.038	0.004	0.007	0.004
	Thiva	0.000	1.451	0.001	0.023	0.095	0.080	0.053	0.003	0.008	0.007

Table 9.2.4- 176: FOCUS MACRO, PECgw results of fluopicolide – 2 x 100 g/ha 1:3 year, early application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0029

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1:3 year rotation – Late window

Table 9.2.4- 177: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.449	0.000	0.001	0.020	0.077	0.049	0.033	0.013	0.007	0.003
	Hamburg	0.003	0.575	0.001	0.005	0.047	0.146	0.054	0.036	0.033	0.016	0.004
	Jokioinen	0.000	0.486	0.001	0.001	0.036	0.166	0.065	0.043	0.040	0.013	0.003
	Kremsmunster	0.001	0.454	0.000	0.002	0.026	0.084	0.038	0.025	0.016	0.008	0.003
	Okehampton	0.003	0.425	0.001	0.005	0.035	0.084	0.032	0.022	0.018	0.011	0.002
	Piacenza	0.002	0.354	0.001	0.004	0.024	0.061	0.035	0.023	0.012	0.008	0.003
	Porto	0.000	0.290	0.001	0.001	0.017	0.042	0.019	0.011	0.008	0.006	0.001
	Seville	0.000	0.258	0.000	0.000	0.006	0.033	0.025	0.017	0.005	0.002	0.002
	Thiva	0.000	0.377	0.000	0.000	0.012	0.052	0.045	0.030	0.007	0.004	0.003

Table 9.2.4- 178: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.005	0.471	0.001	0.003	0.024	0.079	0.049	0.033	0.014	0.008	0.003
	Hamburg	0.014	0.590	0.002	0.012	0.052	0.142	0.054	0.036	0.034	0.016	0.004
	Jokioinen	0.002	0.501	0.002	0.002	0.039	0.168	0.065	0.043	0.041	0.014	0.003
	Kremsmunster	0.015	0.469	0.001	0.007	0.028	0.085	0.038	0.025	0.017	0.009	0.003
	Okehampton	0.026	0.432	0.002	0.012	0.038	0.085	0.032	0.021	0.019	0.012	0.003
	Piacenza	0.018	0.353	0.002	0.008	0.020	0.062	0.035	0.023	0.012	0.008	0.003
	Porto	0.006	0.303	0.001	0.004	0.020	0.045	0.020	0.013	0.009	0.006	0.002
	Seville	0.000	0.266	0.000	0.000	0.006	0.034	0.026	0.017	0.005	0.002	0.002
	Thiva	0.001	0.398	0.000	0.004	0.014	0.052	0.046	0.031	0.008	0.004	0.003

Table 9.2.4- 179: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.000	0.431	0.000	0.018	0.006	0.048	0.032	0.012	0.075	0.003	
	Hamburg	0.003	0.551	0.001	0.044	0.015	0.054	0.036	0.033	0.144	0.004	
	Jokioinen	0.000	0.471	0.001	0.034	0.013	0.065	0.043	0.040	0.163	0.003	
	Kremsmunster	0.001	0.434	0.000	0.024	0.008	0.038	0.025	0.016	0.083	0.003	
	Okehampton	0.003	0.412	0.000	0.033	0.011	0.032	0.021	0.018	0.084	0.002	
	Piacenza	0.002	0.341	0.000	0.023	0.007	0.035	0.023	0.012	0.061	0.003	
	Porto	0.000	0.278	0.000	0.015	0.005	0.019	0.013	0.008	0.039	0.001	
	Seville	0.000	0.243	0.000	0.005	0.002	0.025	0.017	0.005	0.031	0.002	
	Thiva	0.000	0.362	0.000	0.010	0.004	0.044	0.029	0.007	0.050	0.003	

Table 9.2.4- 180: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.005	0.452	0.000	0.022	0.078	0.049	0.035	0.013	0.00	0.003
	Hamburg	0.024	0.574	0.002	0.049	0.146	0.054	0.036	0.034	0.016	0.004
	Jokioinen	0.002	0.486	0.002	0.037	0.165	0.065	0.043	0.040	0.013	0.003
	Kremsmunster	0.015	0.454	0.001	0.026	0.085	0.038	0.025	0.017	0.009	0.003
	Okehampton	0.026	0.421	0.001	0.036	0.085	0.032	0.021	0.019	0.011	0.003
	Piacenza	0.018	0.358	0.001	0.025	0.062	0.055	0.023	0.012	0.008	0.003
	Porto	0.006	0.292	0.001	0.018	0.042	0.019	0.013	0.009	0.006	0.002
	Seville	0.000	0.251	0.000	0.006	0.032	0.025	0.017	0.005	0.002	0.002
	Thiva	0.001	0.381	0.000	0.012	0.057	0.045	0.030	0.007	0.004	0.003

Table 9.2.4- 181: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, late application – acidic soils with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.557	0.000	0.000	0.015	0.063	0.038	0.026	0.002	0.005	0.003
	Hamburg	0.002	0.653	0.002	0.004	0.042	0.124	0.047	0.032	0.011	0.013	0.003
	Jokioinen	0.000	0.515	0.003	0.000	0.037	0.146	0.053	0.036	0.014	0.012	0.003
	Kremsmunster	0.001	0.530	0.001	0.002	0.026	0.082	0.037	0.024	0.005	0.008	0.003
	Okehampton	0.003	0.463	0.001	0.005	0.034	0.078	0.029	0.019	0.007	0.011	0.002
	Piacenza	0.002	0.437	0.001	0.004	0.024	0.060	0.029	0.019	0.005	0.007	0.002
	Porto	0.001	0.314	0.002	0.003	0.029	0.050	0.020	0.014	0.005	0.007	0.002
	Seville	0.000	0.337	0.000	0.000	0.007	0.035	0.025	0.016	0.002	0.003	0.002
	Thiva	0.000	0.515	0.000	0.000	0.009	0.043	0.034	0.023	0.002	0.003	0.003

Table 9.2.4- 182: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.003	0.553	0.000	0.002	0.017	0.063	0.038	0.025	0.002	0.006	0.003
	Hamburg	0.004	0.650	0.003	0.009	0.040	0.123	0.047	0.031	0.011	0.014	0.003
	Jokioinen	0.002	0.517	0.004	0.002	0.036	0.143	0.052	0.035	0.017	0.013	0.003
	Kremsmunster	0.010	0.527	0.001	0.005	0.027	0.081	0.036	0.024	0.005	0.009	0.003
	Okehampton	0.025	0.458	0.003	0.011	0.036	0.077	0.028	0.018	0.007	0.011	0.002
	Piacenza	0.015	0.425	0.002	0.008	0.025	0.059	0.028	0.019	0.005	0.008	0.002
	Porto	0.008	0.316	0.003	0.006	0.024	0.051	0.020	0.013	0.005	0.007	0.002
	Seville	0.000	0.330	0.000	0.000	0.008	0.035	0.023	0.016	0.002	0.003	0.002
	Thiva	0.001	0.498	0.000	0.000	0.010	0.043	0.032	0.022	0.002	0.003	0.003

Table 9.2.4- 183: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.539	0.000	0.014	0.061	0.037	0.025	0.002	0.005	0.003
	Hamburg	0.002	0.635	0.001	0.040	0.122	0.046	0.034	0.011	0.01	0.003
	Jokioinen	0.000	0.504	0.003	0.032	0.146	0.052	0.035	0.017	0.012	0.003
	Kremsmunster	0.001	0.516	0.000	0.024	0.081	0.035	0.024	0.005	0.008	0.003
	Okehampton	0.003	0.451	0.001	0.032	0.078	0.028	0.018	0.007	0.010	0.002
	Piacenza	0.002	0.424	0.001	0.023	0.059	0.028	0.018	0.005	0.007	0.002
	Porto	0.001	0.303	0.001	0.021	0.048	0.020	0.013	0.005	0.007	0.002
	Seville	0.000	0.326	0.000	0.007	0.034	0.023	0.015	0.002	0.003	0.002
	Thiva	0.000	0.508	0.000	0.008	0.041	0.032	0.021	0.004	0.003	0.003

Table 9.2.4- 184: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 2 x 100 g/ha 1:3 year, late application – alkaline soils, without aged sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.003	0.536	0.000	0.016	0.061	0.037	0.025	0.002	0.005	0.003
	Hamburg	0.015	0.634	0.002	0.043	0.122	0.046	0.031	0.011	0.014	0.003
	Jokioinen	0.002	0.504	0.003	0.034	0.143	0.052	0.035	0.017	0.012	0.003
	Kremsmunster	0.010	0.515	0.001	0.026	0.080	0.035	0.024	0.005	0.008	0.003
	Okehampton	0.023	0.449	0.001	0.034	0.077	0.028	0.018	0.007	0.011	0.002
	Piacenza	0.015	0.423	0.002	0.024	0.058	0.028	0.018	0.005	0.007	0.002
	Porto	0.008	0.306	0.002	0.023	0.049	0.020	0.013	0.005	0.007	0.002
	Seville	0.000	0.319	0.000	0.007	0.034	0.023	0.015	0.002	0.003	0.002
	Thiva	0.001	0.489	0.000	0.009	0.041	0.032	0.021	0.002	0.003	0.003

Table 9.2.4- 185: FOCUS MACRO, PECgw results of fluopicolide – 2 x 100 g/ha 1:3 year, late application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0008

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Potatoes 1x100 g / ha

1:1 year rotation – Early window

Table 9.2.4- 186: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	1.986	0.001	0.004	0.091	0.313	0.203	0.135	0.053	0.031	0.014
	Hamburg	0.018	2.438	0.007	0.023	0.291	0.696	0.278	0.184	0.152	0.066	0.026
	Jokioinen	0.000	2.045	0.004	0.003	0.168	0.712	0.312	0.208	0.177	0.061	0.012
	Kremsmunster	0.011	1.890	0.002	0.012	0.116	0.336	0.156	0.104	0.064	0.037	0.012
	Okehampton	0.025	1.774	0.005	0.024	0.145	0.348	0.141	0.094	0.071	0.045	0.010
	Piacenza	0.015	1.466	0.003	0.017	0.094	0.230	0.085	0.090	0.042	0.029	0.010
	Porto	0.004	1.245	0.004	0.010	0.068	0.174	0.086	0.058	0.032	0.022	0.006
	Seville	0.000	1.272	0.000	0.000	0.023	0.120	0.097	0.065	0.019	0.010	0.007
	Thiva	0.000	1.514	0.000	0.001	0.038	0.188	0.160	0.106	0.023	0.010	0.014

Table 9.2.4- 187: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.052	2.063	0.004	0.019	0.106	0.323	0.203	0.135	0.097	0.035	0.015
	Hamburg	0.145	2.509	0.013	0.056	0.218	0.702	0.273	0.182	0.155	0.070	0.016
	Jokioinen	0.005	2.084	0.010	0.010	0.181	0.724	0.310	0.207	0.178	0.063	0.012
	Kremsmunster	0.106	1.925	0.006	0.038	0.128	0.342	0.155	0.103	0.066	0.040	0.012
	Okehampton	0.152	1.781	0.011	0.056	0.134	0.333	0.139	0.093	0.074	0.047	0.010
	Piacenza	0.106	1.486	0.007	0.037	0.104	0.238	0.135	0.090	0.044	0.031	0.011
	Porto	0.050	1.279	0.009	0.023	0.076	0.185	0.087	0.058	0.035	0.024	0.007
	Seville	0.001	1.309	0.000	0.001	0.031	0.124	0.093	0.065	0.020	0.011	0.007
	Thiva	0.016	1.587	0.001	0.007	0.044	0.197	0.159	0.106	0.026	0.015	0.014

Table 9.2.4- 188: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.002	1.905	0.000	0.081	0.028	0.201	0.134	0.049	0.299	0.014	
	Hamburg	0.018	2.336	0.003	0.185	0.063	0.274	0.183	0.146	0.681	0.016	
	Jokioinen	0.000	1.987	0.003	0.160	0.059	0.311	0.208	0.177	0.714	0.012	
	Kremsmunster	0.011	1.826	0.001	0.107	0.035	0.155	0.104	0.061	0.327	0.012	
	Okehampton	0.025	1.716	0.003	0.133	0.042	0.139	0.093	0.068	0.336	0.010	
	Piacenza	0.015	1.391	0.002	0.085	0.027	0.132	0.088	0.039	0.219	0.010	
	Porto	0.004	1.193	0.002	0.060	0.020	0.085	0.057	0.029	0.164	0.006	
	Seville	0.000	1.202	0.000	0.024	0.009	0.095	0.063	0.017	0.113	0.007	
	Thiva	0.000	1.433	0.000	0.032	0.011	0.156	0.104	0.021	0.176	0.014	

Table 9.2.4- 189: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.052	1.985	0.003	0.096	0.310	0.201	0.134	0.053	0.032	0.015
	Hamburg	0.145	2.427	0.009	0.205	0.689	0.271	0.181	0.150	0.067	0.016
	Jokioinen	0.005	2.031	0.007	0.172	0.722	0.310	0.207	0.179	0.061	0.012
	Kremsmunster	0.106	1.865	0.005	0.119	0.333	0.154	0.103	0.063	0.038	0.011
	Okehampton	0.152	1.740	0.008	0.144	0.343	0.138	0.092	0.071	0.044	0.010
	Piacenza	0.106	1.418	0.004	0.095	0.228	0.152	0.088	0.041	0.029	0.011
	Porto	0.050	1.231	0.006	0.069	0.175	0.086	0.057	0.033	0.022	0.007
	Seville	0.001	1.238	0.000	0.028	0.117	0.095	0.063	0.014	0.010	0.007
	Thiva	0.016	1.493	0.004	0.039	0.187	0.156	0.104	0.024	0.013	0.014

Table 9.2.4- 190: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	2.550	0.001	0.002	0.071	0.259	0.058	0.005	0.009	0.024	0.012
	Hamburg	0.008	2.829	0.011	0.017	0.179	0.500	0.206	0.137	0.041	0.057	0.013
	Jokioinen	0.000	2.183	0.010	0.002	0.167	0.652	0.268	0.170	0.073	0.058	0.011
	Kremsmunster	0.006	2.265	0.002	0.011	0.116	0.339	0.191	0.100	0.020	0.038	0.011
	Okehampton	0.021	1.889	0.007	0.026	0.141	0.329	0.125	0.083	0.025	0.042	0.009
	Piacenza	0.014	1.791	0.005	0.017	0.092	0.217	0.114	0.076	0.015	0.028	0.009
	Porto	0.008	1.379	0.002	0.018	0.092	0.199	0.088	0.059	0.017	0.028	0.007
	Seville	0.000	1.536	0.001	0.000	0.029	0.126	0.095	0.064	0.006	0.010	0.007
	Thiva	0.000	2.241	0.000	0.001	0.034	0.159	0.124	0.082	0.006	0.012	0.011

Table 9.2.4- 191: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.027	2.542	0.002	0.010	0.080	0.264	0.154	0.103	0.010	0.026	0.012
	Hamburg	0.009	2.801	0.013	0.042	0.180	0.500	0.200	0.133	0.043	0.059	0.013
	Jokioinen	0.005	2.166	0.013	0.008	0.169	0.642	0.262	0.175	0.072	0.057	0.011
	Kremsmunster	0.081	2.240	0.007	0.027	0.126	0.338	0.147	0.098	0.021	0.039	0.011
	Okehampton	0.130	1.856	0.012	0.052	0.145	0.324	0.121	0.080	0.027	0.043	0.009
	Piacenza	0.098	1.781	0.009	0.037	0.097	0.218	0.112	0.074	0.015	0.029	0.009
	Porto	0.070	1.352	0.019	0.039	0.095	0.199	0.086	0.058	0.018	0.028	0.006
	Seville	0.000	1.525	0.001	0.001	0.032	0.127	0.094	0.062	0.006	0.011	0.007
	Thiva	0.008	2.217	0.000	0.004	0.039	0.161	0.120	0.080	0.006	0.013	0.011

Table 9.2.4- 192: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	2.477	0.000	0.064	0.249	0.223	0.148	0.008	0.022	0.012
	Hamburg	0.008	2.754	0.007	0.166	0.486	0.281	0.187	0.037	0.051	0.011
	Jokioinen	0.000	2.163	0.007	0.156	0.651	0.363	0.242	0.071	0.056	0.011
	Kremsmunster	0.006	2.207	0.001	0.107	0.329	0.205	0.137	0.018	0.036	0.011
	Okehampton	0.021	1.842	0.004	0.130	0.318	0.154	0.102	0.023	0.040	0.008
	Piacenza	0.014	1.738	0.004	0.083	0.207	0.140	0.097	0.013	0.026	0.009
	Porto	0.008	1.336	0.007	0.083	0.190	0.152	0.075	0.016	0.026	0.007
	Seville	0.000	1.480	0.000	0.026	0.119	0.128	0.085	0.006	0.009	0.007
	Thiva	0.000	2.165	0.000	0.030	0.150	0.174	0.116	0.005	0.011	0.011

Table 9.2.4- 193: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.027	2.464	0.001	0.072	0.254	0.153	0.101	0.009	0.024	0.012
	Hamburg	0.099	2.737	0.003	0.177	0.487	0.197	0.132	0.040	0.056	0.013
	Jokioinen	0.005	2.148	0.010	0.161	0.639	0.263	0.175	0.071	0.056	0.011
	Kremsmunster	0.081	2.188	0.005	0.117	0.329	0.145	0.097	0.019	0.037	0.011
	Okehampton	0.136	1.816	0.009	0.135	0.315	0.120	0.080	0.025	0.041	0.009
	Piacenza	0.098	1.732	0.006	0.089	0.209	0.110	0.074	0.014	0.027	0.009
	Porto	0.070	1.317	0.013	0.087	0.190	0.085	0.057	0.017	0.026	0.006
	Seville	0.000	1.469	0.001	0.029	0.120	0.091	0.067	0.006	0.010	0.007
	Thiva	0.008	2.143	0.001	0.035	0.133	0.117	0.078	0.006	0.012	0.011

Table 9.2.4- 194: FOCUS MACRO, PECgw results of fluopicolide – 1 x 100 g/ha 1:1 year, early application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0039

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1:1 year rotation – Late window

Table 9.2.4- 195: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.702	0.000	0.001	0.033	0.118	0.076	0.051	0.020	0.011	0.005
	Hamburg	0.004	0.876	0.002	0.007	0.071	0.258	0.103	0.069	0.056	0.024	0.006
	Jokioinen	0.000	0.722	0.001	0.001	0.056	0.265	0.117	0.078	0.064	0.024	0.004
	Kremsmunster	0.002	0.667	0.001	0.003	0.040	0.127	0.039	0.039	0.024	0.013	0.004
	Okehampton	0.005	0.644	0.002	0.008	0.054	0.133	0.054	0.036	0.028	0.017	0.004
	Piacenza	0.004	0.532	0.001	0.000	0.037	0.095	0.053	0.035	0.018	0.012	0.004
	Porto	0.001	0.457	0.001	0.003	0.026	0.070	0.033	0.027	0.013	0.008	0.002
	Seville	0.000	0.468	0.000	0.000	0.010	0.054	0.039	0.026	0.008	0.004	0.003
	Thiva	0.000	0.559	0.000	0.000	0.014	0.078	0.064	0.043	0.011	0.005	0.005

Table 9.2.4- 196: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.010	0.738	0.001	0.005	0.038	0.121	0.077	0.051	0.021	0.013	0.005
	Hamburg	0.040	0.903	0.004	0.018	0.071	0.259	0.102	0.068	0.057	0.025	0.006
	Jokioinen	0.000	0.748	0.002	0.003	0.061	0.271	0.117	0.078	0.064	0.022	0.004
	Kremsmunster	0.027	0.694	0.002	0.010	0.045	0.129	0.059	0.039	0.025	0.014	0.004
	Okehampton	0.043	0.649	0.004	0.019	0.057	0.135	0.054	0.036	0.029	0.017	0.004
	Piacenza	0.032	0.548	0.002	0.003	0.040	0.096	0.053	0.039	0.018	0.012	0.004
	Porto	0.011	0.472	0.002	0.007	0.030	0.075	0.034	0.023	0.014	0.009	0.002
	Seville	0.000	0.482	0.000	0.000	0.011	0.055	0.039	0.026	0.009	0.004	0.003
	Thiva	0.007	0.586	0.000	0.002	0.013	0.080	0.064	0.043	0.011	0.006	0.005

Table 9.2.4- 197: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.000	0.672	0.000	0.030	0.010	0.075	0.050	0.020	0.115	0.005	
	Hamburg	0.004	0.848	0.001	0.067	0.023	0.102	0.068	0.057	0.257	0.006	
	Jokioinen	0.000	0.699	0.001	0.053	0.020	0.116	0.078	0.064	0.262	0.004	
	Kremsmunster	0.002	0.645	0.000	0.037	0.012	0.058	0.039	0.023	0.125	0.004	
	Okehampton	0.005	0.627	0.001	0.052	0.016	0.054	0.036	0.027	0.132	0.004	
	Piacenza	0.004	0.516	0.000	0.035	0.011	0.053	0.036	0.018	0.094	0.004	
	Porto	0.000	0.440	0.000	0.023	0.008	0.033	0.022	0.012	0.066	0.002	
	Seville	0.000	0.431	0.000	0.009	0.003	0.038	0.026	0.008	0.051	0.003	
	Thiva	0.000	0.538	0.000	0.013	0.005	0.063	0.042	0.010	0.075	0.005	

Table 9.2.4- 198: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.010	0.707	0.001	0.034	0.119	0.076	0.054	0.021	0.012	0.005
	Hamburg	0.040	0.874	0.003	0.074	0.258	0.102	0.088	0.057	0.024	0.006
	Jokioinen	0.000	0.721	0.002	0.057	0.267	0.116	0.078	0.064	0.021	0.004
	Kremsmunster	0.027	0.673	0.001	0.042	0.127	0.058	0.039	0.024	0.015	0.004
	Okehampton	0.043	0.635	0.002	0.055	0.134	0.050	0.036	0.028	0.017	0.004
	Piacenza	0.032	0.531	0.002	0.038	0.096	0.053	0.035	0.018	0.012	0.004
	Porto	0.011	0.456	0.001	0.027	0.072	0.033	0.022	0.013	0.009	0.002
	Seville	0.000	0.464	0.000	0.010	0.053	0.039	0.026	0.004	0.004	0.003
	Thiva	0.003	0.556	0.000	0.015	0.071	0.061	0.042	0.011	0.005	0.005

Table 9.2.4- 199: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, late application – acidic soils with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.901	0.000	0.000	0.026	0.097	0.058	0.039	0.004	0.009	0.004
	Hamburg	0.002	1.017	0.004	0.005	0.065	0.185	0.078	0.052	0.016	0.021	0.005
	Jokioinen	0.000	0.780	0.003	0.004	0.057	0.240	0.100	0.060	0.025	0.020	0.004
	Kremsmunster	0.001	0.810	0.001	0.003	0.040	0.127	0.056	0.038	0.008	0.013	0.004
	Okehampton	0.005	0.700	0.002	0.008	0.053	0.125	0.047	0.032	0.011	0.016	0.003
	Piacenza	0.003	0.647	0.002	0.006	0.036	0.091	0.046	0.030	0.007	0.011	0.003
	Porto	0.002	0.509	0.004	0.005	0.030	0.080	0.034	0.023	0.007	0.011	0.003
	Seville	0.000	0.575	0.000	0.000	0.010	0.052	0.039	0.026	0.003	0.004	0.003
	Thiva	0.000	0.830	0.000	0.000	0.014	0.070	0.050	0.034	0.003	0.005	0.004

Table 9.2.4- 200: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.004	0.889	0.000	0.002	0.028	0.096	0.057	0.038	0.004	0.009	0.004
	Hamburg	0.002	1.016	0.006	0.014	0.060	0.186	0.076	0.050	0.017	0.022	0.005
	Jokioinen	0.001	0.775	0.004	0.002	0.058	0.238	0.098	0.066	0.027	0.020	0.004
	Kremsmunster	0.019	0.804	0.002	0.008	0.043	0.126	0.055	0.037	0.008	0.014	0.004
	Okehampton	0.030	0.692	0.004	0.018	0.055	0.124	0.046	0.030	0.011	0.016	0.003
	Piacenza	0.007	0.607	0.003	0.015	0.038	0.091	0.044	0.029	0.007	0.011	0.003
	Porto	0.016	0.500	0.006	0.011	0.037	0.079	0.034	0.022	0.008	0.011	0.002
	Seville	0.000	0.566	0.000	0.000	0.011	0.052	0.038	0.025	0.003	0.004	0.003
	Thiva	0.001	0.808	0.000	0.001	0.015	0.069	0.049	0.032	0.003	0.005	0.004

Table 9.2.4- 201: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.872	0.000	0.023	0.095	0.058	0.038	0.003	0.008	0.004
	Hamburg	0.002	0.992	0.002	0.062	0.182	0.077	0.052	0.016	0.020	0.005
	Jokioinen	0.000	0.765	0.002	0.054	0.239	0.100	0.066	0.027	0.020	0.004
	Kremsmunster	0.001	0.788	0.000	0.037	0.127	0.056	0.038	0.008	0.012	0.004
	Okehampton	0.005	0.687	0.001	0.050	0.124	0.047	0.032	0.010	0.016	0.003
	Piacenza	0.003	0.626	0.001	0.035	0.090	0.046	0.030	0.007	0.011	0.003
	Porto	0.002	0.495	0.002	0.033	0.077	0.033	0.022	0.007	0.010	0.003
	Seville	0.000	0.555	0.000	0.009	0.049	0.038	0.025	0.002	0.003	0.003
	Thiva	0.000	0.802	0.000	0.012	0.067	0.050	0.033	0.004	0.004	0.004

Table 9.2.4- 202: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha 1:1 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.004	0.862	0.000	0.026	0.094	0.056	0.038	0.004	0.009	0.004
	Hamburg	0.025	0.993	0.004	0.065	0.182	0.076	0.050	0.017	0.021	0.005
	Jokioinen	0.001	0.760	0.003	0.056	0.236	0.098	0.065	0.026	0.020	0.004
	Kremsmunster	0.019	0.783	0.001	0.040	0.125	0.055	0.036	0.008	0.013	0.004
	Okehampton	0.038	0.683	0.001	0.053	0.123	0.046	0.030	0.011	0.016	0.003
	Piacenza	0.027	0.627	0.002	0.037	0.090	0.044	0.029	0.007	0.011	0.003
	Porto	0.016	0.488	0.004	0.034	0.076	0.032	0.022	0.007	0.011	0.002
	Seville	0.000	0.545	0.005	0.010	0.050	0.035	0.025	0.002	0.004	0.003
	Thiva	0.000	0.759	0.000	0.013	0.067	0.048	0.032	0.003	0.005	0.004

Table 9.2.4- 203: FOCUS MACRO, PECgw results of fluopicolide – 1 x 100 g/ha 1:1 year, late application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0011

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1:2 year rotation – Early window

Table 9.2.4- 204: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	0.944	0.000	0.002	0.042	0.155	0.105	0.070	0.025	0.014	0.007
	Hamburg	0.007	1.186	0.003	0.011	0.097	0.319	0.124	0.083	0.069	0.032	0.008
	Jokioinen	0.000	1.018	0.003	0.001	0.079	0.346	0.149	0.099	0.083	0.028	0.006
	Kremsmunster	0.003	0.903	0.001	0.005	0.054	0.167	0.075	0.050	0.031	0.017	0.006
	Okehampton	0.008	0.858	0.002	0.011	0.070	0.164	0.065	0.043	0.035	0.022	0.005
	Piacenza	0.005	0.715	0.001	0.007	0.046	0.113	0.063	0.042	0.021	0.014	0.005
	Porto	0.001	0.588	0.002	0.004	0.032	0.081	0.039	0.028	0.016	0.010	0.003
	Seville	0.000	0.552	0.000	0.000	0.012	0.058	0.048	0.032	0.009	0.004	0.003
	Thiva	0.000	0.756	0.000	0.001	0.019	0.079	0.084	0.056	0.010	0.006	0.006

Table 9.2.4- 205: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.017	0.993	0.002	0.008	0.049	0.162	0.106	0.071	0.027	0.016	0.007
	Hamburg	0.035	1.210	0.005	0.025	0.101	0.322	0.123	0.081	0.074	0.034	0.008
	Jokioinen	0.006	1.046	0.005	0.004	0.085	0.355	0.149	0.100	0.085	0.029	0.006
	Kremsmunster	0.039	0.935	0.003	0.015	0.059	0.170	0.075	0.050	0.033	0.019	0.006
	Okehampton	0.059	0.873	0.005	0.024	0.075	0.167	0.064	0.043	0.036	0.023	0.005
	Piacenza	0.040	0.738	0.003	0.015	0.050	0.146	0.063	0.042	0.022	0.015	0.005
	Porto	0.018	0.608	0.004	0.011	0.036	0.088	0.040	0.027	0.017	0.011	0.003
	Seville	0.000	0.573	0.000	0.000	0.013	0.060	0.048	0.032	0.009	0.005	0.003
	Thiva	0.004	0.788	0.001	0.003	0.023	0.084	0.083	0.056	0.011	0.007	0.006

Table 9.2.4- 206: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.001	0.904	0.000	0.037	0.013	0.103	0.069	0.023	0.149	0.007	
	Hamburg	0.007	1.148	0.001	0.090	0.030	0.123	0.082	0.067	0.310	0.008	
	Jokioinen	0.000	0.987	0.002	0.075	0.027	0.146	0.098	0.081	0.342	0.006	
	Kremsmunster	0.003	0.853	0.000	0.049	0.016	0.074	0.049	0.030	0.162	0.006	
	Okehampton	0.008	0.830	0.001	0.065	0.021	0.064	0.042	0.034	0.159	0.005	
	Piacenza	0.005	0.675	0.001	0.041	0.013	0.062	0.041	0.019	0.109	0.005	
	Porto	0.000	0.560	0.001	0.029	0.009	0.038	0.025	0.014	0.076	0.003	
	Seville	0.000	0.522	0.000	0.011	0.004	0.047	0.031	0.008	0.054	0.003	
	Thiva	0.000	0.710	0.000	0.016	0.006	0.082	0.055	0.009	0.074	0.006	

Table 9.2.4- 207: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.017	0.951	0.001	0.044	0.156	0.105	0.070	0.025	0.01	0.005
	Hamburg	0.055	1.177	0.003	0.098	0.315	0.122	0.081	0.069	0.032	0.008
	Jokioinen	0.006	1.016	0.004	0.081	0.350	0.147	0.098	0.084	0.028	0.006
	Kremsmunster	0.039	0.901	0.002	0.055	0.166	0.074	0.049	0.031	0.017	0.006
	Okehampton	0.059	0.849	0.003	0.071	0.162	0.063	0.042	0.035	0.022	0.005
	Piacenza	0.040	0.703	0.002	0.046	0.112	0.067	0.041	0.020	0.014	0.005
	Porto	0.018	0.585	0.002	0.033	0.082	0.039	0.026	0.016	0.010	0.003
	Seville	0.000	0.542	0.000	0.012	0.056	0.047	0.031	0.005	0.004	0.003
	Thiva	0.004	0.741	0.000	0.020	0.070	0.080	0.055	0.010	0.007	0.006

Table 9.2.4- 208: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	1.188	0.000	0.001	0.032	0.121	0.081	0.054	0.004	0.011	0.006
	Hamburg	0.004	1.359	0.004	0.008	0.086	0.250	0.102	0.068	0.020	0.028	0.007
	Jokioinen	0.000	1.102	0.000	0.000	0.070	0.300	0.132	0.088	0.034	0.026	0.006
	Kremsmunster	0.002	1.077	0.001	0.004	0.054	0.166	0.073	0.050	0.009	0.017	0.005
	Okehampton	0.007	0.935	0.003	0.010	0.067	0.155	0.056	0.038	0.013	0.021	0.005
	Piacenza	0.004	0.907	0.002	0.007	0.045	0.103	0.053	0.035	0.007	0.014	0.004
	Porto	0.003	0.657	0.005	0.008	0.040	0.095	0.041	0.020	0.009	0.013	0.003
	Seville	0.000	0.714	0.000	0.000	0.012	0.060	0.047	0.031	0.003	0.004	0.004
	Thiva	0.000	0.997	0.000	0.000	0.015	0.064	0.064	0.042	0.002	0.005	0.005

Table 9.2.4- 209: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.008	1.179	0.001	0.004	0.037	0.122	0.080	0.053	0.005	0.012	0.006
	Hamburg	0.004	1.336	0.004	0.019	0.090	0.250	0.100	0.066	0.021	0.029	0.007
	Jokioinen	0.004	1.111	0.008	0.003	0.080	0.295	0.130	0.086	0.034	0.027	0.006
	Kremsmunster	0.029	1.070	0.003	0.012	0.058	0.166	0.073	0.049	0.010	0.018	0.005
	Okehampton	0.050	0.918	0.002	0.021	0.071	0.153	0.055	0.036	0.013	0.022	0.004
	Piacenza	0.035	0.908	0.004	0.010	0.049	0.105	0.052	0.034	0.008	0.015	0.004
	Porto	0.024	0.649	0.008	0.016	0.045	0.099	0.040	0.027	0.009	0.014	0.003
	Seville	0.000	0.712	0.000	0.000	0.013	0.060	0.046	0.030	0.003	0.005	0.003
	Thiva	0.003	0.986	0.000	0.002	0.017	0.065	0.062	0.042	0.002	0.006	0.005

Table 9.2.4- 210: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	1.146	0.000	0.029	0.117	0.080	0.054	0.004	0.010	0.006
	Hamburg	0.004	1.326	0.003	0.080	0.241	0.100	0.067	0.018	0.025	0.007
	Jokioinen	0.000	1.082	0.005	0.074	0.296	0.130	0.087	0.033	0.025	0.006
	Kremsmunster	0.002	1.052	0.001	0.049	0.161	0.074	0.049	0.009	0.016	0.005
	Okehampton	0.007	0.903	0.002	0.062	0.150	0.056	0.038	0.012	0.020	0.005
	Piacenza	0.004	0.874	0.002	0.044	0.098	0.052	0.034	0.006	0.013	0.004
	Porto	0.003	0.635	0.003	0.039	0.090	0.046	0.026	0.008	0.012	0.003
	Seville	0.000	0.691	0.000	0.011	0.057	0.046	0.031	0.003	0.004	0.004
	Thiva	0.000	0.962	0.000	0.013	0.060	0.063	0.042	0.004	0.004	0.005

Table 9.2.4- 211: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, early application alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.008	1.142	0.001	0.033	0.119	0.070	0.053	0.004	0.011	0.006
	Hamburg	0.037	1.308	0.005	0.085	0.242	0.098	0.065	0.019	0.027	0.007
	Jokioinen	0.004	1.089	0.006	0.076	0.295	0.128	0.086	0.037	0.026	0.006
	Kremsmunster	0.029	1.046	0.002	0.053	0.164	0.072	0.048	0.009	0.017	0.005
	Okehampton	0.050	0.892	0.004	0.066	0.149	0.055	0.036	0.012	0.021	0.004
	Piacenza	0.035	0.876	0.003	0.045	0.100	0.050	0.034	0.007	0.014	0.004
	Porto	0.024	0.625	0.005	0.041	0.094	0.039	0.026	0.009	0.013	0.003
	Seville	0.000	0.684	0.005	0.012	0.058	0.043	0.030	0.003	0.004	0.003
	Thiva	0.002	0.952	0.000	0.015	0.061	0.061	0.040	0.002	0.005	0.005

Table 9.2.4- 212: FOCUS MACRO, PECgw results of fluopicolide – 1 x 100 g/ha 1:2 year, early application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0011

1:2 year rotation – Late window

Table 9.2.4- 213: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.333	0.000	0.000	0.015	0.058	0.038	0.026	0.010	0.005	0.003
	Hamburg	0.001	0.416	0.001	0.003	0.034	0.121	0.047	0.031	0.026	0.011	0.003
	Jokioinen	0.000	0.356	0.001	0.000	0.026	0.131	0.059	0.040	0.031	0.019	0.002
	Kremsmunster	0.000	0.317	0.000	0.001	0.019	0.064	0.029	0.019	0.012	0.006	0.002
	Okehampton	0.002	0.312	0.001	0.003	0.025	0.064	0.024	0.016	0.014	0.008	0.002
	Piacenza	0.001	0.260	0.000	0.002	0.018	0.047	0.028	0.018	0.009	0.006	0.002
	Porto	0.000	0.219	0.000	0.001	0.013	0.032	0.015	0.010	0.006	0.004	0.001
	Seville	0.000	0.203	0.000	0.000	0.004	0.024	0.019	0.012	0.004	0.002	0.001
	Thiva	0.000	0.283	0.000	0.000	0.008	0.033	0.032	0.021	0.005	0.003	0.003

Table 9.2.4- 214: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.003	0.348	0.000	0.002	0.017	0.060	0.039	0.026	0.010	0.006	0.003
	Hamburg	0.004	0.425	0.002	0.008	0.031	0.122	0.047	0.030	0.025	0.012	0.003
	Jokioinen	0.001	0.368	0.001	0.001	0.029	0.134	0.059	0.039	0.031	0.010	0.002
	Kremsmunster	0.009	0.329	0.001	0.004	0.022	0.065	0.029	0.019	0.012	0.007	0.002
	Okehampton	0.016	0.317	0.002	0.008	0.027	0.065	0.024	0.016	0.014	0.009	0.002
	Piacenza	0.002	0.270	0.001	0.005	0.019	0.047	0.028	0.018	0.009	0.006	0.002
	Porto	0.004	0.226	0.001	0.003	0.014	0.035	0.016	0.011	0.007	0.005	0.001
	Seville	0.000	0.208	0.000	0.000	0.005	0.026	0.019	0.013	0.004	0.002	0.001
	Thiva	0.001	0.298	0.000	0.004	0.016	0.035	0.032	0.021	0.005	0.003	0.003

Table 9.2.4- 215: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.319	0.000	0.013	0.005	0.038	0.025	0.009	0.056	0.003
	Hamburg	0.001	0.402	0.000	0.032	0.011	0.047	0.031	0.026	0.120	0.003
	Jokioinen	0.000	0.343	0.001	0.025	0.009	0.060	0.040	0.031	0.131	0.002
	Kremsmunster	0.000	0.305	0.000	0.018	0.006	0.029	0.019	0.012	0.063	0.002
	Okehampton	0.002	0.303	0.000	0.024	0.008	0.024	0.016	0.014	0.063	0.002
	Piacenza	0.001	0.249	0.000	0.017	0.005	0.027	0.018	0.009	0.046	0.002
	Porto	0.000	0.210	0.000	0.011	0.004	0.015	0.010	0.006	0.030	0.001
	Seville	0.000	0.196	0.000	0.004	0.001	0.018	0.012	0.003	0.023	0.001
	Thiva	0.000	0.274	0.000	0.007	0.003	0.032	0.021	0.004	0.032	0.003

Table 9.2.4- 216: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.003	0.334	0.000	0.016	0.058	0.039	0.024	0.010	0.000	0.000
	Hamburg	0.015	0.412	0.001	0.035	0.121	0.047	0.031	0.026	0.012	0.003
	Jokioinen	0.001	0.355	0.001	0.027	0.133	0.060	0.040	0.031	0.010	0.002
	Kremsmunster	0.009	0.318	0.001	0.020	0.064	0.029	0.019	0.012	0.006	0.002
	Okehampton	0.016	0.311	0.001	0.026	0.064	0.022	0.016	0.014	0.008	0.002
	Piacenza	0.012	0.259	0.001	0.018	0.047	0.027	0.018	0.009	0.006	0.002
	Porto	0.004	0.219	0.001	0.013	0.033	0.015	0.010	0.007	0.004	0.001
	Seville	0.000	0.201	0.000	0.004	0.024	0.019	0.012	0.004	0.002	0.001
	Thiva	0.001	0.286	0.000	0.009	0.032	0.032	0.021	0.005	0.003	0.003

Table 9.2.4- 217: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, late application – acidic soils with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.422	0.000	0.000	0.011	0.047	0.029	0.019	0.002	0.004	0.002
	Hamburg	0.001	0.476	0.001	0.002	0.030	0.096	0.039	0.026	0.008	0.010	0.002
	Jokioinen	0.000	0.383	0.002	0.000	0.027	0.115	0.051	0.034	0.015	0.009	0.002
	Kremsmunster	0.001	0.383	0.000	0.001	0.019	0.053	0.029	0.020	0.004	0.006	0.002
	Okehampton	0.002	0.341	0.001	0.003	0.025	0.060	0.022	0.014	0.005	0.008	0.002
	Piacenza	0.001	0.316	0.001	0.002	0.017	0.044	0.023	0.016	0.003	0.005	0.002
	Porto	0.001	0.237	0.002	0.002	0.019	0.038	0.016	0.019	0.004	0.005	0.001
	Seville	0.000	0.268	0.000	0.000	0.004	0.025	0.019	0.012	0.001	0.002	0.001
	Thiva	0.000	0.392	0.000	0.000	0.007	0.029	0.026	0.017	0.001	0.002	0.002

Table 9.2.4- 218: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	0.419	0.000	0.001	0.012	0.047	0.028	0.019	0.002	0.004	0.002
	Hamburg	0.000	0.475	0.000	0.006	0.032	0.096	0.038	0.025	0.008	0.010	0.002
	Jokioinen	0.001	0.383	0.002	0.001	0.027	0.114	0.050	0.033	0.013	0.010	0.002
	Kremsmunster	0.006	0.382	0.001	0.003	0.021	0.062	0.029	0.019	0.004	0.007	0.002
	Okehampton	0.010	0.336	0.002	0.007	0.026	0.059	0.021	0.014	0.005	0.008	0.002
	Piacenza	0.000	0.328	0.002	0.005	0.018	0.044	0.023	0.015	0.003	0.006	0.002
	Porto	0.005	0.236	0.003	0.005	0.018	0.039	0.016	0.010	0.004	0.005	0.001
	Seville	0.000	0.263	0.000	0.000	0.005	0.025	0.018	0.012	0.001	0.002	0.001
	Thiva	0.000	0.381	0.000	0.000	0.007	0.029	0.025	0.016	0.001	0.002	0.002

Table 9.2.4- 219: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.408	0.000	0.010	0.044	0.029	0.019	0.001	0.003	0.002
	Hamburg	0.001	0.463	0.001	0.027	0.088	0.038	0.026	0.008	0.009	0.001
	Jokioinen	0.000	0.373	0.001	0.025	0.110	0.051	0.034	0.013	0.009	0.002
	Kremsmunster	0.001	0.371	0.000	0.017	0.059	0.029	0.019	0.004	0.006	0.002
	Okehampton	0.002	0.335	0.000	0.022	0.055	0.022	0.014	0.005	0.007	0.002
	Piacenza	0.001	0.307	0.000	0.014	0.036	0.022	0.015	0.003	0.005	0.002
	Porto	0.001	0.231	0.001	0.014	0.033	0.016	0.010	0.003	0.004	0.001
	Seville	0.000	0.256	0.000	0.004	0.021	0.018	0.012	0.001	0.001	0.001
	Thiva	0.000	0.375	0.000	0.004	0.022	0.025	0.017	0.004	0.002	0.002

Table 9.2.4- 220: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:2 year, late application – alkaline soils, without aged sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	0.405	0.000	0.011	0.044	0.012	0.075	0.008	0.004	0.002
	Hamburg	0.009	0.465	0.001	0.029	0.088	0.150	0.100	0.034	0.010	0.002
	Jokioinen	0.001	0.373	0.002	0.026	0.110	0.194	0.130	0.053	0.009	0.002
	Kremsmunster	0.006	0.372	0.000	0.018	0.059	0.109	0.072	0.016	0.006	0.002
	Okehampton	0.015	0.333	0.001	0.023	0.055	0.091	0.061	0.022	0.007	0.002
	Piacenza	0.010	0.309	0.001	0.015	0.037	0.087	0.058	0.015	0.005	0.002
	Porto	0.005	0.229	0.002	0.015	0.034	0.064	0.043	0.014	0.005	0.001
	Seville	0.000	0.254	0.000	0.004	0.021	0.075	0.049	0.005	0.001	0.001
	Thiva	0.009	0.365	0.000	0.005	0.022	0.095	0.064	0.005	0.002	0.002

Table 9.2.4- 221: FOCUS MACRO, PEC_{gw} results of fluopicolide – 1 x 100 g/ha 1:2 year, late application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0003

1:3 year rotation – Early window

Table 9.2.4- 222: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.623	0.000	0.001	0.027	0.101	0.066	0.044	0.017	0.009	0.005
	Hamburg	0.003	0.751	0.002	0.006	0.062	0.191	0.072	0.048	0.042	0.021	0.005
	Jokioinen	0.000	0.674	0.002	0.001	0.050	0.217	0.086	0.057	0.054	0.018	0.004
	Kremsmunster	0.002	0.592	0.001	0.003	0.035	0.114	0.032	0.035	0.021	0.011	0.004
	Okehampton	0.004	0.560	0.001	0.007	0.045	0.107	0.042	0.028	0.023	0.014	0.003
	Piacenza	0.003	0.467	0.001	0.004	0.031	0.074	0.043	0.029	0.014	0.010	0.003
	Porto	0.001	0.379	0.001	0.003	0.021	0.053	0.025	0.018	0.010	0.007	0.002
	Seville	0.000	0.325	0.000	0.000	0.007	0.040	0.032	0.021	0.006	0.003	0.002
	Thiva	0.000	0.507	0.000	0.000	0.013	0.058	0.056	0.037	0.007	0.004	0.005

Table 9.2.4- 223: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.009	0.649	0.001	0.005	0.032	0.105	0.066	0.044	0.018	0.011	0.005
	Hamburg	0.039	0.776	0.003	0.018	0.068	0.193	0.072	0.048	0.044	0.022	0.005
	Jokioinen	0.003	0.691	0.003	0.003	0.054	0.218	0.086	0.057	0.054	0.019	0.004
	Kremsmunster	0.022	0.617	0.002	0.010	0.038	0.116	0.052	0.035	0.022	0.012	0.004
	Okehampton	0.034	0.569	0.003	0.015	0.049	0.109	0.041	0.027	0.024	0.015	0.003
	Piacenza	0.023	0.480	0.002	0.009	0.030	0.076	0.043	0.029	0.015	0.010	0.003
	Porto	0.009	0.392	0.002	0.006	0.024	0.036	0.025	0.017	0.011	0.008	0.002
	Seville	0.000	0.335	0.000	0.000	0.008	0.041	0.032	0.021	0.006	0.003	0.002
	Thiva	0.002	0.531	0.000	0.004	0.015	0.060	0.056	0.037	0.008	0.005	0.005

Table 9.2.4- 224: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Potatoes	Chateaudun	0.000	0.596	0.000	0.024	0.008	0.065	0.044	0.016	0.098	0.005	
	Hamburg	0.003	0.722	0.001	0.057	0.019	0.072	0.048	0.041	0.186	0.005	
	Jokioinen	0.000	0.658	0.001	0.047	0.017	0.086	0.057	0.053	0.217	0.004	
	Kremsmunster	0.002	0.584	0.000	0.032	0.011	0.052	0.035	0.020	0.112	0.004	
	Okehampton	0.004	0.537	0.001	0.041	0.013	0.041	0.028	0.022	0.104	0.003	
	Piacenza	0.002	0.442	0.000	0.028	0.009	0.042	0.028	0.013	0.070	0.003	
	Porto	0.000	0.360	0.000	0.019	0.006	0.024	0.016	0.009	0.050	0.002	
	Seville	0.000	0.307	0.000	0.007	0.002	0.031	0.021	0.006	0.038	0.002	
	Thiva	0.000	0.473	0.000	0.011	0.004	0.055	0.037	0.007	0.054	0.005	

Table 9.2.4- 225: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.009	0.623	0.001	0.028	0.102	0.066	0.044	0.017	0.010	0.005
	Hamburg	0.031	0.747	0.002	0.063	0.189	0.071	0.048	0.042	0.021	0.005
	Jokioinen	0.003	0.675	0.002	0.050	0.218	0.086	0.057	0.054	0.018	0.004
	Kremsmunster	0.022	0.590	0.001	0.035	0.115	0.052	0.035	0.021	0.011	0.004
	Okehampton	0.034	0.549	0.002	0.045	0.106	0.040	0.027	0.023	0.014	0.003
	Piacenza	0.023	0.459	0.001	0.031	0.072	0.032	0.028	0.014	0.010	0.003
	Porto	0.009	0.377	0.001	0.022	0.053	0.024	0.016	0.010	0.007	0.002
	Seville	0.000	0.317	0.000	0.008	0.039	0.031	0.021	0.006	0.003	0.002
	Thiva	0.002	0.502	0.000	0.013	0.057	0.057	0.037	0.007	0.004	0.005

Table 9.2.4- 226: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, early application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.772	0.000	0.001	0.020	0.082	0.052	0.035	0.002	0.007	0.004
	Hamburg	0.002	0.878	0.003	0.005	0.056	0.159	0.062	0.042	0.013	0.018	0.004
	Jokioinen	0.000	0.717	0.004	0.004	0.046	0.202	0.073	0.048	0.023	0.017	0.004
	Kremsmunster	0.001	0.717	0.001	0.003	0.035	0.109	0.040	0.033	0.006	0.011	0.004
	Okehampton	0.004	0.605	0.002	0.006	0.044	0.100	0.037	0.025	0.008	0.014	0.003
	Piacenza	0.002	0.578	0.002	0.004	0.031	0.071	0.035	0.024	0.005	0.009	0.003
	Porto	0.001	0.422	0.003	0.004	0.029	0.062	0.026	0.011	0.006	0.009	0.002
	Seville	0.000	0.438	0.000	0.000	0.010	0.043	0.031	0.020	0.002	0.003	0.002
	Thiva	0.000	0.730	0.000	0.000	0.011	0.048	0.041	0.028	0.002	0.004	0.004

Table 9.2.4- 227: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, early application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.004	0.776	0.001	0.003	0.023	0.082	0.051	0.034	0.003	0.008	0.004
	Hamburg	0.004	0.871	0.005	0.011	0.050	0.158	0.061	0.040	0.014	0.019	0.004
	Jokioinen	0.002	0.714	0.005	0.002	0.051	0.198	0.070	0.047	0.023	0.018	0.004
	Kremsmunster	0.016	0.719	0.002	0.007	0.038	0.110	0.048	0.032	0.006	0.012	0.004
	Okehampton	0.030	0.594	0.002	0.013	0.047	0.100	0.036	0.024	0.009	0.014	0.003
	Piacenza	0.020	0.525	0.003	0.010	0.033	0.071	0.035	0.023	0.005	0.010	0.003
	Porto	0.012	0.421	0.005	0.009	0.031	0.064	0.026	0.017	0.007	0.009	0.002
	Seville	0.000	0.430	0.000	0.000	0.010	0.043	0.029	0.020	0.002	0.004	0.002
	Thiva	0.001	0.720	0.000	0.001	0.012	0.050	0.040	0.027	0.002	0.004	0.004

Table 9.2.4- 228: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, early application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.748	0.000	0.018	0.079	0.080	0.054	0.004	0.006	0.004
	Hamburg	0.002	0.852	0.002	0.051	0.153	0.100	0.067	0.018	0.01	0.004
	Jokioinen	0.000	0.706	0.003	0.046	0.202	0.130	0.087	0.033	0.017	0.004
	Kremsmunster	0.001	0.694	0.000	0.032	0.105	0.074	0.049	0.009	0.011	0.004
	Okehampton	0.004	0.587	0.001	0.040	0.097	0.056	0.038	0.012	0.013	0.003
	Piacenza	0.002	0.557	0.001	0.028	0.069	0.052	0.034	0.006	0.009	0.003
	Porto	0.001	0.408	0.002	0.026	0.059	0.048	0.026	0.008	0.008	0.002
	Seville	0.000	0.423	0.000	0.009	0.041	0.046	0.031	0.003	0.003	0.002
	Thiva	0.000	0.707	0.000	0.009	0.046	0.063	0.042	0.004	0.003	0.004

Table 9.2.4- 229: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, early application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.004	0.752	0.000	0.020	0.079	0.050	0.034	0.003	0.007	0.004
	Hamburg	0.019	0.847	0.003	0.055	0.153	0.060	0.040	0.013	0.018	0.004
	Jokioinen	0.002	0.703	0.004	0.048	0.198	0.072	0.048	0.023	0.017	0.004
	Kremsmunster	0.016	0.694	0.001	0.035	0.106	0.048	0.032	0.006	0.011	0.004
	Okehampton	0.023	0.589	0.002	0.043	0.097	0.035	0.024	0.008	0.014	0.003
	Piacenza	0.020	0.555	0.002	0.030	0.069	0.034	0.023	0.005	0.009	0.003
	Porto	0.012	0.407	0.003	0.028	0.061	0.025	0.017	0.006	0.009	0.002
	Seville	0.000	0.415	0.000	0.009	0.041	0.029	0.019	0.002	0.003	0.002
	Thiva	0.003	0.698	0.000	0.011	0.047	0.040	0.027	0.002	0.004	0.004

Table 9.2.4- 230: FOCUS MACRO, PEC_{gw} results of fluopicolide – 1 x 100 g/ha 1:3 year, early application

	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0009

1:3 year rotation – Late window

Table 9.2.4- 231: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, late application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.215	0.000	0.000	0.010	0.038	0.024	0.016	0.006	0.003	0.002
	Hamburg	0.001	0.276	0.000	0.002	0.022	0.072	0.027	0.018	0.016	0.007	0.002
	Jokioinen	0.000	0.233	0.001	0.000	0.017	0.083	0.033	0.022	0.020	0.006	0.001
	Kremsmunster	0.000	0.218	0.000	0.001	0.012	0.042	0.019	0.013	0.008	0.004	0.001
	Okehampton	0.001	0.207	0.000	0.002	0.017	0.042	0.016	0.011	0.009	0.005	0.001
	Piacenza	0.001	0.171	0.000	0.001	0.011	0.030	0.018	0.012	0.006	0.004	0.001
	Porto	0.000	0.140	0.000	0.001	0.008	0.021	0.010	0.008	0.004	0.003	0.001
	Seville	0.000	0.123	0.000	0.000	0.003	0.016	0.013	0.009	0.003	0.001	0.001
	Thiva	0.000	0.181	0.000	0.000	0.005	0.026	0.023	0.015	0.004	0.002	0.002

Table 9.2.4- 232: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	0.226	0.000	0.001	0.011	0.039	0.025	0.016	0.007	0.004	0.002
	Hamburg	0.008	0.386	0.001	0.002	0.021	0.073	0.027	0.018	0.014	0.008	0.002
	Jokioinen	0.001	0.241	0.001	0.001	0.018	0.083	0.032	0.022	0.020	0.007	0.001
	Kremsmunster	0.005	0.225	0.000	0.003	0.013	0.043	0.019	0.013	0.008	0.004	0.001
	Okehampton	0.009	0.211	0.001	0.005	0.018	0.042	0.016	0.011	0.009	0.006	0.001
	Piacenza	0.008	0.159	0.001	0.003	0.010	0.031	0.018	0.011	0.006	0.004	0.001
	Porto	0.002	0.146	0.001	0.002	0.009	0.022	0.010	0.007	0.005	0.003	0.001
	Seville	0.000	0.127	0.000	0.000	0.003	0.017	0.013	0.009	0.003	0.001	0.001
	Thiva	0.000	0.190	0.000	0.000	0.006	0.026	0.023	0.015	0.004	0.002	0.002

Table 9.2.4- 233: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.207	0.000	0.009	0.003	0.024	0.016	0.006	0.037	0.002
	Hamburg	0.001	0.266	0.000	0.021	0.007	0.027	0.018	0.016	0.072	0.002
	Jokioinen	0.000	0.225	0.000	0.016	0.006	0.033	0.022	0.020	0.081	0.001
	Kremsmunster	0.000	0.210	0.000	0.011	0.004	0.019	0.013	0.008	0.041	0.001
	Okehampton	0.001	0.200	0.000	0.016	0.005	0.016	0.011	0.009	0.042	0.001
	Piacenza	0.001	0.164	0.000	0.011	0.004	0.017	0.012	0.006	0.030	0.001
	Porto	0.000	0.130	0.000	0.007	0.002	0.009	0.006	0.004	0.020	0.001
	Seville	0.000	0.116	0.000	0.002	0.001	0.013	0.008	0.002	0.015	0.001
	Thiva	0.000	0.173	0.000	0.005	0.002	0.022	0.015	0.003	0.025	0.002

Table 9.2.4- 234: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, late application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.002	0.216	0.000	0.010	0.039	0.024	0.014	0.007	0.003	0.002
	Hamburg	0.008	0.275	0.001	0.023	0.072	0.027	0.018	0.017	0.008	0.002
	Jokioinen	0.001	0.232	0.001	0.017	0.082	0.032	0.022	0.020	0.006	0.001
	Kremsmunster	0.005	0.218	0.000	0.012	0.042	0.019	0.013	0.008	0.004	0.001
	Okehampton	0.009	0.205	0.001	0.017	0.042	0.017	0.011	0.009	0.005	0.001
	Piacenza	0.006	0.171	0.000	0.012	0.031	0.017	0.012	0.006	0.004	0.001
	Porto	0.002	0.141	0.000	0.008	0.021	0.010	0.006	0.004	0.003	0.001
	Seville	0.000	0.120	0.000	0.003	0.016	0.013	0.008	0.004	0.001	0.001
	Thiva	0.000	0.182	0.000	0.006	0.022	0.022	0.015	0.004	0.002	0.002

Table 9.2.4- 235: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, late application – acidic soils with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.266	0.000	0.000	0.007	0.031	0.019	0.013	0.001	0.003	0.001
	Hamburg	0.001	0.316	0.001	0.002	0.020	0.062	0.024	0.016	0.005	0.007	0.002
	Jokioinen	0.000	0.247	0.001	0.000	0.017	0.073	0.027	0.018	0.009	0.006	0.001
	Kremsmunster	0.000	0.255	0.000	0.001	0.012	0.041	0.019	0.012	0.002	0.004	0.001
	Okehampton	0.001	0.227	0.001	0.002	0.016	0.039	0.014	0.010	0.003	0.005	0.001
	Piacenza	0.001	0.211	0.001	0.001	0.011	0.030	0.014	0.010	0.002	0.004	0.001
	Porto	0.000	0.151	0.001	0.001	0.019	0.025	0.010	0.009	0.003	0.004	0.001
	Seville	0.000	0.157	0.000	0.000	0.004	0.018	0.012	0.008	0.001	0.001	0.001
	Thiva	0.000	0.247	0.000	0.000	0.004	0.022	0.017	0.011	0.001	0.002	0.001

Table 9.2.4- 236: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, late application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	0.267	0.000	0.001	0.008	0.031	0.019	0.012	0.001	0.003	0.001
	Hamburg	0.001	0.315	0.001	0.004	0.021	0.062	0.023	0.016	0.006	0.007	0.002
	Jokioinen	0.001	0.247	0.002	0.001	0.017	0.071	0.026	0.018	0.009	0.006	0.001
	Kremsmunster	0.004	0.253	0.001	0.002	0.013	0.041	0.018	0.012	0.003	0.004	0.001
	Okehampton	0.001	0.225	0.001	0.005	0.017	0.038	0.014	0.009	0.004	0.005	0.001
	Piacenza	0.001	0.221	0.001	0.001	0.012	0.029	0.014	0.009	0.002	0.004	0.001
	Porto	0.003	0.152	0.002	0.003	0.012	0.026	0.010	0.007	0.003	0.004	0.001
	Seville	0.000	0.156	0.000	0.000	0.004	0.018	0.012	0.008	0.001	0.001	0.001
	Thiva	0.000	0.238	0.000	0.000	0.005	0.022	0.016	0.011	0.001	0.002	0.001

Table 9.2.4- 237: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, late application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.000	0.259	0.000	0.006	0.029	0.019	0.013	0.001	0.002	0.001
	Hamburg	0.001	0.307	0.000	0.017	0.057	0.024	0.016	0.005	0.005	0.001
	Jokioinen	0.000	0.242	0.001	0.016	0.076	0.027	0.018	0.009	0.006	0.001
	Kremsmunster	0.000	0.249	0.000	0.011	0.039	0.019	0.012	0.002	0.004	0.001
	Okehampton	0.001	0.221	0.000	0.014	0.036	0.014	0.010	0.003	0.005	0.001
	Piacenza	0.001	0.205	0.000	0.010	0.025	0.010	0.010	0.002	0.003	0.001
	Porto	0.000	0.146	0.000	0.009	0.022	0.010	0.007	0.002	0.003	0.001
	Seville	0.000	0.154	0.000	0.003	0.015	0.012	0.008	0.001	0.001	0.001
	Thiva	0.000	0.244	0.000	0.003	0.017	0.017	0.011	0.004	0.001	0.001

Table 9.2.4- 238: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha 1:3 year, late application – alkaline soils, without aged sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Potatoes	Chateaudun	0.001	0.259	0.000	0.007	0.029	0.009	0.012	0.001	0.002	0.001
	Hamburg	0.005	0.307	0.001	0.019	0.056	0.023	0.016	0.005	0.006	0.002
	Jokioinen	0.001	0.242	0.001	0.016	0.074	0.026	0.018	0.008	0.006	0.001
	Kremsmunster	0.004	0.247	0.000	0.012	0.039	0.015	0.012	0.002	0.004	0.001
	Okehampton	0.005	0.221	0.001	0.015	0.036	0.014	0.009	0.004	0.005	0.001
	Piacenza	0.006	0.205	0.001	0.010	0.025	0.014	0.009	0.002	0.003	0.001
	Porto	0.003	0.147	0.001	0.010	0.022	0.010	0.007	0.002	0.003	0.001
	Seville	0.004	0.154	0.000	0.003	0.015	0.011	0.008	0.001	0.001	0.001
	Thiva	0.000	0.244	0.000	0.004	0.017	0.016	0.011	0.001	0.001	0.001

Table 9.2.4- 239: FOCUS MACRO, PEC_{gw} results of fluopicolide – 1 x 100 g/ha 1:3 year, late application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) MACRO Fluopicolide
Potatoes	Chateaudun	0.0002

III. Conclusion

The predicted environmental concentrations in groundwater (PEC_{gw}) of the active substance fluopicolide and its metabolites M-01, M-02, M-03, M-05, M-10, M-11/M-12, M-13, M-14, and M-15 were calculated for use in potatoes.

The overall maximum predicted PEC_{gw} value for fluopicolide was 0.500 µg/L in Okehampton scenario for 3 early applications of 100 g a.s./ha to potatoes every year without considering time dependent sorption parameters of fluopicolide. After refinement of the PEC_{gw} by considering aged sorption the predicted PEC_{gw} value for parent was 0.096 µg/L.

The metabolites M-02 and M-15 were predicted to reach groundwater at concentrations below 0.1 µg/L for all uses on potatoes. The metabolites M-01, M-03, M-05, M-10, M-11, M-12, M-13, M-14 were predicted to reach groundwater at concentrations in excess of 0.1 µg/L. The overall maximum concentrations were 6.980 µg/L for M-01, 0.163 µg/L for M-03, 0.548 µg/L for M-05, 1.737 µg/L for

M-10, 0.740 µg/L for M-11, 0.493 µg/L for M-12, 0.427 µg/L for M-13 and 0.175 µg/L for M-14. The non-relevance of these metabolites has been addressed in Document N4 using the assessment scheme described in the ‘Guidance Document On The Assessment Of The Relevance Of Metabolites In Groundwater Of Substances Regulated Under Council Directive 91/414/EEC (Sanco/221/2000 – Revision 10 – Final; 25 February 2003).

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2014) and is considered valid to assess predicted environmental concentrations in groundwater (PEC_{GW}) for fluopicolide and its metabolites in potatoes.

Data Point:	KCP 9.2.4.1/08
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (F/C) and metabolites: PEC _{GW} FOCUS PEARL, PELMO and MACRO - Use as foliar application in lettuce in Europe
Report No:	VC/19/0410
Document No:	M-68850-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	Not applicable
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

Predicted environmental concentrations of the active substance fluopicolide in groundwater recharge (PEC_{GW}) were calculated for the use in lettuce in Europe, using the simulation models FOCUS PEARL 4.4 (Leistra *et al.* 2001), FOCUS PELMO 5.5.3 (Jene 1998; Klein 1995, 1999, 2011), and FOCUS MACRO 5.4 (Jarvis 1994; Jarvis and Larsbo 2012). PEC_{GW} were evaluated as the 80th percentile of the mean annual leachate concentration at 1 m soil depth. Model parameters and scenarios consisting of weather, soil, and crop data were used as proposed by FOCUS (2014b).

I. Materials and Methods

Detailed application parameters are presented in Table 9.2.4- 240.

Table 9.2.4- 240: Application data of fluopicolide according to the use pattern in Europe

Individual crop	FOCUS crop	Rate g/ha	Interval (days)	Plant interception (%)	BBCH stage (-)	Amount reaching soil g/ha
Lettuce	Cabbage	1 x 100	-	25	13-49	75
Lettuce	Cabbage	2 x 100	7	70	41-49	30

The calculations were based on the maximum intended application rate together with the maximum intended number of applications per season and the minimum interval between applications (where applicable).

The application dates for this assessment were set with the help of the tool AppDate (Klein 2018), which proposes dates for specific crop stages (given as BBCH code) based on the crop development as defined in the FOCUS model scenarios for groundwater and surface water. For cabbages, a number of the scenarios have 2 crops per season - these were evaluated separately (Table 9.2.4- 241).

For cabbage, BBCH 13 is on average reached 19 days after crop emergence for the 1st crop and 13 days after emergence for the 2nd crop according to AppDate. Therefore, applications for the Early window were timed to start 19 or 13 days after emergence.

BBCH 49 is on average reached 4 days before harvest for the 1st crop and 5 days before harvest for the 2nd crop according to AppDate. Therefore, applications for the Late window were timed to end 4 or 5 days before harvest i.e. timed at 11 and 4 days before harvest for the 1st crop and 11 and 5 days before harvest for the 2nd crop.

Table 9.2.4- 241: Application timing and plant intercept data of fluopicolide

Individual crop	Window	Application timing	Rate g/ha	Interval (days)	Plant interception (%)	Amount reaching soil g/ha
Lettuce - early	1 st crop	19 days after emergence	1 x 100	-	25	75
Lettuce - early	2 nd crop	13 days after emergence	1 x 100	-	25	75
Lettuce - late	1 st crop	4 days before harvest	1 x 100	-	70	30
Lettuce - late	2 nd crop	5 days before harvest	1 x 100	-	70	30
Lettuce - late	1 st crop	4 days before harvest	2 x 100	-	70/70	30/30
Lettuce - late	2 nd crop	5 days before harvest	2 x 100	-	70/70	30/30

Input parameters for PEC groundwater modelling are fully evaluated and derived in the Core Modelling Information document (KCP 9.2.4/06) and are summarised on Table 9.2.4- 242 and Table 9.2.4- 243.

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Table 9.2.4- 242: Input parameters related to active substance fluopicolide and metabolites for PEC_{gw} calculations – with aged-sorption

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03* (AE 0608000)	M-05 (AE 1344122)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58	453.2
Solubility at temp.	(mg/L)	2.8	2220	115000	10	120000
Vapour pressure at temp.	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
Freundlich exponent	(-)	0.888	0.914	0.889	0.971	0.942
Plant uptake factor	(-)	0.5	0.5	0	0	0
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	FLC	M01	M02	M03	M05
DT50	(days)	121.0	146	1.6	17	25.2
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	155.3	4.0	3.3	2.0	8.1
k _{des}	(1/day)	0.0356	0	0	0	0
F _{ne}	(-)	0.508	0	0	0	0
PELMO parameters						
Substance code	(-)	Fluopicolide	M-01	M-02	M-03	M-05
Rate constant	(1/day)	0.005728	0.004743	0.43327	0.03873	0.027506
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	267.7	24.1	2.7	106.9	14.0
MACRO parameters						
Substance code	(-)	Fluopicolide	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temp	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948
Parameter	Unit	M-10 (AE 1344123)	M-11/12 (AE 1344119/ AE 1344120)	M-13 (Fluopicolide- P3)	M-14 (AE 1388273)	M-15 (AE 1413903)
Molar mass	(g/mol)	271.17	287.17	241.55	241.19	463.64
Solubility at temp.	(mg/L)	100000	1000	1000	15800	160000
Vapour pressure at temp.	(Pa)	0 (default)	0 (default)	0 (default)	0 (default)	0 (default)
Freundlich exponent	(-)	1.7	1.0	1.0	0.942	0.937
Plant uptake factor	(-)	0	0	0	0	0
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	M10	M11/12	M13	M14	M15
DT50	(days)	35.4	87.6	20.7	9.4	145.0
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	1.1	0	0	5.7	10.9
k _{des}	(1/day)	0	0	0	0	0
F _{ne}	(-)	0	0	0	0	0
PELMO parameters						
Substance code	(-)	M-10	M-11/12	M-13	M-14	M-15
Rate constant	(1/day)	0.019580	0.007913	0.033485	0.073739	0.004780
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	1.8	0	0	9.9	18.8
MACRO parameters						
Substance code	(-)	-	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temp	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948

* Metabolite M-03 not simulated in alkaline soils



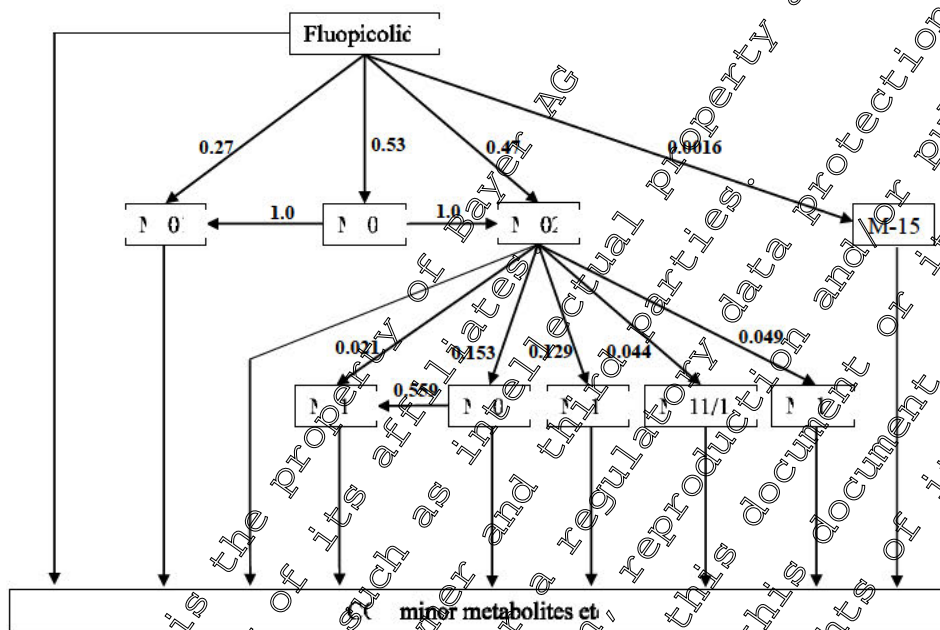
Table 9.2.4- 243: Input parameters related to active substance fluopicolide and metabolites for PECgw calculations – without aged-sorption

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03* (AE 0608000)	M-05 (AE 1344122)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58	453.2
Solubility at temp.	(mg/L) (°C)	2.8 20	2220 20	115000 20	10 20	120000 20
Vapour pressure at temp.	(Pa) (°C)	0 (default) 20	0 (default) 20	0 (default) 20	0 (default) 20	0 (default) 20
Freundlich exponent	(-)	0.888	0.914	0.889	0.971	0.947
Plant uptake factor	(-)	0.5	0.5	0	0	0
Walker exponent	(-)	0.7	0	0	0	0
PEARL parameters						
Substance code	(-)	FLC	M01	M02	M03	M05
DT50	(days)	182.0	146.6	1.6	17.6	25.2
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	155.3	14.0	3.3	62.0	8.1
PELMO parameters						
Substance code	(-)	Fluopicolide	M-01	M-02	M-03	M-05
Rate constant	(1/day)	0.003809	0.004748	0.43217	0.038723	0.027506
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	267.7	24.1	5.7	106.9	14.0
MACRO parameters						
Substance code	(-)	Fluopicolide	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948
Parameter	Unit	M-10 (AE 1344123)	M-11/12 (AE 1344119/ AE 1344120)	M-13 (Fluopicolide- P)	M-14 (AE 1388273)	M-15 (AE 1413903)
Molar mass	(g/mol)	201.17	281.17	231.55	241.19	463.64
Solubility at temp.	(mg/L) (°C)	100000 20	1000 20	1000 20	15800 20	160000 20
Vapour pressure at temp.	(Pa) (°C)	0 (default) 20	0 (default) 20	0 (default) 20	0 (default) 20	0 (default) 20
Freundlich exponent	(-)	1.0	1.0	1.0	0.942	0.937
Plant uptake factor	(-)	0	0	0	0	0
Walker exponent	(-)	0.7	0.7	0.7	0.7	0.7
PEARL parameters						
Substance code	(-)	M10	M11	M13	M14	M15
DT50	(days)	35.7	87.6	20.7	9.4	145.0
Molar activ. energy	(kJ/mol)	65.4	65.4	65.4	65.4	65.4
Kom	(mL/g)	1.1	0	0	5.7	10.9
PELMO parameters						
Substance code	(-)	M-10	M-11/12	M-13	M-14	M-15
Rate constant	(1/day)	0.009580	0.007913	0.033485	0.073739	0.004780
Q10	(-)	2.58	2.58	2.58	2.58	2.58
Koc	(mL/g)	1.8	0	0	9.9	18.8
MACRO parameters						
Substance code	(-)	-	-	-	-	-
Exponent moisture	(-)	0.49	0.49	0.49	0.49	0.49
Exponent temperature	(1/K)	0.0948	0.0948	0.0948	0.0948	0.0948

* Metabolite M-03 not simulated in alkaline soils

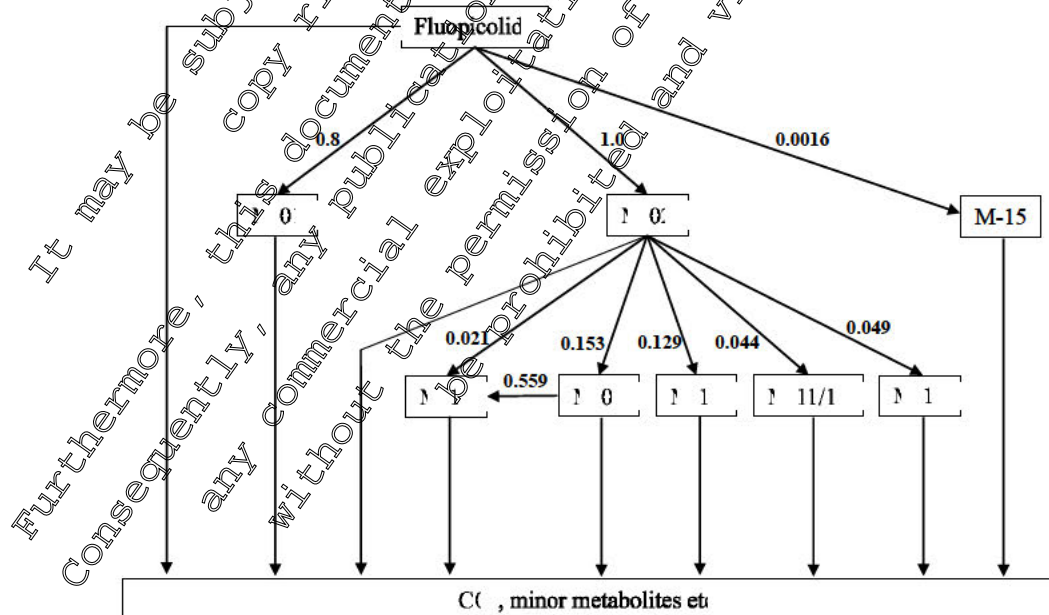
In acidic soils, the principle breakdown of fluopicolide in soil proceeds via formation of the M-03 metabolite, which splits to form the M-01 and M-02 metabolites, with M-01 and M-02 additionally being formed direct from fluopicolide [Figure 9.2.4- 7].

Figure 9.2.4- 7: Degradation pathway for fluopicolide in acidic soils



In alkaline soils, degradation of M-03 is very rapid (DT₅₀ < 1 day) and no kinetic formation information can be derived. Therefore, simulations for alkaline soil conditions are made assuming only direct formation of M-01 and M-02 from fluopicolide [Figure 9.2.4- 8].

Figure 9.2.4- 8: Degradation pathway for fluopicolide in alkaline soils



These two pathways can be fully parameterised directly in FOCUS PEAR 4.4.4. However, due to the pathway limitations in FOCUS PELMO 5.5.3, three separate evaluations are required for each. Aged-sorption is significant for fluopicolide, and thus two sets of evaluations are conducted – with/without the use of aged-sorption. Thus, for PEARL four sets of model evaluations are conducted per MAP, whereas twelve sets of model evaluations are required for PELMO.

Table 9.2.4- 244: Degradation pathway related parameters for fluopicolide and its metabolites

Degradation fraction from → to (-) (FOCUS PEARL): acidic soils	FLC → M01: 0.27 FLC → M02: 0.47 FLC → M03: 0.53 FLC → M10: 0.0016 M03 → M01: 1.0 M03 → M02: 1.0 M02 → M05: 0.153 M02 → M10: 0.129 M02 → M11-2: 0.044 M02 → M13: 0.049 M02 → M14: 0.021 M05 → M14: 0.559
Degradation fraction from → to (-) (FOCUS PEARL): alkaline soils	FLC → M01: 0.8 FLC → M02: 1.0 FLC → M10: 0.0016 M02 → M05: 0.153 M02 → M10: 0.129 M02 → M11-2: 0.044 M02 → M13: 0.049 M02 → M14: 0.021 M05 → M14: 0.559
Partial DT ₅₀ /Degradation rate from → to (day or 1/day) (FOCUS PELMO): acidic soils	Pathway 1: Active Substance → M-02: 387.234 / 0.0017900 Active Substance → M-03: 343.396 / 0.0020190 Active Substance (TDS) → M-02: 257.447 / 0.0026920 Active Substance (TDS) → M-03: 228.302 / 0.0030360 Active Substance → BR/CO2: 0 M-03 → M-02: 17.9 / 0.0387230 M-02 → M-05: 10.458 / 0.0662790 M-02 → M-10: 12.403 / 0.0558850 M-02 → M-14: 76.190 / 0.0090980 M-02 → BR/CO2: 2.296 / 0.3018930 M-05 → M-10: 45.081 / 0.0153760 M-05 → BR/CO2: 57.143 / 0.0121300 M-10 → BR/CO2: 35.4 / 0.0195800 M-14 → BR/CO2: 9.4 / 0.0737390 Pathway 2: Active Substance → M-02: 387.234 / 0.0017900 Active Substance → M-03: 343.396 / 0.0020190 Active Substance (TDS) → M-02: 257.447 / 0.0026920 Active Substance (TDS) → M-03: 228.302 / 0.0030360 Active Substance → BR/CO2: 0 M-03 → M-02: 17.9 / 0.0387230 M-02 → M-11/12: 36.364 / 0.0190610 M-02 → M-13: 32.653 / 0.0212280 M-02 → BR/CO2: 1.764 / 0.3929410 M-11/12 → BR/CO2: 87.6 / 0.0079130 M-13 → BR/CO2: 20.7 / 0.0737390

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Fluopicolide + Propamocarb-hydrochloride SC 687.5

	<p>Pathway 3: Active Substance → M-01: 674.074 / 0.0010280 Active Substance → M-03: 343.396 / 0.0020190 Active Substance → M-15: 113750 / 6.09E-06 Active Substance → BR/CO2: 917.339 / 0.000756 Active Substance (TDS) → M-01: 448.148 / 0.0015470 Active Substance (TDS) → M-03: 228.302 / 0.0030366 Active Substance (TDS) → M-15: 75625 / 9.17E-06 Active Substance (TDS) → BR/CO2: 609.879 / 0.0011370 M-03 → M-01: 17.9 / 0.0387230 M-01 → BR/CO2: 146 / 0.0047480 M-15 → BR/CO2: 145 / 0.0047800</p>
<p>Partial DT₅₀/Degradation rate from → to (day or 1/day) (FOCUS PELMO)^a: alkaline soils</p>	<p>Pathway 1: Active Substance → M-02: 182 / 0.0038090 Active Substance (TDS) → M-02: 121 / 0.0057280 Active Substance → BR/CO2: 0 M-02 → M-05: 10.458 / 0.0662790 M-02 → M-10: 2.403 / 0.0558850 M-02 → M-14: 76.190 / 0.0090980 M-02 → BR/CO2: 2.296 / 0.3018930 M-05 → M-14: 45.081 / 0.0153760 M-05 → BR/CO2: 57.445 / 0.0121300 M-10 → BR/CO2: 35.3 / 0.0195800 M-14 → BR/CO2: 9.4 / 0.0737390</p> <p>Pathway 2: Active Substance → M-02: 182 / 0.0038090 Active Substance (TDS) → M-02: 121 / 0.0057280 Active Substance → BR/CO2: 0 M-02 → M-11/12: 36.364 / 0.0190610 M-02 → M-13: 32.600 / 0.0212280 M-02 → BR/CO2: 1.764 / 0.3929470 M-11/12 → BR/CO2: 87.8 / 0.0079130 M-13 → BR/CO2: 20.0 / 0.0737390</p> <p>Pathway 3: Active Substance → M-01: 227.500 / 0.0030470 Active Substance → M-15: 113750 / 6.09E-06 Active Substance → BR/CO2: 917.339 / 0.000756 Active Substance (TDS) → M-01: 151.250 / 0.0045830 Active Substance (TDS) → M-15: 75625 / 9.17E-06 Active Substance (TDS) → BR/CO2: 609.879 / 0.0011370 M-01 → BR/CO2: 146 / 0.0047480 M-15 → BR/CO2: 145 / 0.0047800</p>
<p>Conversion factor from → to (-) (FOCUS MACRO)^b: acidic soils</p>	-
<p>Conversion factor from → to (-) (FOCUS MACRO)^b: alkaline soils</p>	-

^a Calculated as $(2) / DT_{50} \times \text{formation fraction}$
^b Calculated as $\text{molar mass} / \text{molar mass predecessor} \times \text{formation fraction}$

Plant uptake parameters, in different leaching models, define the ability of plant roots to transport a solute into the plant, in comparison to the water uptake (that is, the ratio between pesticide mass uptake flux and water volume uptake flux, normalised to the aqueous concentration of the pesticide outside the root). For fluopicolide and M-01 the plant uptake factor was set to the value of 0.5; for all the other metabolites the plant uptake factors were set at 0.

M-11/12 is a mixture of two isomers M-11 and M-12 in the ratio M-11:M-12 ≈ 60:40. PEC_{gw} calculations are conducted for M-11/12 and the results then split in the ratio 60:40 to derive PEC_{gw} values for M-11 and M-12. Groundwater simulations using MACRO 5.5.4 was carried out for fluopicolide only.

Following the proposal of the FOCUS working group on groundwater scenarios (FOCUS 2014b), the concentrations in the percolate at 1 m depth were evaluated. This shallow depth reflects a worst case with respect to the assessment of a potential groundwater contamination. The effective long-term groundwater concentrations will be even lower due to dilution in the upper groundwater layer.

II. Results and Discussion

Overview of the PEC_{gw} values obtained with individual FOCUS models is given in Table 9.2.4- 245 to Table 9.2.4- 248 (PEARL), Table 9.2.4- 249 to Table 9.2.4- 252 (PELMO).

Table 9.2.4- 245: Maximum FOCUS PEARL PEC_{gw} results of fluopicolide and its metabolites in µg/L for the uses assessed – acidic soils, with aged-sorption

Use pattern	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
	FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Lettuce Early 1x 1 st Crop	0.056	4.667	0.015	0.055	0.385	1.578	0.641	0.427	0.388	0.127	0.032
Lettuce Early 1x 2 nd Crop	0.064	4.727	0.017	0.062	0.403	1.269	0.498	0.332	0.281	0.131	0.032
Lettuce Late 1x 1 st Crop	0.013	1.805	0.005	0.017	0.149	0.622	0.258	0.172	0.157	0.049	0.012
Lettuce Late 1x 2 nd Crop	0.014	1.805	0.005	0.019	0.146	0.486	0.097	0.131	0.105	0.048	0.012
Lettuce Late 2x 1 st Crop	0.041	3.796	0.012	0.043	0.311	0.250	0.316	0.344	0.307	0.102	0.025
Lettuce Late 2x 2 nd Crop	0.046	0.754	0.013	0.047	0.308	0.979	0.394	0.263	0.212	0.101	0.025

Table 9.2.4- 246: Maximum FOCUS PEARL PEC_{gw} results of fluopicolide and its metabolites in µg/L for the uses assessed – acidic soils, without aged-sorption

Use pattern	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
	FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Lettuce Early 1x 1 st Crop	0.367	2.773	0.028	0.121	0.413	1.604	0.638	0.426	0.397	0.134	0.032
Lettuce Early 1x 2 nd Crop	0.411	4.856	0.03	0.134	0.434	1.269	0.496	0.327	0.284	0.138	0.032
Lettuce Late 1x 1 st Crop	0.104	1.845	0.010	0.031	0.161	0.632	0.257	0.172	0.156	0.052	0.013
Lettuce Late 1x 2 nd Crop	0.117	1.864	0.010	0.044	0.159	0.489	0.195	0.130	0.107	0.051	0.012
Lettuce Late 2x 1 st Crop	0.282	3.815	0.023	0.097	0.337	1.272	0.515	0.343	0.314	0.108	0.026
Lettuce Late 2x 2 nd Crop	0.313	3.851	0.024	0.105	0.335	0.982	0.389	0.259	0.215	0.107	0.026

Table 9.2.4- 247: Maximum FOCUS PEARL PEC_{gw} results of fluopicolide and its metabolites in µg/L for the uses assessed – alkaline soils, with aged-sorption

Use pattern	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
	FLC	M-01	M-02	M-03	M-10	M-11	M-12	M-13	M-14	M-15	
Lettuce Early 1x 1 st Crop	0.056	4.488	0.006	0.335	1.558	0.640	0.427	0.381	0.120	0.032	
Lettuce Early 1x 2 nd Crop	0.064	4.515	0.009	0.379	1.267	0.498	0.332	0.281	0.126	0.032	
Lettuce Late 1x 1 st Crop	0.013	1.746	0.002	0.139	0.615	0.257	0.171	0.151	0.047	0.012	
Lettuce Late 1x 2 nd Crop	0.014	0.734	0.003	0.136	0.479	0.195	0.130	0.103	0.046	0.012	
Lettuce Late 2x 1 st Crop	0.041	3.591	0.006	0.290	1.238	0.513	0.342	0.304	0.097	0.025	
Lettuce Late 2x 2 nd Crop	0.046	3.605	0.007	0.290	0.966	0.391	0.261	0.209	0.096	0.025	

Table 9.2.4- 248: Maximum FOCUS PEARL PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – alkaline soils, without aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL										
	FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Lettuce Early 1x 1 st Crop	0.367	4.613	0.019	0.387	1.585	0.638	0.425	0.391	0.127	0.030	
Lettuce Early 1x 2 nd Crop	0.411	4.711	0.022	0.416	1.269	0.490	0.327	0.285	0.133	0.032	
Lettuce Late 1x 1 st Crop	0.104	1.787	0.006	0.152	0.624	0.256	0.171	0.153	0.050	0.013	
Lettuce Late 1x 2 nd Crop	0.117	1.801	0.007	0.150	0.482	0.194	0.129	0.105	0.049	0.012	
Lettuce Late 2x 1 st Crop	0.282	3.701	0.016	0.318	0.257	0.512	0.342	0.310	0.104	0.026	
Lettuce Late 2x 2 nd Crop	0.313	3.734	0.017	0.318	0.969	0.386	0.258	0.215	0.10	0.026	

Table 9.2.4- 249: Maximum FOCUS PELMO PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – acidic soils, with aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
	FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Lettuce Early 1x 1 st Crop	0.030	5.791	0.027	0.047	0.364	1.364	0.569	0.380	0.335	0.117	0.027
Lettuce Early 1x 2 nd Crop	0.038	5.895	0.034	0.050	0.209	1.029	0.404	0.270	0.250	0.154	0.028
Lettuce Late 1x 1 st Crop	0.007	2.254	0.010	0.015	0.142	0.45	0.227	0.152	0.132	0.046	0.011
Lettuce Late 1x 2 nd Crop	0.009	2.242	0.011	0.018	0.140	0.398	0.158	0.106	0.083	0.045	0.011
Lettuce Late 2x 1 st Crop	0.022	4.635	0.022	0.037	0.297	1.097	0.454	0.302	0.260	0.095	0.022
Lettuce Late 2x 2 nd Crop	0.028	4.625	0.026	0.044	0.299	0.890	0.418	0.251	0.168	0.094	0.022

Table 9.2.4- 250: Maximum FOCUS PELMO PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – acidic soils, without aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
	FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
Lettuce Early 1x 1 st Crop	0.268	5.677	0.041	0.107	0.382	1.364	0.57	0.371	0.331	0.120	0.027
Lettuce Early 1x 2 nd Crop	0.312	5.792	0.051	0.116	0.316	1.031	0.393	0.262	0.222	0.127	0.028
Lettuce Late 1x 1 st Crop	0.074	2.219	0.015	0.034	0.152	0.544	0.223	0.148	0.130	0.047	0.011
Lettuce Late 1x 2 nd Crop	0.083	2.212	0.017	0.038	0.151	0.395	0.153	0.102	0.084	0.047	0.011
Lettuce Late 2x 1 st Crop	0.204	4.535	0.029	0.080	0.375	1.095	0.443	0.296	0.260	0.098	0.022
Lettuce Late 2x 2 nd Crop	0.233	4.538	0.039	0.091	0.316	0.94	0.305	0.203	0.170	0.097	0.022

Table 9.2.4- 251: Maximum FOCUS PELMO PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – alkaline soils, with aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
	FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Lettuce Early 1x 1 st Crop	0.030	5.641	0.020	0.333	1.346	0.568	0.378	0.329	0.110	0.027	
Lettuce Early 1x 2 nd Crop	0.038	5.780	0.018	0.368	1.013	0.403	0.269	0.217	0.120	0.028	
Lettuce Late 1x 1 st Crop	0.007	2.201	0.007	0.13	0.545	0.226	0.150	0.132	0.044	0.011	
Lettuce Late 1x 2 nd Crop	0.009	2.188	0.006	0.131	0.389	0.157	0.104	0.081	0.043	0.011	
Lettuce Late 2x 1 st Crop	0.022	4.529	0.018	0.276	1.088	0.450	0.300	0.264	0.090	0.022	
Lettuce Late 2x 2 nd Crop	0.028	4.524	0.016	0.280	0.781	0.314	0.209	0.165	0.090	0.022	

Table 9.2.4- 252: Maximum FOCUS PELMO PECgw results of fluopicolide and its metabolites in µg/L for the uses assessed – alkaline soils, without aged-sorption

Use pattern	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO										
	FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
Lettuce Early 1x 1 st Crop	0.268	5.536	0.030	0.353	1.345	0.556	0.370	0.326	0.113	0.027	
Lettuce Early 1x 2 nd Crop	0.312	5.705	0.038	0.395	1.019	0.392	0.262	0.220	0.123	0.028	
Lettuce Late 1x 1 st Crop	0.074	2.175	0.010	0.142	0.538	0.221	0.148	0.129	0.045	0.011	
Lettuce Late 1x 2 nd Crop	0.083	2.165	0.012	0.143	0.389	0.152	0.102	0.082	0.045	0.011	
Lettuce Late 2x 1 st Crop	0.204	4.453	0.024	0.295	1.081	0.440	0.294	0.259	0.093	0.022	
Lettuce Late 2x 2 nd Crop	0.233	4.455	0.030	0.300	0.783	0.304	0.203	0.166	0.093	0.022	

Detailed results for all scenarios for FOCUS PEARL, FOCUS PELMO and FOCUS MACRO are listed in the following subsections Table 9.2.4- 253 to Table 9.2.4- 279.

Lettuce Early 1 x 100 g/ha BBCH 13-49

Annual application, 1st Crop & 2nd Crop

Table 9.2.4- 253: FOCUS PEARL, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.056	4.667	0.015	0.055	0.385	1.240	0.494	0.330	0.269	0.127	0.032
	Hamburg	<0.001	4.058	0.012	0.009	0.360	1.578	0.644	0.427	0.388	0.123	0.025
	Jokioinen	0.031	3.503	0.005	0.027	0.215	0.584	0.297	0.183	0.192	0.069	0.021
	Kremsmünster	0.019	2.076	0.012	0.031	0.151	0.949	0.164	0.110	0.069	0.047	0.013
	Porto	<0.001	2.015	0.001	0.001	0.060	0.266	0.212	0.142	0.041	0.021	0.017
	Sevilla	0.002	2.785	0.001	0.005	0.103	0.325	0.216	0.142	0.058	0.032	0.018
	Thiva	0.056	4.667	0.015	0.055	0.385	1.240	0.494	0.330	0.269	0.127	0.032
2 nd Crop	Châteaudun	0.009	3.861	0.002	0.011	0.197	0.376	0.341	0.227	0.106	0.066	0.025
	Hamburg	0.064	4.727	0.017	0.062	0.403	1.269	0.498	0.332	0.281	0.131	0.032
	Kremsmünster	0.034	3.588	0.005	0.029	0.223	0.603	0.270	0.188	0.110	0.072	0.022
	Porto	0.025	2.200	0.006	0.040	0.186	0.401	0.236	0.139	0.063	0.037	0.014
	Sevilla	<0.001	2.254	0.001	0.001	0.073	0.318	0.230	0.153	0.051	0.026	0.017

Table 9.2.4- 254: FOCUS PEARL, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.141	3.337	0.009	0.045	0.16	0.572	0.344	0.230	0.103	0.070	0.026
	Hamburg	0.367	4.773	0.028	0.121	0.413	1.249	0.488	0.325	0.275	0.134	0.032
	Jokioinen	0.030	4.133	0.026	0.029	0.387	1.604	0.638	0.426	0.397	0.125	0.026
	Kremsmünster	0.249	3.543	0.014	0.075	0.236	0.594	0.274	0.183	0.116	0.074	0.021
	Porto	0.135	2.155	0.024	0.069	0.265	0.363	0.465	0.110	0.072	0.050	0.013
	Sevilla	0.003	2.060	0.001	0.003	0.067	0.271	0.209	0.139	0.042	0.023	0.016
	Thiva	0.062	2.912	0.004	0.023	0.115	0.334	0.215	0.143	0.059	0.037	0.018
2 nd Crop	Châteaudun	0.169	3.982	0.010	0.050	0.229	0.595	0.346	0.230	0.111	0.074	0.026
	Hamburg	0.411	4.850	0.031	0.134	0.434	1.269	0.490	0.327	0.284	0.138	0.032
	Kremsmünster	0.273	2.633	0.015	0.082	0.243	0.616	0.276	0.184	0.122	0.076	0.022
	Porto	0.206	2.308	0.031	0.086	0.201	0.416	0.177	0.118	0.089	0.059	0.014
	Sevilla	0.003	2.310	0.001	0.003	0.067	0.325	0.227	0.151	0.054	0.028	0.017

Table 9.2.4- 255: FOCUS PEARL, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
1 st Crop	Châteaudun	0.008	3.676	0.001	0.163	0.525	0.334	0.223	0.090	0.056	0.025	
	Hamburg	0.056	4.488	0.008	0.355	1.206	0.490	0.326	0.258	0.120	0.032	
	Jokioinen	0.090	3.983	0.008	0.340	1.558	0.640	0.427	0.381	0.119	0.025	
	Kremsmünster	0.031	3.392	0.002	0.197	0.566	0.275	0.184	0.106	0.065	0.021	
	Porto	0.019	1.960	0.006	0.135	0.330	0.161	0.107	0.063	0.042	0.013	
	Sevilla	0.009	1.867	0.000	0.054	0.250	0.206	0.138	0.038	0.019	0.017	
	Thiva	0.092	2.719	0.000	0.100	0.324	0.215	0.143	0.055	0.033	0.018	
2 nd Crop	Châteaudun	0.009	3.733	0.001	0.180	0.561	0.338	0.225	0.102	0.061	0.025	
	Hamburg	0.064	4.575	0.009	0.379	1.267	0.498	0.332	0.281	0.126	0.032	
	Kremsmünster	0.034	3.472	0.003	0.207	0.599	0.277	0.185	0.118	0.068	0.022	
	Porto	0.025	2.123	0.007	0.173	0.396	0.173	0.116	0.084	0.055	0.014	
	Sevilla	0.000	2.131	0.000	0.067	0.305	0.227	0.151	0.048	0.024	0.017	

Table 9.2.4- 256: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 1 x 100 g/ha annual application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14
1 st Crop	Châteaudun	0.141	3.802	0.007	0.194	0.550	0.339	0.226	0.097	0.064	0.026
	Hamburg	0.367	4.613	0.019	0.387	1.220	0.484	0.323	0.265	0.122	0.036
	Jokioinen	0.030	4.064	0.019	0.367	1.585	0.638	0.425	0.391	0.122	0.026
	Kremsmünster	0.249	3.441	0.010	0.220	0.576	0.273	0.182	0.111	0.069	0.021
	Porto	0.155	2.046	0.017	0.150	0.345	0.162	0.108	0.067	0.046	0.013
	Sevilla	0.003	1.911	0.001	0.060	0.255	0.202	0.135	0.039	0.021	0.016
	Thiva	0.062	2.832	0.003	0.112	0.333	0.216	0.144	0.056	0.035	0.018
2 nd Crop	Châteaudun	0.163	3.874	0.008	0.210	0.581	0.345	0.228	0.108	0.069	0.026
	Hamburg	0.411	4.711	0.021	0.407	1.269	0.490	0.327	0.285	0.133	0.032
	Kremsmünster	0.273	3.531	0.011	0.230	0.607	0.275	0.183	0.120	0.073	0.022
	Porto	0.206	2.229	0.022	0.190	0.409	0.175	0.117	0.087	0.038	0.014
	Sevilla	0.003	2.197	0.001	0.075	0.313	0.224	0.149	0.081	0.026	0.017

Table 9.2.4- 257: FOCUS PELMO, PEC_{gw} results of flupicolide and its metabolites – 1 x 100 g/ha annual application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.004	4.734	0.001	0.006	0.146	0.471	0.283	0.189	0.078	0.049	0.022
	Hamburg	0.030	5.791	0.025	0.041	0.364	0.984	0.395	0.263	0.207	0.117	0.027
	Jokioinen	0.000	4.602	0.026	0.007	0.349	1.367	0.569	0.380	0.337	0.115	0.022
	Kremsmünster	0.020	4.408	0.006	0.023	0.218	0.617	0.278	0.184	0.117	0.071	0.021
	Porto	0.029	2.793	0.027	0.047	0.162	0.330	0.137	0.091	0.068	0.048	0.011
	Sevilla	0.001	2.959	0.001	0.001	0.049	0.206	0.173	0.115	0.031	0.017	0.014
	Thiva	0.002	3.368	0.002	0.004	0.109	0.312	0.199	0.132	0.054	0.035	0.016
2 nd Crop	Châteaudun	0.004	4.700	0.002	0.002	0.155	0.488	0.284	0.190	0.086	0.053	0.022
	Hamburg	0.036	5.805	0.028	0.048	0.493	1.029	0.404	0.270	0.220	0.124	0.028
	Kremsmünster	0.023	4.446	0.006	0.025	0.225	0.641	0.280	0.187	0.123	0.072	0.021
	Porto	0.038	2.507	0.034	0.057	0.196	0.382	0.149	0.099	0.087	0.059	0.012
	Sevilla	<0.001	3.095	0.001	0.000	0.057	0.245	0.183	0.122	0.038	0.020	0.015

Table 9.2.4- 258: FOCUS PELMO, PEC_{gw} results of flupicolide and its metabolites – 1 x 100 g/ha annual application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.085	4.670	0.006	0.028	0.163	0.473	0.280	0.186	0.082	0.053	0.022
	Hamburg	0.268	5.657	0.041	0.101	0.382	0.980	0.380	0.253	0.209	0.120	0.027
	Jokioinen	0.022	4.550	0.026	0.024	0.360	1.364	0.557	0.371	0.331	0.117	0.022
	Kremsmünster	0.200	4.359	0.015	0.061	0.235	0.611	0.266	0.177	0.118	0.073	0.021
	Porto	0.203	2.564	0.041	0.088	0.166	0.335	0.134	0.089	0.071	0.049	0.011
	Sevilla	0.001	2.831	0.001	0.001	0.052	0.205	0.166	0.111	0.032	0.018	0.013
	Thiva	0.042	3.349	0.001	0.018	0.112	0.311	0.194	0.129	0.056	0.036	0.016
2 nd Crop	Châteaudun	0.100	4.628	0.006	0.022	0.177	0.494	0.280	0.186	0.089	0.057	0.022
	Hamburg	0.312	5.792	0.047	0.116	0.416	1.031	0.393	0.262	0.222	0.127	0.028
	Kremsmünster	0.223	4.404	0.016	0.067	0.241	0.637	0.271	0.181	0.125	0.075	0.021
	Porto	0.260	2.546	0.050	0.115	0.202	0.389	0.148	0.099	0.090	0.059	0.012
	Sevilla	0.001	2.992	0.002	0.001	0.063	0.246	0.177	0.118	0.040	0.021	0.014

Table 9.2.4- 259: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.004	4.587	0.001	0.130	0.448	0.279	0.186	0.073	0.044	0.022
	Hamburg	0.030	5.641	0.015	0.333	0.948	0.389	0.259	0.196	0.108	0.025
	Jokioinen	<0.001	4.541	0.020	0.328	1.346	0.568	0.368	0.329	0.110	0.022
	Kremsmünster	0.020	4.277	0.003	0.200	0.592	0.273	0.182	0.112	0.066	0.021
	Porto	0.029	2.311	0.015	0.147	0.315	0.135	0.090	0.064	0.045	0.011
	Sevilla	<0.001	2.853	0.001	0.044	0.192	0.169	0.112	0.028	0.015	0.010
	Thiva	0.002	3.316	0.001	0.107	0.313	0.199	0.133	0.053	0.035	0.016
2 nd Crop	Châteaudun	0.004	4.587	0.001	0.146	0.480	0.289	0.189	0.083	0.049	0.022
	Hamburg	0.036	5.780	0.018	0.368	1.013	0.403	0.269	0.217	0.120	0.028
	Kremsmünster	0.023	4.338	0.004	0.210	0.633	0.279	0.186	0.124	0.069	0.021
	Porto	0.038	2.440	0.018	0.188	0.370	0.146	0.097	0.083	0.058	0.022
	Sevilla	<0.001	2.999	0.001	0.051	0.230	0.181	0.121	0.035	0.018	0.015

Table 9.2.4- 260: FOCUS PELMO, PECgw results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.085	4.536	0.004	0.146	0.463	0.273	0.184	0.076	0.048	0.022
	Hamburg	0.268	5.536	0.029	0.343	0.947	0.375	0.250	0.199	0.113	0.027
	Jokioinen	0.022	4.493	0.028	0.341	1.345	0.556	0.370	0.320	0.113	0.022
	Kremsmünster	0.200	4.237	0.011	0.218	0.592	0.264	0.176	0.114	0.069	0.021
	Porto	0.203	2.302	0.030	0.154	0.322	0.132	0.088	0.067	0.045	0.011
	Sevilla	0.001	2.729	0.003	0.046	0.191	0.163	0.108	0.029	0.016	0.013
	Thiva	0.002	3.300	0.003	0.110	0.312	0.194	0.130	0.055	0.036	0.016
2 nd Crop	Châteaudun	0.100	4.522	0.005	0.163	0.483	0.278	0.185	0.086	0.054	0.022
	Hamburg	0.312	5.705	0.034	0.395	1.010	0.392	0.262	0.220	0.123	0.028
	Kremsmünster	0.223	4.296	0.012	0.227	0.632	0.271	0.180	0.122	0.073	0.021
	Porto	0.260	2.465	0.038	0.197	0.376	0.146	0.097	0.086	0.058	0.012
	Sevilla	0.001	2.901	0.001	0.056	0.232	0.175	0.117	0.036	0.019	0.014

Table 9.2.4- 261: FOCUS MACRO, PECgw results of fluopicolide – 1 x 100 g/ha annual application

Crop	Scenario	80 th percentile PECgw at 1 m soil depth (µg/L) - MACRO Fluopicolide
1 st Crop	Chateaudun	0.0285
2 nd Crop	Chateaudun	0.0617

Lettuce Late 1 x 100 g/ha BBCH 41-49

Annual application, 1st Crop & 2nd Crop

Table 9.2.4- 262: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.001	1.454	<0.001	0.003	0.071	0.226	0.136	0.091	0.04	0.024	0.016
	Hamburg	0.013	1.801	0.005	0.017	0.049	0.508	0.291	0.134	0.042	0.04	0.019
	Jokioinen	<0.001	1.529	0.003	0.002	0.129	0.622	0.258	0.172	0.152	0.046	0.010
	Kremsmünster	0.007	1.358	0.001	0.008	0.083	0.240	0.112	0.075	0.047	0.027	0.008
	Porto	0.004	0.823	0.004	0.010	0.066	0.157	0.069	0.040	0.032	0.024	0.005
	Sevilla	<0.001	0.812	<0.001	<0.001	0.024	0.118	0.090	0.060	0.049	0.009	0.007
	Thiva	<0.001	0.945	<0.001	0.001	0.025	0.088	0.076	0.050	0.013	0.008	0.006
2 nd Crop	Châteaudun	0.001	1.439	0.001	0.003	0.070	0.219	0.135	0.090	0.039	0.023	0.009
	Hamburg	0.014	1.805	0.005	0.016	0.146	0.486	0.197	0.133	0.105	0.048	0.012
	Kremsmünster	0.007	1.361	0.002	0.009	0.081	0.297	0.101	0.074	0.045	0.024	0.008
	Porto	0.005	0.791	0.005	0.012	0.062	0.139	0.067	0.044	0.028	0.019	0.005
	Sevilla	<0.001	0.818	<0.001	<0.001	0.029	0.128	0.091	0.061	0.023	0.010	0.007
	Thiva	0.008	0.980	0.004	0.004	0.030	0.094	0.077	0.052	0.015	0.010	0.006

Table 9.2.4- 263: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.035	1.521	0.003	0.013	0.082	0.234	0.138	0.092	0.043	0.027	0.010
	Hamburg	0.104	1.845	0.010	0.041	0.16	0.514	0.198	0.132	0.114	0.052	0.013
	Jokioinen	0.004	1.567	0.008	0.009	0.140	0.692	0.297	0.172	0.156	0.048	0.010
	Kremsmünster	0.071	1.399	0.004	0.024	0.091	0.244	0.111	0.074	0.049	0.029	0.009
	Porto	0.045	0.851	0.008	0.024	0.072	0.160	0.069	0.046	0.034	0.022	0.005
	Sevilla	<0.001	0.832	<0.001	0.001	0.027	0.121	0.089	0.059	0.019	0.009	0.006
	Thiva	0.008	0.980	0.004	0.004	0.030	0.094	0.077	0.052	0.015	0.010	0.006
2 nd Crop	Châteaudun	0.038	1.513	0.003	0.014	0.081	0.225	0.137	0.091	0.041	0.026	0.010
	Hamburg	0.117	1.864	0.010	0.044	0.159	0.489	0.195	0.130	0.107	0.051	0.012
	Kremsmünster	0.078	1.409	0.005	0.024	0.090	0.245	0.110	0.074	0.046	0.028	0.009
	Porto	0.052	0.829	0.009	0.027	0.069	0.145	0.067	0.045	0.030	0.020	0.005
	Sevilla	0.001	0.836	<0.001	0.001	0.031	0.128	0.089	0.060	0.023	0.011	0.007
	Thiva	0.008	0.980	0.004	0.004	0.030	0.094	0.077	0.052	0.015	0.010	0.006

Table 9.2.4- 264: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
1 st Crop	Châteaudun	0.001	1.400	0.000	0.064	0.217	0.134	0.090	0.038	0.022	0.010	
	Hamburg	0.013	1.746	0.002	0.139	0.503	0.200	0.133	0.110	0.047	0.012	
	Jokioinen	0.000	1.483	0.002	0.122	0.615	0.257	0.171	0.151	0.044	0.010	
	Kremsmünster	0.007	1.317	0.001	0.076	0.234	0.111	0.074	0.046	0.025	0.008	
	Porto	0.004	0.783	0.002	0.060	0.151	0.067	0.045	0.030	0.019	0.005	
	Sevilla	0.000	0.758	0.000	0.022	0.112	0.088	0.059	0.017	0.008	0.007	
	Thiva	0.000	0.904	0.000	0.023	0.084	0.073	0.049	0.012	0.008	0.006	
2 nd Crop	Châteaudun	0.001	1.381	0.000	0.064	0.213	0.132	0.088	0.037	0.022	0.009	
	Hamburg	0.014	1.734	0.003	0.136	0.479	0.195	0.130	0.103	0.046	0.012	
	Kremsmünster	0.007	1.317	0.001	0.074	0.233	0.110	0.073	0.043	0.025	0.008	
	Porto	0.005	0.757	0.002	0.058	0.136	0.066	0.044	0.028	0.019	0.005	
	Sevilla	0.000	0.803	0.000	0.028	0.131	0.091	0.061	0.023	0.010	0.007	
	Thiva	0.008	0.980	0.004	0.004	0.030	0.094	0.077	0.052	0.015	0.010	0.006

Table 9.2.4- 265: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 1 x 100 g/ha annual application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.035	1.467	0.002	0.074	0.226	0.136	0.091	0.041	0.025	0.010
	Hamburg	0.104	1.787	0.006	0.152	0.508	0.198	0.132	0.112	0.050	0.010
	Jokioinen	0.004	1.528	0.005	0.133	0.624	0.256	0.170	0.153	0.046	0.010
	Kremsmünster	0.071	1.353	0.003	0.085	0.239	0.111	0.074	0.047	0.028	0.009
	Porto	0.045	0.813	0.005	0.067	0.155	0.068	0.045	0.032	0.021	0.005
	Sevilla	<0.001	0.779	<0.001	0.025	0.115	0.087	0.058	0.018	0.009	0.006
	Thiva	0.008	0.945	<0.001	0.027	0.089	0.070	0.050	0.040	0.009	0.006
2 nd Crop	Châteaudun	0.038	1.452	0.002	0.073	0.220	0.135	0.090	0.040	0.024	0.010
	Hamburg	0.117	1.801	0.007	0.150	0.482	0.194	0.129	0.105	0.049	0.012
	Kremsmünster	0.078	1.367	0.003	0.084	0.239	0.110	0.073	0.048	0.027	0.009
	Porto	0.052	0.790	0.005	0.065	0.141	0.060	0.044	0.029	0.019	0.005
	Sevilla	0.001	0.817	0.000	0.031	0.131	0.089	0.059	0.023	0.011	0.007

Table 9.2.4- 266: FOCUS PELMO, PEC_{gw} results of flupicolide and its metabolites – 1 x 100 g/ha annual application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.001	1.873	0.000	0.002	0.057	0.194	0.115	0.076	0.033	0.019	0.009
	Hamburg	0.007	2.254	0.008	0.013	0.142	0.406	0.161	0.107	0.082	0.046	0.011
	Jokioinen	<0.001	1.696	0.008	0.002	0.129	0.543	0.227	0.152	0.102	0.045	0.008
	Kremsmünster	0.004	1.682	0.002	0.007	0.084	0.251	0.112	0.074	0.048	0.027	0.008
	Porto	0.007	0.923	0.010	0.015	0.072	0.146	0.056	0.038	0.032	0.022	0.005
	Sevilla	<0.001	1.166	<0.001	<0.001	0.024	0.093	0.073	0.049	0.014	0.007	0.006
	Thiva	<0.001	1.189	<0.001	0.000	0.028	0.093	0.069	0.046	0.014	0.009	0.006
2 nd Crop	Châteaudun	0.001	1.778	<0.001	0.002	0.055	0.181	0.110	0.074	0.032	0.019	0.008
	Hamburg	0.008	2.242	0.009	0.014	0.140	0.398	0.158	0.106	0.083	0.045	0.011
	Kremsmünster	0.004	1.683	0.002	0.008	0.084	0.244	0.111	0.074	0.047	0.027	0.008
	Porto	0.009	0.931	0.010	0.017	0.064	0.139	0.058	0.038	0.030	0.019	0.005
	Sevilla	<0.001	1.156	<0.001	<0.001	0.024	0.106	0.070	0.047	0.018	0.009	0.006

Table 9.2.4- 267: FOCUS PELMO, PEC_{gw} results of flupicolide and its metabolites – 1 x 100 g/ha annual application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) – PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.020	1.787	0.002	0.008	0.065	0.196	0.112	0.075	0.034	0.021	0.009
	Hamburg	0.074	2.219	0.010	0.014	0.152	0.406	0.156	0.104	0.088	0.047	0.011
	Jokioinen	0.003	1.687	0.011	0.007	0.134	0.544	0.223	0.148	0.130	0.045	0.008
	Kremsmünster	0.053	1.673	0.005	0.019	0.090	0.251	0.109	0.072	0.048	0.029	0.008
	Porto	0.062	0.933	0.015	0.032	0.076	0.148	0.056	0.038	0.034	0.022	0.005
	Sevilla	<0.001	1.130	<0.001	<0.001	0.021	0.093	0.071	0.047	0.014	0.008	0.006
	Thiva	0.005	1.064	0.001	0.003	0.030	0.093	0.067	0.045	0.015	0.010	0.006
2 nd Crop	Châteaudun	0.022	1.754	0.002	0.008	0.061	0.182	0.109	0.072	0.032	0.020	0.008
	Hamburg	0.083	2.212	0.015	0.038	0.151	0.395	0.153	0.102	0.084	0.047	0.011
	Kremsmünster	0.050	1.680	0.003	0.021	0.089	0.243	0.108	0.072	0.047	0.028	0.008
	Porto	0.072	0.946	0.017	0.035	0.067	0.139	0.056	0.038	0.031	0.019	0.005
	Sevilla	0.001	1.112	0.001	<0.001	0.025	0.103	0.067	0.044	0.018	0.009	0.005

Table 9.2.4- 268: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.001	1.764	0.000	0.052	0.187	0.113	0.076	0.031	0.018	0.009
	Hamburg	0.007	2.201	0.005	0.131	0.396	0.160	0.106	0.084	0.044	0.010
	Jokioinen	0.000	1.679	0.007	0.124	0.545	0.226	0.150	0.132	0.044	0.008
	Kremsmünster	0.004	1.633	0.001	0.077	0.245	0.111	0.074	0.046	0.026	0.008
	Porto	0.007	0.891	0.005	0.067	0.139	0.055	0.037	0.030	0.021	0.005
	Sevilla	0.000	1.129	0.000	0.018	0.087	0.072	0.048	0.013	0.006	0.006
	Thiva	0.000	1.144	0.000	0.026	0.089	0.067	0.045	0.016	0.009	0.006
2 nd Crop	Châteaudun	0.001	1.723	0.000	0.051	0.176	0.105	0.072	0.031	0.017	0.008
	Hamburg	0.008	2.188	0.006	0.101	0.389	0.157	0.104	0.081	0.043	0.011
	Kremsmünster	0.004	1.640	0.001	0.075	0.241	0.110	0.074	0.046	0.025	0.008
	Porto	0.009	0.902	0.006	0.063	0.137	0.057	0.038	0.030	0.018	0.005
	Sevilla	0.000	1.121	0.000	0.023	0.105	0.071	0.047	0.019	0.008	0.006

Table 9.2.4- 269: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 1 x 100 g/ha annual application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.019	1.742	0.001	0.057	0.190	0.107	0.074	0.033	0.019	0.009
	Hamburg	0.074	2.175	0.005	0.142	0.599	0.155	0.103	0.085	0.045	0.011
	Jokioinen	0.003	1.666	0.009	0.128	0.538	0.221	0.148	0.129	0.044	0.008
	Kremsmünster	0.053	1.630	0.003	0.084	0.245	0.108	0.073	0.047	0.027	0.008
	Porto	0.061	0.907	0.010	0.071	0.142	0.055	0.037	0.022	0.021	0.005
	Sevilla	<0.001	1.095	<0.001	0.019	0.087	0.070	0.046	0.013	0.007	0.006
	Thiva	0.005	1.120	0.001	0.027	0.088	0.065	0.044	0.014	0.009	0.006
2 nd Crop	Châteaudun	0.022	1.704	0.001	0.056	0.176	0.105	0.071	0.031	0.019	0.008
	Hamburg	0.083	2.165	0.011	0.143	0.389	0.152	0.102	0.082	0.045	0.011
	Kremsmünster	0.059	1.630	0.003	0.082	0.240	0.107	0.072	0.046	0.026	0.008
	Porto	0.072	0.922	0.012	0.066	0.138	0.056	0.038	0.031	0.019	0.005
	Sevilla	<0.001	0.981	0.001	0.024	0.105	0.067	0.044	0.018	0.009	0.005

Table 9.2.4- 270: FOCUS MACRO, PEC_{gw} results of fluopicolide – 100 g/ha annual application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - MACRO Fluopicolide
1 st Crop	Chateaudun	0.0108
2 nd Crop	Chateaudun	0.0108

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Lettuce Late 2 x 100 g/ha BBCH 41-49

Annual application, 1st Crop & 2nd Crop

Table 9.2.4- 271: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.005	3.028	0.001	0.007	0.150	0.453	0.273	0.182	0.082	0.050	0.026
	Hamburg	0.041	3.716	0.012	0.043	0.091	1.019	0.461	0.268	0.225	0.102	0.025
	Jokioinen	<0.001	3.186	0.010	0.007	0.277	1.250	0.516	0.344	0.307	0.096	0.020
	Kremsmünster	0.022	2.821	0.004	0.020	0.174	0.480	0.224	0.150	0.095	0.057	0.017
	Porto	0.014	1.689	0.010	0.026	0.137	0.311	0.137	0.091	0.065	0.042	0.010
	Sevilla	<0.001	1.685	<0.001	0.001	0.051	0.233	0.109	0.119	0.057	0.018	0.043
	Thiva	0.001	1.961	0.001	0.003	0.054	0.179	0.052	0.101	0.027	0.018	0.013
2 nd Crop	Châteaudun	0.006	3.000	0.001	0.008	0.149	0.442	0.270	0.180	0.079	0.050	0.020
	Hamburg	0.046	3.754	0.012	0.047	0.368	0.979	0.391	0.263	0.212	0.101	0.025
	Kremsmünster	0.024	2.847	0.004	0.022	0.191	0.478	0.202	0.148	0.091	0.051	0.017
	Porto	0.019	1.655	0.012	0.030	0.131	0.282	0.134	0.089	0.058	0.040	0.010
	Sevilla	<0.001	1.725	<0.001	0.001	0.062	0.260	0.182	0.121	0.046	0.021	0.014
	Thiva	0.001	1.961	0.001	0.003	0.054	0.179	0.052	0.101	0.027	0.018	0.013

Table 9.2.4- 272: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.002	3.047	0.007	0.034	0.175	0.471	0.277	0.184	0.087	0.057	0.020
	Hamburg	0.282	3.815	0.023	0.097	0.337	1.023	0.396	0.264	0.228	0.108	0.026
	Jokioinen	0.019	3.256	0.021	0.023	0.301	1.272	0.515	0.343	0.314	0.098	0.020
	Kremsmünster	0.191	2.863	0.011	0.059	0.192	0.401	0.232	0.148	0.097	0.060	0.017
	Porto	0.122	1.663	0.020	0.037	0.149	0.320	0.137	0.092	0.068	0.045	0.011
	Sevilla	0.002	1.724	<0.001	0.002	0.058	0.240	0.176	0.118	0.038	0.020	0.013
	Thiva	0.028	2.062	0.002	0.011	0.066	0.193	0.155	0.104	0.031	0.021	0.013
2 nd Crop	Châteaudun	0.113	3.123	0.009	0.037	0.173	0.444	0.275	0.183	0.084	0.056	0.020
	Hamburg	0.413	3.851	0.024	0.105	0.335	0.982	0.389	0.259	0.215	0.107	0.026
	Kremsmünster	0.207	2.900	0.012	0.063	0.189	0.488	0.220	0.147	0.094	0.058	0.017
	Porto	0.148	1.736	0.022	0.064	0.144	0.295	0.135	0.090	0.062	0.041	0.011
	Sevilla	0.009	1.757	0.001	0.002	0.067	0.259	0.179	0.119	0.046	0.023	0.014
	Thiva	0.028	2.062	0.002	0.011	0.066	0.193	0.155	0.104	0.031	0.021	0.013

Table 9.2.4- 273: FOCUS PEARL, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL										
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15	
1 st Crop	Châteaudun	0.005	2.917	0.001	0.035	0.435	0.269	0.179	0.077	0.046	0.020	
	Hamburg	0.041	3.591	0.006	0.290	1.006	0.400	0.267	0.220	0.097	0.025	
	Jokioinen	0.000	3.125	0.006	0.262	1.238	0.513	0.342	0.304	0.093	0.020	
	Kremsmünster	0.022	2.703	0.002	0.161	0.468	0.223	0.148	0.091	0.053	0.017	
	Porto	0.014	1.606	0.004	0.123	0.301	0.134	0.090	0.061	0.039	0.010	
	Sevilla	0.000	1.571	0.000	0.046	0.223	0.175	0.117	0.034	0.017	0.013	
	Thiva	0.001	1.883	0.000	0.049	0.171	0.147	0.098	0.026	0.016	0.013	
2 nd Crop	Châteaudun	0.006	2.883	0.001	0.136	0.431	0.266	0.177	0.075	0.046	0.020	
	Hamburg	0.046	3.615	0.007	0.290	0.966	0.391	0.261	0.209	0.096	0.025	
	Kremsmünster	0.024	2.761	0.002	0.158	0.469	0.219	0.146	0.087	0.052	0.017	
	Porto	0.019	1.578	0.005	0.123	0.276	0.133	0.088	0.057	0.038	0.010	
	Sevilla	0.000	1.694	0.000	0.060	0.265	0.183	0.122	0.047	0.021	0.014	
	Thiva	0.001	1.883	0.000	0.049	0.171	0.147	0.098	0.026	0.016	0.013	

Table 9.2.4- 274: FOCUS PEARL, PEC_{gw} results of flupicolide and its metabolites – 2 x 100 g/ha application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PEARL									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.102	3.052	0.005	0.159	0.454	0.273	0.182	0.083	0.053	0.020
	Hamburg	0.282	3.701	0.015	0.318	1.015	0.395	0.263	0.225	0.104	0.026
	Jokioinen	0.019	3.197	0.016	0.285	1.257	0.512	0.342	0.310	0.095	0.020
	Kremsmünster	0.191	2.772	0.008	0.179	0.477	0.221	0.147	0.095	0.057	0.017
	Porto	0.122	1.686	0.014	0.138	0.309	0.135	0.090	0.064	0.042	0.011
	Sevilla	0.002	1.614	0.000	0.052	0.228	0.172	0.115	0.036	0.018	0.019
	Thiva	0.028	1.974	0.001	0.059	0.183	0.151	0.101	0.029	0.019	0.043
2 nd Crop	Châteaudun	0.113	3.020	0.005	0.158	0.446	0.276	0.180	0.081	0.052	0.020
	Hamburg	0.313	3.734	0.017	0.318	0.969	0.486	0.258	0.212	0.102	0.026
	Kremsmünster	0.207	2.826	0.008	0.177	0.481	0.219	0.146	0.092	0.056	0.017
	Porto	0.148	1.661	0.016	0.136	0.286	0.134	0.089	0.060	0.040	0.011
	Sevilla	0.002	1.720	0.001	0.066	0.260	0.179	0.119	0.047	0.022	0.014

Table 9.2.4- 275: FOCUS PELMO, PEC_{gw} results of flupicolide and its metabolites – 2 x 100 g/ha application – acidic soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.002	3.738	0.001	0.004	0.120	0.388	0.229	0.152	0.066	0.040	0.018
	Hamburg	0.022	4.635	0.020	0.032	0.297	0.812	0.321	0.214	0.173	0.095	0.022
	Jokioinen	0.006	3.524	0.021	0.005	0.274	1.092	0.484	0.302	0.260	0.092	0.017
	Kremsmünster	0.014	3.493	0.004	0.018	0.176	0.583	0.222	0.148	0.096	0.058	0.016
	Porto	0.022	1.923	0.022	0.037	0.149	0.291	0.112	0.075	0.065	0.044	0.009
	Sevilla	<0.001	2.432	0.001	0.000	0.042	0.185	0.146	0.097	0.028	0.015	0.011
	Thiva	0.001	2.450	0.001	0.000	0.060	0.186	0.138	0.092	0.029	0.020	0.011
2 nd Crop	Châteaudun	0.003	3.655	0.001	0.004	0.117	0.363	0.221	0.147	0.064	0.039	0.017
	Hamburg	0.026	4.625	0.022	0.036	0.299	0.800	0.316	0.211	0.168	0.094	0.022
	Kremsmünster	0.016	3.507	0.005	0.019	0.172	0.490	0.224	0.148	0.095	0.055	0.017
	Porto	0.028	1.974	0.026	0.047	0.134	0.280	0.115	0.077	0.061	0.039	0.009
	Sevilla	<0.001	2.429	0.001	0.000	0.051	0.175	0.140	0.093	0.037	0.018	0.012

Table 9.2.4- 276: FOCUS PELMO, PEC_{gw} results of flupicolide and its metabolites – 2 x 100 g/ha application – acidic soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO										
		FLC	M-01	M-02	M-03	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.060	3.673	0.004	0.020	0.135	0.392	0.224	0.150	0.069	0.044	0.017
	Hamburg	0.204	4.534	0.035	0.080	0.315	0.811	0.309	0.206	0.175	0.098	0.022
	Jokioinen	0.015	3.495	0.029	0.019	0.283	1.093	0.443	0.296	0.260	0.093	0.017
	Kremsmünster	0.151	3.461	0.011	0.047	0.190	0.502	0.215	0.143	0.096	0.060	0.016
	Porto	0.159	1.911	0.034	0.074	0.155	0.294	0.112	0.074	0.067	0.044	0.009
	Sevilla	<0.001	2.341	0.001	0.001	0.045	0.184	0.140	0.094	0.029	0.015	0.011
	Thiva	0.019	2.800	0.002	0.009	0.063	0.188	0.134	0.090	0.030	0.021	0.011
2 nd Crop	Châteaudun	0.069	3.590	0.005	0.023	0.130	0.368	0.217	0.144	0.066	0.042	0.017
	Hamburg	0.233	4.532	0.036	0.091	0.316	0.794	0.305	0.203	0.170	0.097	0.022
	Kremsmünster	0.166	3.474	0.013	0.051	0.186	0.487	0.215	0.143	0.095	0.057	0.016
	Porto	0.097	1.974	0.039	0.082	0.140	0.281	0.113	0.076	0.062	0.040	0.009
	Sevilla	0.001	2.299	0.001	0.001	0.053	0.209	0.133	0.089	0.037	0.018	0.011

Table 9.2.4- 277: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha application – alkaline soils, with aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.002	3.638	0.000	0.108	0.374	0.226	0.150	0.062	0.037	0.018
	Hamburg	0.022	4.529	0.012	0.276	0.792	0.318	0.212	0.167	0.090	0.026
	Jokioinen	0.000	3.495	0.018	0.262	1.088	0.450	0.300	0.264	0.090	0.037
	Kremsmünster	0.014	3.391	0.003	0.163	0.490	0.220	0.147	0.093	0.054	0.016
	Porto	0.022	1.860	0.011	0.138	0.277	0.110	0.073	0.060	0.042	0.009
	Sevilla	0.000	2.351	0.000	0.037	0.173	0.143	0.095	0.026	0.013	0.010
	Thiva	0.001	2.363	0.000	0.054	0.178	0.134	0.090	0.022	0.018	0.011
2 nd Crop	Châteaudun	0.003	3.546	0.000	0.108	0.355	0.240	0.145	0.062	0.036	0.017
	Hamburg	0.026	4.524	0.014	0.280	0.781	0.314	0.209	0.165	0.090	0.022
	Kremsmünster	0.016	3.409	0.003	0.159	0.485	0.220	0.147	0.092	0.052	0.016
	Porto	0.028	1.904	0.016	0.130	0.279	0.115	0.076	0.060	0.038	0.009
	Sevilla	0.000	2.356	0.001	0.049	0.210	0.140	0.094	0.037	0.017	0.012

Table 9.2.4- 278: FOCUS PELMO, PEC_{gw} results of fluopicolide and its metabolites – 2 x 100 g/ha application – alkaline soils, without aged-sorption

Crop	Scenario	80 th percentile PEC _{gw} at 1 m soil depth (µg/L) - PELMO									
		FLC	M-01	M-02	M-05	M-10	M-11	M-12	M-13	M-14	M-15
1 st Crop	Châteaudun	0.060	3.584	0.003	0.120	0.388	0.222	0.098	0.065	0.040	0.017
	Hamburg	0.200	4.455	0.024	0.265	0.796	0.307	0.205	0.170	0.093	0.022
	Jokioinen	0.018	3.434	0.024	0.271	1.081	0.440	0.294	0.259	0.090	0.017
	Kremsmünster	0.151	3.363	0.008	0.178	0.489	0.214	0.143	0.094	0.057	0.016
	Porto	0.159	1.872	0.024	0.145	0.282	0.109	0.073	0.063	0.042	0.009
	Sevilla	0.000	2.262	0.000	0.040	0.172	0.138	0.092	0.026	0.014	0.011
	Thiva	0.009	2.323	0.001	0.057	0.178	0.131	0.087	0.028	0.019	0.011
2 nd Crop	Châteaudun	0.069	3.493	0.003	0.119	0.355	0.213	0.143	0.064	0.039	0.017
	Hamburg	0.233	4.455	0.027	0.306	0.780	0.304	0.203	0.166	0.093	0.022
	Kremsmünster	0.166	3.383	0.009	0.174	0.481	0.214	0.143	0.093	0.054	0.016
	Porto	0.197	1.928	0.030	0.134	0.279	0.113	0.075	0.062	0.039	0.009
	Sevilla	0.000	2.257	0.001	0.051	0.210	0.134	0.089	0.037	0.018	0.011

Table 9.2.4- 279: FOCUS MACRO, PEC_{gw} results of fluopicolide – 2 x 100 g/ha application

Crop	Scenario	80 th percentile PEC _{gw} at 1 m Soil depth (µg/L) - MACRO Fluopicolide
1 st Crop	Chateaudun	0.0314
2 nd Crop	Chateaudun	0.0359

III. Conclusion

The predicted environmental concentrations in groundwater (PEC_{gw}) of the active substance fluopicolide and its metabolites M-01, M-02, M-03, M-05, M-10, M-11, M-12, M-13, M-14, and M-15 were calculated for use in lettuce.

The overall maximum predicted PEC_{gw} value for fluopicolide was 0.411 µg/L in the Hamburg scenario for an early application of 100 g a.s./ha in the second crop of lettuce per season each year without considering time dependent sorption parameters of fluopicolide. After refinement of the PEC_{gw} by considering aged sorption the predicted PEC_{gw} value for parent was 0.064 µg/L.

The metabolites M-02 and M-15 were predicted to reach groundwater at concentrations below 0.1 µg/L. The metabolites M-01, M-03, M-05, M-10, M-11, M-12, M-13, M-14 were predicted to reach groundwater at concentrations in excess of 0.1 µg/L. The overall maximum concentrations were 5.895 µg/L for M-01, 0.134 µg/L for M-03, 0.434 µg/L for M-05, 1.604 µg/L for M-10, 0.641 µg/L for M-11,

0.427 µg/L for M-12, 0.397 µg/L for M-13 and 0.138 µg/L for M-14. The non-relevance of these metabolites has been addressed in Document N4 using the assessment scheme described in the 'Guidance Document On The Assessment Of The Relevance Of Metabolites In Groundwater Of Substances Regulated Under Council Directive 91/414/EEC (Sanco/221/2000 – Revision 10 – Final, 25 February 2003).

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2014) and is considered valid to assess predicted environmental concentrations in groundwater (PEC_{GW}) for fluopicolide and its metabolites in lettuce.

PEC_{GW} for propamocarb-hydrochloride

No groundwater assessment was required for propamocarb-hydrochloride.

CP 9.2.4.2 Additional field tests

A comprehensive range of field dissipation/degradation studies, in total 17 studies, have been conducted with fluopicolide and are summarized in MCA 7.1.2.2.1. In addition, a number of field degradation studies have been conducted with the metabolite M-01 (see also section MCA 7.1.4.2.1). Also, a lysimeter study and field leaching study were conducted and are summarized in MCA 7.1.4.2 and MCA 7.1.4.2.3 both of which additionally characterized the leaching behavior of fluopicolide and its metabolites. Given the results of these field studies and the calculations for predicted environmental concentrations in groundwater no additional field tests are needed or required for this formulation.

CP 9.2.5 Estimation of concentrations in surface water and sediment

Predicted environmental concentrations fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe using the tiered FOCUS Surface Water approach. All relevant entry routes of a compound into surface water, principally a combination of spray drift and runoff/erosion or drain flow were considered in these calculations. FOCUS Steps 1-4 calculations were performed for fluopicolide and M-03 (AE 0608000) and FOCUS Step 1-2 calculations for the metabolites M-01 (AE C653711) and M-02 (AE C657188).

Metabolites M-01, M-02 and M-03 are relevant for the aquatic risk assessment. No metabolite is relevant for sediment risk assessment.

M-01 was the only major metabolite detected in water sediment systems reaching a maximum of 20.3% in the total system (sediment compartment maximum 3.9%, water compartment maximum 18.2%). M-02 (AE C657188) was also detected as a significant minor metabolite, >5% at 3 consecutive timepoints and increasing at final timepoint, reaching a maximum of 8.2% in the total system (sediment compartment maximum 0.8%, water compartment maximum 7.4%). The metabolite M-03 (AE 0608000) was not detected as an aquatic metabolite. All three metabolites have been included in FOCUS surface water and sediment modelling, as exposure from formation of a metabolite in soil, with subsequent exposure of surface water and sediment from drainage or runoff from soil, has to be considered in addition to the formation of a metabolite in aquatic systems. However, M-03 is unstable

in aquatic systems making aquatic ecotoxicological testing unfeasible (see KCA 7.2.1.1/03 and KCA 8.2.6.2/11 for further details).

Predicted environmental concentrations in surface water (PEC_{sw})

Data Point:	KCP 9.2.5/01
Report Author:	[REDACTED]
Report Year:	2005
Report Title:	Predicted environmental concentrations of AE C638206 and metabolites in surface water and sediment (PEC _{sw} , PEC _{sed}) calculated according to FOCUS for use in vine and potatoes in Europe Codes: AE C638206, AE C63711, AE C657188
Report No:	C048302
Document No:	M-221316-02-1
Guideline(s) followed in study:	--
Deviations from current test guideline:	--
Previous evaluation:	yes, evaluated and accepted DAR (2005)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005) this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Additionally calculations were performed for crop use on vine which is not one of the current representative uses. Consequently the reports are now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier however it is now superseded by KCP 9.2.5/05, [REDACTED] 2020, [M-687153-01-1](#).

Data Point:	KCP 9.2.5/01
Report Author:	[REDACTED]
Report Year:	2004
Report Title:	Predicted environmental concentrations of propamocarb-HCl in surface water and sediment (PEC _{sw} , PEC _{sed}) calculated according to FOCUS for use in potatoes in Europe Code: AE B06675
Report No:	C039640
Document No:	M-221377-01-1
Guideline(s) followed in study:	--
Deviations from current test guideline:	--
Previous evaluation:	yes, evaluated and accepted DAR (2005)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005), this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier however it is now superseded by KCP 9.2.5/08, [REDACTED] 2020, [M-687163-01-1](#).

Data Point:	KCP 9.2.5/03
Report Author:	[REDACTED]
Report Year:	2005
Report Title:	Predicted environmental concentrations in surface water and assessment of risk to aquatic organisms for the metabolite AE 0608000 following Use of Fluopicolide on vines and potatoes
Report No:	CX/05/011A
Document No:	M-253959-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	none
Previous evaluation:	yes, evaluated and accepted DAR (2005)
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

In the previous submission (DAR, 2005), this modelling report was evaluated and accepted as valid. However the modelling endpoints have been superseded by new studies and new kinetic evaluations. Additionally calculations were performed for crop use on vines which is not one of the current representative uses. Consequently the report is now invalid and a summary of the results is not presented in this dossier. For procedural reasons it has to be included in the current dossier however it is now superseded by KCP 9.2.5/05, [REDACTED] 2020, [M-687152-01-1](#).

PEC_{sw} for fluopicolide

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Data Point:	KCP 9.2.5/04
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (FLC): Core PECsw EUR - Modelling core info document for surface water risk assessment in Europe
Report No:	VC/19/041K
Document No:	M-686283-01-1
Guideline(s) followed in study:	FOCUS 2014 Generic guidance for FOCUS Surface Water Scenarios, version 2.4 May 2015
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

This summary summarises the substance data for fluopicolide and its metabolites as used for the purpose of surface water risk assessment employing the following deterministic pesticide fate models:

- STEP 1 in FOCUS
- STEP 2 in FOCUS
- STEP 3 in FOCUS
- STEP 4 in FOCUS

The parameters correspond to standard EU requirements.

Modelling reports utilising the core info document should have the substance data presented as shown in the following tables.

Table 9.2.5- 1: Substance parameters used at FOCUS Steps 1-2 level

Parameter	Unit	Fluopicolide	M-01 (AE C653741)	M-02 (AE C657188)	M-03 (AE 0608000)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58
Water solubility	(mg/L)	2.8	1890	9721	10
Koc	(mL/g)	267	24.1	5.7	106.9
Degradation					
Soil	(days)	32	146	1.6	17.9
Total system	(days)	1000	1000	1000	1.9
Water	(days)	1000	1000	1000	1.9
Sediment	(days)	1000	1000	1000	1000
Max occurrence					
Water / sediment	(%)	100	20.3	8.2	0.001
Soil	(%)	100	48	16.4	10.6

Table 9.2.5- 2: Substance parameters used for fluopicolide and its metabolite M-03 (AE 0608000) at Step 3/4 level

Parameter	Unit	Parent	Metabolite
Substance		Fluopicolide	M-03 (AE 0608000)
SWASH code		FLC	M03
General			
Molar mass	(g/mol)	383.59	399.58

Parameter	Unit	Parent	Metabolite
Water solubility (temp.)	(mg/L)	2.8 (20 °C)	10 (20 °C)
Vapour pressure (temp.)	(Pa)	3.03E-07 (20 °C)	0 (20 °C)
Crop processes			
Coefficient for uptake by plant (TSCF)	(-)	0.5	0
Wash-off factor	(1/m)	50	50
Sorption			
K _{OC}	(mL/g)	267.74	106.89
K _{OM}	(mL/g)	155.3	62
Freundlich exponent (1/n)	(-)	0.888	0.97
Transformation			
DT ₅₀ in soil	(days)	182	19
temperature	(°C)	20	20
moisture content (pF)	(log cm)	2	2
formation fraction in soil	(-)	-	0.53
DT ₅₀ in water	(days)	1000	19
temperature	(°C)	20	20
formation fraction in water	(-)	-	-
DT ₅₀ in sediment	(days)	1000	1000
temperature	(°C)	20	20
formation fraction in sediment	(-)	-	-
DT ₅₀ on canopy	(days)	20	10
Exponent for the effect of moisture			
PRZM and TOXSWA (Walker exp)	(-)	0.7	0.7
MACRO (calibrated value)	(-)	0.49	0.49
Effect of temperature			
TOXSWA (molar activation energy)	(kJ/mol)	65.4	65.4
MACRO (effect of temperature)	(°K)	0.0948	0.0948
PRZM (Q ₁₀)	(-)	2.58	2.58

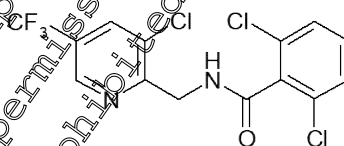
I. Materials and Methods

Calculation of the substance parameters for fluopicolide and its metabolites M-01, M-02 and M-03 is detailed as follows: -

Fluopicolide (AE C638206)

Physico-Chemical Properties

Structural formula



Common name

Fluopicolide (AE C638206)

Chemical name (IUPAC)

2,6-dichloro-N-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]methyl]-benzamide

Molar mass

383.59 g mol⁻¹

Water solubility

2.8 mg L⁻¹ at 20°C ([M-234496-01-1](#), [REDACTED] 2003a)

Vapour pressure

3.03 × 10⁻⁷ Pa at 20°C ([M-197457-01-1](#), [REDACTED] 2000)

Degradation in Aerobic Soil

Laboratory studies

The aerobic degradation and metabolism of fluopicolide in soil was investigated in the laboratory by [M-201230-02-1](#), [REDACTED] (2003); [M-241049-01-1](#), [REDACTED] (2003a); [M-241052-01-1](#), [REDACTED] (2003b); [M-241051-01-1](#), [REDACTED] (2003c); [M-550687-01-1](#), [REDACTED] (2016a); [M-55570-01-1](#), [REDACTED] (2016b) and [M-655056-01-1](#), [REDACTED] (2019). A summary of the modelling endpoint Deg₅₀ values derived for fluopicolide (KCA 7.1.2.1.1/10, [M-685680-01-1](#), [REDACTED]) normalised to 20°C and pF2, is given in Table 9.2.5- 3.

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Table 9.2.5- 3: Summary of DegT₅₀ values derived for fluopicolide under laboratory conditions (after [M-685680-01-1](#), Carnall *et al.*, 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised to 20°C and pF2 (D)
Fluopicolide	M-201230-02-1 , ██████████ 2003	Münster	SFO	212.0	212.0
		Sarotti	SFO	191.2	191.7
	M-241049-01-1 , ██████████ 2003a	Abington (non-sterile)	SFO	348.0	349.2
	M-241051-01-1 , ██████████ 2003b	Lamberton	SFO	1290.0	1037.7
	M-241052-01-1 , ██████████ 2003c	Lamberton	SFO	358.0	395.8
		Pikeville	DFOP	612.9 ^a / 70.1 ^b	616.0 ^a / 30.3 ^b
		Albaro/Marcomini	DFOP	146.2 ^a / 2.8 ^b	146.2 ^a / 2.8 ^b
		Great Chishill	DFOP	312.4 ^a / 2.7 ^b	312.7 / 2.7 ^b
	M-550687-01-1 , ██████████ 2016a	██████████	DFOP	155.5 ^a / 7.2 ^b	155.5 ^a / 7.2 ^b
		Ma du Cèg	DFOP	216.2 ^a / 10.4 ^b	193.7 ^a / 9.4 ^b
		Parcey Meslay	DFOP	202.5 ^a / 8.1 ^b	202.5 ^a / 8.1 ^b
		Vilobid'Onyaz	DFOP	93.5 ^a / 7.8 ^b	93.5 ^a / 7.8 ^b
		Dollendorf II	DFOP	111.4 ^a / 0.6 ^b	111.4 ^a / 0.6 ^b
	M-555570-01-1 , ██████████ 2016b	██████████	DFOP	137.7 ^a / 4.2 ^b	137.7 ^a / 4.2 ^b
		██████████	DFOR	141.3 ^a / 6.3 ^b	141.3 ^a / 6.3 ^b
		██████████	DFOP	133.5 ^a / 9.4 ^b	133.5 ^a / 9.4 ^b
		Abington 2	DFOP	142.1 ^a / 1.9 ^b	142.1 ^a / 1.9 ^b
		Lamberton	DFOP	176.1 ^a / 2.8 ^b	145.1 ^a / 2.3 ^b
	M-65056-01-1 , ██████████ 2019	Lignières	DFOP	141.4 ^a / 1.4 ^b	141.4 ^a / 1.4 ^b
		Münster	DFOP	170.1 ^a / 5.3 ^b	124.5 ^a / 3.9 ^b
	Pikeville	DFOP	155.2 ^a / 4.1 ^b	129.4 ^a / 3.5 ^b	
	Sarotti 2	DFOP	161.2 ^a / 1.6 ^b	143.6 ^a / 1.4 ^b	
Geometric mean (SFO and DFOP slow phase)					181.6^c

a – Pseudo-SFO value based on slow phase of decline (calculated as $\ln(2)/k_2$ and normalised if applicable)
b – Pseudo-SFO value based on fast phase of decline (calculated as $\ln(2)/k_1$ and normalised if applicable)
c – Geometric mean calculated of DegT₅₀ values from Lamberton soils prior to calculation of overall geometric mean.

Field Dissipation Studies

DegT₅₀ values for fluopicolide, normalised to 20°C and pF2, have been derived by [M-685675-01-1](#), ██████████ (2020a) and [M-685676-01-1](#), ██████████ (2020b) from 12 terrestrial field dissipation studies ([M-651636-01-1](#), ██████████, 2019a; [M-218667-01-1](#), ██████████, 2003; [M-220477-02-1](#), ██████████, 2003; [M-234424-01-1](#), ██████████, 2004; [M-247945-01-1](#), ██████████, 2005a; [M-251338-01-1](#), ██████████, 2005b; [M-218672-01-1](#), ██████████, 2003). A summary of the modelling endpoint DegT₅₀ values derived for fluopicolide is given in Table 9.2.5- 4: Summary of DegT₅₀ values (normalised to 20°C and pF2) derived for fluopicolide from terrestrial field dissipation studies (after [M-685675-01-1](#), ██████████, 2020a and [M-685676-01-1](#), ██████████, 2020b)

Table 9.2.5- 4: Summary of DegT₅₀ values (normalised to 20°C and pF2) derived for fluopicolide from terrestrial field dissipation studies (after [M-685675-01-1](#), 2020a and [M-685676-01-1](#), 2020b)

Soil type	Aerobic field conditions					
	Location (country)	pH (CaCl ₂)	Depth (cm)	St. (χ ² err) (%)	Method of calculation	DegT ₅₀ (d) ng/g
Silt loam	Burscheid (Germany)	5.9	0-120	9.86	SFO	171.9
Clay	Great Chishill (UK)	7.8	0-120	11.64	SFO	216.9
Sandy loam	Lignieres de Touraine (France)	6.9	0-120	4.82	SFO	158.6
Clay loam	St.Etienne du Grès (France)	8.1	0-120	4.90	SFO	203.2
Clay loam	Albaro di Ronco all'Adige (Italy)	7.7	0-120	9.99	SFO	237.7
Sandy clay loam	Vilobi d'Onyar (Spain)	6.9	0-120	6.20	SFO	166.8
Loamy sand	Philippsburg (Germany)	6.4	0-50	9.477	SFO	199.9
Sandy clay loam	Rödelsee (Germany)	7.4	0-30	21.59	SFO	146.4
Sand	Huntlosen (Germany)	4.9	0-50	15.46	SFO	168.4
Loamy sand	Valencia (Spain)	7.3	0-30	13.95	SFO	317.4
Sandy silt	Appilly (France)	7.1	0-30	11.16	SFO	144.2
Sandy silt loam	Senas (France)	7.6	0-45	9.864	SFO	136.5
Geometric mean						183

Degradation in Aerobic Soil: Overall DegT₅₀ value

Degradation half-lives for fluopicolide derived from laboratory and field dissipation studies were compared using the EFSA DegT₅₀ Endpoint Selector (EFSA, 2014). This comparison indicated that the laboratory and field DegT₅₀ values for fluopicolide should be combined.

An overall geometric mean DegT₅₀ value of **182 days** in soil was derived for fluopicolide for use in surface water calculations, including both laboratory and field data.

Degradation in Water-Sediment Systems

The degradation of fluopicolide in water-sediment systems was investigated in the laboratory by [M-241425-01-1](#), 2003a). Limited degradation of fluopicolide was observed, and a default DegT₅₀ value of **1000 days** was used in the modelling to describe the degradation of fluopicolide in the water compartment, sediment compartment and total water-sediment system.

Plant Uptake

The plant uptake factor for fluopicolide was set to 0.5. Residues of fluopicolide and metabolites have been found in different plants in a rotational crop study ([M-240707-03-1](#), 2003). Fluopicolide is redistributed via the xylem (acropetal systemic activity) but is not phloem mobile. TSCF calculated according to Briggs is 0.47.

The uptake of fluopicolide into potato plants has been investigated in a new study ([M-688372-01-1](#), 2020) and the transpiration stream concentration factor (TSCF) determined. The mean TSCF was determined as 0.71 (DAT2), 0.75 (DAT4) and 0.82 (DAT6), thus fully supporting the use of the default value of 0.5 in the PEC_{sw} evaluations.

Foliar Wash-off and Canopy Degradation

Plant wash-off was set to the default value of **50 m⁻¹**, and the canopy degradation DT₅₀ value was set to the default value of **10 days** (FOCUS, 2014).

Adsorption

The adsorption and desorption of fluopicolide has been investigated in five studies ([M-241425-01-1](#), [redacted] 2003b; [M-233840-01-1](#), [redacted] 2003b; [M-544194-02-1](#), [redacted], 2015; [M-572869-01-1](#), [redacted], 2016; [M-595721-01-1](#), [redacted], 2017). A summary of K_{oc} and $1/n$ values derived for fluopicolide from these studies is given in Table 9.2.5- 5.

A geometric mean K_{oc} value of **267.7 mL/g**, corresponding to a K_{ow} value of 155.3 mL/g ($K_{OM} = K_{OC} \div 1.724$), was used for fluopicolide in the modelling, with an arithmetic mean $1/n$ value of **0.888**.

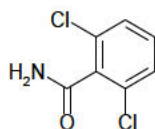
Table 9.2.5- 5: Summary of sorption parameters derived for fluopicolide

Study reference	Soil	Soil Code	Texture	pH	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
M-241425-01-1 , [redacted] (2003b)	Pikeville Sediment	EFS-54	loam	4.5	2.07	7.7	373*	0.926*
	Pikeville, North Carolina	EFS-65	sand	4.7	0.5	242	283	0.924
	Abington	EFS-86	sandy loam	7.5	2.21	7.5 (**336)	341	0.926 (**6882)
	Sarotti	EFS-88	silty clay loam	7.4	0.9	3.2	306	0.905
	Münster	EFS-93	loamy sand	5	1.3	4.9	349	0.929
	Münster	EFS-94	loamy sand	6.2	0.2	0.21	106	0.931*
	Münster	EFS-96	loamy sand	6.2	0.2	0.17	83*	0.951*
M-233840-01-1 , [redacted] (2003b)	Philippsburg	03/02	sandy loam	6.3	0.6	1.49	248	0.841
	Senas	03/03	clay loam	5.6	1.5	3.59	239	0.882
	Hunfösen	03/04	loamy sand	5.3	1.6	9.27	580	0.953
	Rehelsee	03/05	clay	7	1.5	2.59	172	0.859
M-544194-02-1 , [redacted] (2015)	[redacted]	WuW	loam	5	0.8	2.65	258.6	0.9258
	[redacted]	HaH	silt loam	6.1	1.9	6.22	327.5	0.8741
	Dollendorf II	0611	clay loam	7.3	4.8	11.71	244.1	0.8596
M-572869-01-1 , [redacted] (2016)	[redacted]	AXX	sandy loam	6.5	1.5	4.04	269.3	0.8723
	Bütscheid	VG08	silt loam	6.1	0.7	2.12	303.3	0.8868
	Great Chishill	ENG2	clay	6.3	2.1	5.40	257.0	0.9076
	Parco Meslo	FR09B	loam	6.7	1.3	3.35	257.4	0.8992
	Tarascon Cayades	FR08	clay loam	7.6	0.9	1.84	204.9	0.8668
	Valery Tomelini	IT09	silt clay	7.2	2.1	3.93	187.0	0.9110
M-595721-01-1 , [redacted] (2017)	Vilobi D'Onyar	SPA01	sandy loam	6.3	0.8	2.34	292.0	0.8818
	Abington	AB	sandy loam	7.3	2.6	5.6	214.7	0.868
	Lamberton	LB	loam	5.6	2.6	8.6	331.9	0.844
	Ligneres	LN	sandy loam	5.7	0.8	2.9	363.1	0.888
	Münster	MS	loamy sand	5.6	1.2	3.4	282.6	0.916
	Pikeville	PV	loamy sand	4.5	1.8	6.2	342.6	0.873
Sarotti	SR	silty clay loam	6.9	1.4	2.6	185.6	0.851	
Arithmetic mean							-	0.888
Geometric mean							267.7	-

*excluded from calculations, **checklist value used for geomean and average

M-01 (BAM; AE C653711)

Physico-Chemical Properties
Structural formula



Common name	M-01 (BAM; AE C653711)
Chemical name (IUPAC)	2,6-dichlorobenzamide
Molar mass	190.03 g mol ⁻¹
Water solubility	2220 mg L ⁻¹ at 20°C (M-2014, M-205637-01-1)

Laboratory studies

The aerobic degradation of M-01 (BAM) in soil was investigated in the laboratory by M-234320-01-1 (2002). In addition, M-01 was observed to form from fluopicolide in six studies: M-241049-01-1, 2003a; M-241052-01-1, 2003b; M-241051-01-1, 2003c; M-550687-01-1, 2016a; M-555570-01-1, 2016b and M-685680-01-1, 2020) and from M-03 in one study (M-241188-01-1, 2003). A summary of the modelling endpoints derived for M-01 b (KCA 7.1.2.1.1/10, M-685680-01-1, 2020) is given in Table 9.2.5- 6.

The maximum observed occurrence in soil of M-01 in laboratory studies, expressed as a molar fraction of applied fluopicolide, was 48% (M-555570-01-1, 2016b).

Table 9.2.5- 6: Summary of modelling endpoints derived for M-01 (BAM) under laboratory conditions (after M-685680-01-1, 2020)

Applied compound	Study	Soil	Model selected	Deg T ₅₀ un-normalised (d)	Deg T ₅₀ normalised to 20°C and pF2 (d)	
Fluopicolide	M-201230-02-1 2003	Münster	SFO	1000 ^a	1000 ^a	
	M-241049-01-1 2003a	Sarotti	SFO	1000 ^a	1000 ^a	
	M-241052-01-1 2003b	Abington (non-sterile)	SFO	1000 ^a	1000 ^a	
	M-241051-01-1 2003c	Lamberton	SFO	1000 ^a	1000 ^a	
	M-550687-01-1 2016a	[Redacted]	Lamberton	SFO	1000 ^a	1000 ^a
			Pikeville	SFO	173.1	174.0
			Albano Marsancini	SFO	417.3	417.3
			Great Chishill	SFO	1000 ^a	1000 ^a
			[Redacted]	SFO	571.7	571.7
			Mas du Coq	SFO	472.2	422.2
			Parcey Meslay	SFO	908.4	908.4
	M-555570-01-1 2016b	[Redacted]	Vilobi d'Onyar	SFO	323.9	323.9
			Dollendorf II	SFO	159.7	159.7
			[Redacted]	SFO	869.3	869.3
			[Redacted]	SFO	556.2	556.2
		[Redacted]	SFO	1000 ^a	1000 ^a	
		Abington 2	SFO	175.6	175.6	

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised to 20°C and pF2 (d)
	M-655056-01-1 [redacted] 2019	Lamberton	SFO	1000 ^a	1000 ^a
		Lignieres	SFO	1000 ^a	1000 ^a
		Münster	SFO	294.4	215.6
		Pikeville	SFO	135.9	113.5
		Sarotti 2	SFO	267.1	237.5
M-01	M-234320-01-1, [redacted] 2002	Bethany	SFO	1858.0	977.6
		North Dakota	SFO	568.8	913.3
M-03	M-241188-01-1, [redacted] 2003	Münster	SFO	1000 ^a	1000 ^a
		Pikeville	SFO	1000 ^a	1000 ^a
				Geometric mean	569.5^d

a – Conservative default value

b – Pseudo-SFO value based on slow phase of decline (calculated as $\ln(2)/k$ and normalised if applicable)

c – Pseudo-SFO value based on fast phase of decline (calculated as $\ln(2)/k_f$ and normalised if applicable)

d – Geometric mean calculated of DT₅₀ values from Lamberton soil prior to calculation of overall geometric mean.

Field Dissipation Studies

DegT₅₀ values for M-01 (BAM) normalised to 20°C and pF2, have been derived by M-685675-01-1, [redacted] (2020a) from five terrestrial field dissipation studies (M-650733-02-1, [redacted] 2019b). A summary of the modelling endpoint DegT₅₀ values derived for M-01 is given in Table 9.2.5- 7.

Table 9.2.5- 7: Summary of DegT₅₀ values (normalised to 20°C and pF2) derived for M-01 (BAM) from terrestrial field dissipation studies (after M-685675-01-1, [redacted] 2020a)

Aerobic field conditions						
Soil type	Location (country)	pH (CaCl ₂)	Depth (cm)	St. (χ^2 err) (%)	Method of calculation	DegT ₅₀ (d) norm
Silt loam	Burscheid (Germany)	5.9	0-120	14.68	SFO	94.0
Sandy loam	Lignieres de Touraine (France)	6.9	0-120	7.82	SFO	191.1
Clay loam	St.Etienne du Gres (France)	8.0	0-120	5.87	SFO	179.9
Clay loam	Albarodi Ronco all'Adige (Italy)	7.7	0-120	13.93	SFO	151.8
Sandy clay loam	Vilobis d'Onyar (Spain)	6.5	0-120	10.94	SFO	136.3
Geometric mean						146

Degradation in Aerobic Soil: Overall DegT₅₀ value

Degradation half-lives for M-01 (BAM) derived from laboratory and field dissipation studies were compared using the EFSA DegT₅₀ Endpoint Selector (EFSA, 2014). This comparison indicated that the field DegT₅₀ values for M-01 were significantly shorter than the laboratory studies, therefore the geometric mean field DegT₅₀ value of **146 days** was used in the modelling for M-01 (BAM).

Degradation in Water-Sediment Systems

The degradation of fluopicolide in water sediment systems was investigated in the laboratory by M-241425-01-1, [redacted] (2003a). In this study, metabolite M-01 (BAM) was observed to form up to a maximum of **20.3%** of applied radioactivity.

Limited degradation was observed in the study by [M-241425-01-1](#), [REDACTED] (2003a), and no reliable DegT₅₀ values were derived for M-01. A default DegT₅₀ value of **1000 days** was therefore used in the modelling to describe the degradation of M-01 in the water compartment, sediment compartment and total water sediment system.

Adsorption

The adsorption and desorption of M-01 (BAM) has been investigated in ten soils ([M-235837-01-1](#), [REDACTED] 2001; [M-224926-01-2](#), [REDACTED] 2003; [M-686388-01-1](#), [REDACTED] 2020a). A summary of the sorption parameters derived for M-01 from these studies is given in Table 9.2.5- 8. A geometric mean K_{oc} value of **24.1 mL/g** was used for M-01 in the modelling.

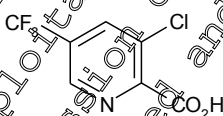
Table 9.2.5- 8: Summary of sorption parameters derived for M-01 (BAM)

Report reference	Soil	Soil Code	Texture	pH	OC [%]	K _d (mL/g)	K _{oc} (mL/g)
M-235837-01-1 [REDACTED] (2001)	Connecticut	RL-51	Sandy loam	4.8	2.4	0.241	26*
	North Dakota	RL-81	Sandy loam	7.7	5.7	1.761	31
	Florida	RM-014	Sand	6.3	1.4	0.520	38
	Washington	RM-019	Sand	4.9	4.2	1.860	45
	California	RM-022	Sandy clay loam	6.6	0.1	0.208	51
M-224926-01-2 [REDACTED] (2003)	Connecticut	RL-51	Sandy loam	4.8	0.9	0.359	39.9**
M-686388-01-1 [REDACTED] (2020a)	LUFA 2.1	2.1	sand	5.2	0.59	0.103	17.5
	LUFA 2.3	2.3	sandy loam	6.2	0.61	0.056	9.2
	LUFA 5M	5M	sandy loam	7.0	1.10	0.162	14.8
	LUFA 6S	6S	clay loam	7.3	1.78	0.265	14.9
	Frankenforst	FF	silt loam	6.9	1.4	0.418	17.4
Geometric mean							24.1

*excluded from calculations, **recalculated and used for calculations

M-02 (PCA; AE C657188)

Physico-Chemical Properties
Structural formula



Common name

M-02 (PCA; AE C657188)

Chemical name (IUPAC)

3-chloro-5-(trifluoromethyl)pyridine-2-carboxylic acid

Molar mass

225.56 g mol⁻¹

Degradation in Aerobic Soil

The aerobic degradation and metabolism of M-02 (PCA) in soil was investigated in the laboratory by [M-219824-01-1](#), [REDACTED] (2003) and [M-581364-01-1](#), [REDACTED] (2017). A summary of the modelling endpoints derived for M-02 (KCA 7.1.2.1.1/10, [M-685680-01-1](#), [REDACTED] 2020) is given in Table 9.2.5- 9. A geometric mean DegT₅₀ value of **1.6 days** was used in the modelling for M-02 (PCA).

The maximum formation of metabolite M-02 in terrestrial field dissipation studies was 16.4% (M-220477-02-1, [REDACTED] 2003).

Table 9.2.5- 9: Summary of modelling endpoints derived for M-02 (PCA) under laboratory conditions (after M-685680-01-1, [REDACTED], 2020)

Applied compound	Study	Soil	Model selected	DegT ₅₀ un-normalised (a)	DegT ₅₀ normalised to 20°C and pH 2 (d)
M-02 (PCA)	M-219824-01-1 [REDACTED] 2003	Abington	SFO	4.4	4.4
		Münster	SFO	3.5	3.5
		Sarotti	SFO	4.4	4.1
	M-581364-01-1 [REDACTED] 2017	Dollendorf	SFO	1.1	1.1
		[REDACTED]	SFO	1.0	0.9
		[REDACTED]	SFO	0.7	0.7
		[REDACTED]	SFO	0.7	0.7
Geometric mean					1.6

Degradation in Water-Sediment Systems

The degradation of fluopicolide in water sediment systems was investigated in the laboratory by M-241425-01-1, [REDACTED] (2003a). In this study, metabolite M-02 (PCA) was observed to form up to a maximum of 8.2% of applied radioactivity.

Limited degradation was observed in the study by M-241425-01-1, [REDACTED] (2003a), and no reliable DegT₅₀ values were derived for M-02. A default DegT₅₀ value of 1000 days was used in the modelling to describe the degradation of M-02 in the water compartment, sediment compartment and total water sediment system.

Adsorption

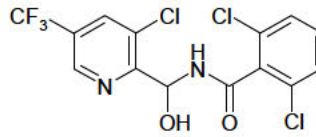
The adsorption and desorption of M-02 (PCA) has been investigated in eight soils (M-219828-01-1, [REDACTED], 2003; M-686387-01-1, [REDACTED], 2020). A summary of the sorption parameters derived for M-02 from these studies is given in Table 9.2.5- 10. A geometric mean K_{oc} value of 5.7 mL/g was used for M-02 in the modelling.

Table 9.2.5- 10: Summary of sorption parameters derived for M-02 (PCA)

Report reference	Soil	Soil Code	Texture	pH (CaCl ₂)	OC [%]	K _f (mL/g)	K _{oc} (mL/g)
M-219828-01-1 [REDACTED] (2003)	Abington	03/06	Sandy loam	7.2	2.6	0.029	1.1
	Münster	03/07	Loamy sand	5.4	1.1	0.116	10.5
	Sarotti	03/10	Silt loam	7.5	1.3	0.082	6.3
M-686387-01-1 [REDACTED] (2020)	LUFA 2.1	2.1	Sand	5.2	0.59	0.047	8.0
	LUFA 2.3	2.3	Sandy loam	6.2	0.61	0.038	6.2
	LUFA 5M	5M	Sandy loam	7.1	1.1	0.154	14.0
	LUFA 6S	6S	Clay loam	7.3	1.78	0.145	8.2
	Frankenfort	FF	Silt loam	6.9	2.4	0.059	2.5
Geometric mean							5.7

M-03 (AE 0608000)

Physico-Chemical Properties
Structural formula



Common name M-03 (AE 0608000)

Chemical name (IUPAC) 2,6-dichloro-N-([3-chloro-5-(trifluoromethyl)pyridin-2-yl](hydroxymethyl)benzamide

Molar mass 399.58 g mol⁻¹

Degradation in Aerobic Soil

The aerobic degradation and metabolism of M-03 in soil was investigated in the laboratory by [M-241188-01-1](#), [redacted] (2003) and [M-365219-01-1](#), [redacted] (2016). In addition, M-03 was observed to form from fluopicolide in three studies ([M-201230-02-1](#), [redacted] 2003; [M-241052-01-1](#), [redacted] 2003; [M-655056-01-1](#), [redacted] 2019). A summary of the modelling endpoints for M-03 (KCA 7.1.2.1.1/10, [M-685680-01-1](#), [redacted], 2020b) is given in Table 9.2.5-1.

A geometric mean DegT₅₀ value of 17.9 days was used in the modelling for M-03, with an arithmetic mean molar formation fraction from fluopicolide of 0.53. These values were derived from acidic soils (pH<6), where the degradation of M-03 occurs more slowly and provide a conservative assessment for M-03.

The maximum observed occurrence in soil of M-03 in laboratory studies was 10.6% ([M-201230-02-1](#), [redacted] 2003).

Table 9.2.5- 11- Summary of un-normalised DegT₅₀ values derived for M-03 under laboratory conditions (after [redacted] 2020b)

Applied compound	Study	Soil	Soil pH	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)	ffm from FLC
Fluopicolide	M-201230-02-1 , [redacted] 2003	Münster	4.9	SFO	62.6	62.6	0.6086
	M-241052-01-1 , [redacted] 2003	Lamberton	5.9	SFO	49.3	54.5	0.5933
	M-655056-01-1 , [redacted] 2019	Pikeville	4.5	SFO	29.3	24.4	0.4009
M-03	M-241188-01-1 , [redacted] 2003	Abington	7.2	SFO	0.1	0.1	-
	[redacted] 2003	Münster	4.9	DFOP	1000 ^a	1000 ^a	-
	[redacted] 2003	Pikeville	5.4	DFOP	2.7 ^b	2.2 ^b	-
	[redacted] 2003	Saroni	7.1	SFO	0.1	0.08	-
	M-365219-01-1 , [redacted] 2016	Brierlow (BL)	5.3	SFO	2.5	2.5	-
[redacted] 2016	[redacted]	6.0	SFO	0.9	0.9	-	

Applied compound	Study	Soil	Soil pH	Model selected	DegT ₅₀ un-normalised (d)	DegT ₅₀ normalised (d)	ffm from FLC
Geometric mean (pH <6)						17.9 ^c	
Arithmetic mean (pH <6)						-	0.53
Geometric mean (soil pH ≥6)						0.19	
Arithmetic mean (pH ≥6)						-	

a – DFOP k₂ parameter fixed to conservative default value

b – Pseudo-SFO DT₅₀ value derived as DT₉₀/3.32 (and normalised if applicable)

c – Geometric mean calculated for Münster soils prior to calculation of overall value

Degradation in Water-Sediment Systems

Metabolite M-03 has not been observed to form in water sediment systems, however an aqueous hydrolysis study has been performed for this compound (M-23624-01-2, 2004). The half-life of M-03 in sterile, aqueous buffered solutions ranged from 8.4 minutes at pH 8.1 to 45.5 hours at pH 5.1. A DT₅₀ value of **1.9 days** (i.e. 45.5 hours) was used in the modelling to describe the degradation of M-03 in the water compartment and the total water sediment system. The DT₅₀ value for M-03 in the sediment compartment was set to a default value of **1000 days**.

The maximum occurrence of M-03 in water sediment systems was set to **0.001%** as the STEP1-2 calculator requires an input greater than zero for this parameter.

Plant uptake

The plant uptake factor for M-03 was set to a conservative default value of 0. As the metabolite M-03 (AE 0608000) has not been detected in the plants from rotational crop studies, the uptake factor was set to 0.

Foliar Wash-off and Canopy Degradation

Plant wash-off was set to the default value of **50 m⁻¹** and the canopy degradation DT₅₀ value was set to the default value of **10 days** (FOCUS, 2014).

Adsorption

The adsorption and desorption of M-03 has been investigated in three soils by M-221107-01-2, (2003). A summary of the sorption parameters derived for M-03 is given in Table 9.2.5- 12. A geometric mean K_{oc} value of **106.9 mL/g**, corresponding to a K_{OM} value of 62.0 mL/g (K_{OM} = K_{OC} ÷ 1.724), was used for M-03 in the modelling, with an arithmetic mean 1/n value of **0.971**.

Table 9.2.5- 12: Summary of sorption parameters derived for M-03

Report reference	Soil	Soil Code	Texture	pH (CaCl ₂)	OC [%]	K _f (mL/g)	K _{oc} (mL/g)	1/n
M-221107-01-2	Ingleby	02/03	Sandy loam	4.1	3.5	2.86	82	0.961
(2003)	Huntloesch	03/04	Loamy sand	4.7	1.7	2.26	133	1.012
	Munster	03/07	Loamy sand	5.4	1.1	1.23	112	0.939
Geometric mean							106.9	-
Arithmetic mean							-	0.971

II. Results and Discussion

Modelling reports utilising the core info document should have the substance data presented as shown in the following tables.

Table 9.2.5- 13: Substance parameters used at FOCUS Steps 1-2 level

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03 (AE 0608000)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58
Water solubility	(mg/L)	2.8	1830	9721	106.9
Koc	(mL/g)	267.7	24.1	5.7	106.9
Degradation					
Soil	(days)	182	146	16	17.9
Total system	(days)	1000	1000	1000	1000
Water	(days)	1000	1000	1000	1000
Sediment	(days)	1000	1000	1000	1000
Max occurrence					
Water / sediment	(%)	100	20.3	8.2	0.001
Soil	(%)	100	48	16.4	20.6

Table 9.2.5- 14: Substance parameters used for fluopicolide and its metabolite M-03 (AE 0608000) at Step 3/4 level

Parameter	Unit	Parent Fluopicolide FLC	Metabolite M-03 (AE 0608000) M03
General			
Molar mass	(g/mol)	383.59	399.58
Water solubility (temp.)	(mg/L)	2.8 (20 °C)	10 (20 °C)
Vapour pressure (temp.)	(Pa)	3.03E-07 (20 °C)	0 (20 °C)
Crop processes			
Coefficient for uptake by plant (TSCF)	(-)	0	0
Wash-off factor	(1/m)	50	50
Sorption			
Koc	(mL/g)	267.7	106.89
KOM	(mL/g)	15.3	62
Freundlich exponent (n)	(-)	0.888	0.971
Transformation			
DT ₅₀ in soil	(days)	182	17.9
temperature	(°C)	20	20
moisture content (p)	(log(m))	2	2
formation fraction in soil	(-)	-	0.53
DT ₅₀ in water	(days)	1000	1.9
temperature	(°C)	20	20
formation fraction in water	(-)	-	-
DT ₅₀ in sediment	(days)	1000	1000
temperature	(°C)	20	20
formation fraction in sediment	(-)	-	-
DT ₅₀ on canopy	(days)	10	10
Exponent for the effect of moisture			
PRZM and TOXSWA (Walker exp.)	(-)	0.7	0.7
MACRO (calibrated value)	(-)	0.49	0.49
Effect of temperature			
TOXSWA (molar activation energy)	(kJ/mol)	65.4	65.4
MACRO (effect of temperature)	(1/K)	0.0948	0.0948
PRZM (Q ₁₀)	(-)	2.58	2.58

III. Conclusion

For the surface water and sediment risk assessment of fluopicolide and its metabolites M-01, M-02, and M-03 the input parameters presented in this summary should be used in all calculations.

Assessment and conclusion by applicant:

This core modelling report was conducted according to FOCUS Degradation Kinetics (2006, 2014) and is considered valid to assess trigger and modelling endpoints for fluopicolide and its metabolites in surface water and sediment under laboratory conditions.

Data Point:	KCP 9.2.5/05
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (FLC) and metabolites: PEC _{sw, sed} FOCUS EUR - use in potatoes in Europe
Report No:	EnSa-20-0399
Document No:	M-687153-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

Predicted environmental concentrations of the fungicide fluopicolide and metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The uses of fluopicolide in potatoes were assessed according to the Good Agricultural Practice (GAP) in Europe.

I. Materials and Methods

Predicted environmental concentrations of the fungicide fluopicolide and its metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The uses of fluopicolide in relevant crops were assessed according to the Good Agricultural Practice (GAP) in Europe. Intended GAPs for the use of fluopicolide in Europe were analysed and consolidated according to regulatory and modelling requirements. As a result, one or more uses may be covered by a single modelling GAP row (GGR). The translation of the regulatory GAP for modelling purposes is shown in Table 9.2.15.

Table 9.2.5-15: GAP translation for modelling purposes

GAP group ID	GAP group name (DGR) and use IDs	Covered crop(s)	Growth stage	Max. apps	Interval (days)	Rate (kg a.s./ha)
DGR I	potatoes 4X	potatoes	BBCH 21 - 89	4	7	4 × 0.1
DGR II	potatoes 3X	potatoes	BBCH 21 - 89	3	7	3 × 0.1
DGR III	potatoes 2X	potatoes	BBCH 21 - 89	2	7	2 × 0.1
DGR IV	potatoes 1X	potatoes	BBCH 21 - 89	-	-	1 × 0.1

The implementation of the modelling GAP (Table 9.2.5-15) at Steps 1-2 level is shown in Table 9.2.5-16. One or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Table 9.2.5- 16: FOCUS Steps 1-2 specific data for the GAPs assessed

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)	Season	Crop cover
DGR I PMT I	potatoes 4X	Early	potatoes (arable crops)	spring (Mar. - May)	average crop cover
DGR I PMT II	potatoes 4X	Late	potatoes (arable crops)	summer (Jun. - Sep.)	full canopy
DGR II PMT III	potatoes 3X	Early	potatoes (arable crops)	spring (Mar. - May)	average crop cover
DGR II PMT IV	potatoes 3X	Late	potatoes (arable crops)	summer (Jun. - Sep.)	full canopy
DGR III PMT V	potatoes 2X	Early	potatoes (arable crops)	spring (Mar. - May)	average crop cover
DGR III PMT VI	potatoes 2X	Late	potatoes (arable crops)	summer (Jun. - Sep.)	full canopy
DGR IV PMT VII	potatoes 1X	Early	potatoes (arable crops)	spring (Mar. - May)	average crop cover
DGR IV PMT VIII	potatoes 1X	Late	potatoes (arable crops)	summer (Jun. - Sep.)	full canopy

This section provides the implementation of the modelling GAP (Table 9.2.5-15) at Step 3 level. Also, here one or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Please note that PMTs at Steps 1-2 and Step 3 do not necessarily fully correspond to each other due to inherent differences in the models.

The application dates for this assessment were set with the help of the tool AppDate (Klein 2018), which proposes dates for specific crop stages (given as BBCH code) based on the crop development as defined in the FOCUS model scenarios for ground water and surface water.

The summary of all Step 3 PMTs is provided in Table 9.2.5- 17. The detailed information on individual uses is given in subsections that follow Table 9.2.5- 18 to Table 9.2.5- 33.

Table 9.2.5- 17: Overview of FOCUS Step 3 assessments

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)
DGR I PMT I	Potatoes 4X	Early	Potatoes (arable crops)
DGR I PMT II	Potatoes 4X	Late	Potatoes (arable crops)

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)
DGR II PMT III	Potatoes 3X	Early	Potatoes (arable crops)
DGR II PMT IV	Potatoes 3X	Late	Potatoes (arable crops)
DGR III PMT V	Potatoes 2X	Early	Potatoes (arable crops)
DGR III PMT VI	Potatoes 2X	Late	Potatoes (arable crops)
DGR IV PMT VII	Potatoes 1X	Early	Potatoes (arable crops)
DGR IV PMT VIII	Potatoes 1X	Late	Potatoes (arable crops)

GAP group name potatoes 4X, assessment name Early

Table 9.2.5- 18: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch D4 Pond/Stream D6 Ditch D6 Ditch (2nd) R1 Pond/Stream R2 Stream R3 Stream	30-May - 20-Jul 17-Jul - 07-Aug 24-Apr - 14-Jun 21-Aug - 11-Oct 20-May - 10-Jul 06-Apr - 27-May 24-Apr - 10-Jun

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Table 9.2.5- 19: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT I			
GAP group name (DGR)		Potatoes 4X			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		4×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 51 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	30-May/20-Jul (150/201)	14-Jun 26-Jun 08-Jul 15-Jul	R1 Pond/Stream	20-May/10-Jul (140/199)	31-May 12-Jun 24-Jun 04-Jul
D4 Pond/Stream	17-Jun/07-Aug (168/219)	21-Jun 28-Jun 05-Jul 18-Jul	R2 Stream	06-Apr/27-May (96/147)	23-Apr 29-Apr 07-May 20-May
D6 Ditch	24-Apr/14-Jun (114/165)	24-Apr 03-May 17-May 24-May	R3 Stream	24-Apr/14-Jun (114/165)	24-Apr 18-May 01-Jun 11-Jun
D6 Ditch (2nd)	27-Aug/11-Oct (233/284)	23-Aug 04-Sep 13-Sep 21-Sep			

GAP group name potatoes 4X, assessment name Late

Table 9.2.5- 20: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	24-Jul - 13-Sep
	D4 Pond/Stream	02-Aug - 22-Sep
	D6 Ditch	23-May - 13-Jul
	D6 Ditch (2nd)	03-Oct - 23-Nov
	R1 Pond/Stream	17-Jul - 06-Sep
	R2 Stream	24-Apr - 14-Jun
	R3 Stream	09-Jul - 29-Aug

Table 9.2.5- 21: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT II			
GAP group name (DGR)		Potatoes 4X			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		4×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 51 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	24-Jul/13-Sep (205/256)	24-Jul 03-Aug 18-Aug 26-Aug	R1 Pond/Stream		22-Jul 29-Jul 26-Aug 22-Sep
D4 Pond/Stream	02-Aug/22-Sep (214/265)	27-Aug 04-Sep 11-Sep 18-Sep	R2 Stream		24-Apr 07-May 20-May 27-May
D6 Ditch	23-May/13-Jul (143/194)	24-May 04-Jun 23-Jun 30-Jul	R3 Stream		13-Jul 20-Jul 27-Jul 04-Aug
D6 Ditch (2nd)	05-Oct/23-Nov (276/327)	05-Oct 14-Oct 22-Oct 31-Oct			

GAP group name potatoes 3X, assessment name Early

Table 9.2.5- 22: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	30-May - 20-Jul
	D4 Pond/Stream	17-Jun - 07-Aug
	D6 Ditch	24-Apr - 14-Jun
	D6 Ditch (2nd)	21-Aug - 11-Oct
	R1 Pond/Stream	20-May - 10-Jul
	R2 Stream	06-Apr - 27-May
	R3 Stream	24-Apr - 14-Jun

Table 9.2.5- 23: Full FOCUS Step 3 application data

Run IDs		DGR II / PMT III			
GAP group name (DGR)		Potatoes 3X			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		3×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	30-May/20-Jul (150/201)	14-Jun 26-Jun 08-Jul	R1 Pond/Stream	20-May/10-Jul (140/193)	31-May 12-Jun 24-Jun
D4 Pond/Stream	17-Jun/07-Aug (168/219)	21-Jun 28-Jun 05-Jul	R2 Stream	06-Apr/27-May (96/147)	22-Apr 29-Apr 07-May
D6 Ditch	24-Apr/14-Jun (114/165)	24-Apr 03-May 07-May	R3 Stream	24-Apr/14-Jun (114/165)	24-Apr 18-May 01-Jun
D6 Ditch (2nd)	01-Aug/11-Oct (207/284)	23-Aug 04-Sep 13-Sep			

GAP group name potatoes 3X, assessment name Late

Table 9.2.5- 24: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	24-Jul - 13-Sep
	D4 Pond/Stream	02-Aug - 22-Sep
	D6 Ditch	23-May - 13-Jul
	D6 Ditch (2nd)	03-Oct - 23-Nov
	R1 Pond/Stream	17-Jul - 06-Sep
	R2 Stream	24-Apr - 14-Jun
	R3 Stream	09-Jul - 29-Aug

Table 9.2.5- 25: Full FOCUS Step 3 application data

Run IDs		DGR II / PMT IV			
GAP group name (DGR)		Potatoes 3X			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		3×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	24-Jul/13-Sep (205/256)	24-Jul 03-Aug 18-Aug	R1 Pond/Stream	17-Jul/06-Sep (198/249)	22-Jul 29-Jul 26-Aug
D4 Pond/Stream	02-Aug/22-Sep (214/265)	27-Aug 10-Sep 18-Sep	R2 Stream	24-Apr/10-Jun (114/165)	24-Apr 07-May 20-May
D6 Ditch	23-May/13-Jul (143/194)	24-May 04-Jun 23-Jun	R3 Stream	09-Jul/29-Aug (190/241)	13-Jul 20-Jul 27-Jul
D6 Ditch (2nd)	03-Oct/23-Nov (276/327)	03-Oct 14-Oct 22-Oct			

GAP group name potatoes 2X, assessment name Early

Table 9.2.5- 26: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	30-May - 20-Jul
	D4 Pond/Stream	17-Jun - 07-Aug
	D6 Ditch	24-Apr - 14-Jun
	D6 Ditch (2nd)	21-Aug - 11-Oct
	R1 Pond/Stream	20-May - 10-Jul
	R2 Stream	06-Apr - 27-May
	R3 Stream	24-Apr - 14-Jun

Table 9.2.5- 27: Full FOCUS Step 3 application data

Run IDs		DGR III / PMT V			
GAP group name (DGR)		Potatoes 2X			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		2×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 37 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	30-May/20-Jul (150/201)	14-Jun- 26-Jun	R1 Pond/Stream	20-May/10-Jul (140/197)	13-Jun- 05-Jul
D4 Pond/Stream	17-Jun/07-Aug (168/219)	01-Jun- 28-Jun	R2 Stream	06-Apr/27-May (96/147)	22-Apr- 29-Apr
D6 Ditch	24-Apr/14-Jun (114/165)	04-Apr- 03-May	R3 Stream	24-Apr/14-Jun (114/165)	24-Apr- 18-May
D6 Ditch (2nd)	21-Aug/11-Oct (233/284)	23-Aug- 04-Sep			

GAP group name potatoes 2X, assessment name Late

Table 9.2.5- 28: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	24-Jul - 13-Sep
	D4 Pond/Stream	02-Aug - 22-Sep
	D6 Ditch	23-May - 13-Jul
	D6 Ditch (2nd)	03-Oct - 23-Nov
	R1 Pond/Stream	17-Jul - 06-Sep
	R2 Stream	24-Apr - 14-Jun
	R3 Stream	09-Jul - 29-Aug

Table 9.2.5- 29: Full FOCUS Step 3 application data

Run IDs		DGR III / PMT VI			
GAP group name (DGR)		Potatoes 2X			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		2×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 37 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	24-Jul/13-Sep (205/256)	24-Jul-03-Aug	R1 Pond/Stream	17-Jul/06-Sep (198/249)	28-Jul-20-Aug
D4 Pond/Stream	02-Aug/22-Sep (214/265)	27-Aug-10-Sep	R2 Stream	24-Apr/14-Jun (114/165)	24-Apr-07-May
D6 Ditch	23-May/13-Jul (143/194)	24-May-04-Jun	R3 Stream	09-Jul/29-Aug (190/241)	13-Jul-20-Jul
D6 Ditch (2nd)	03-Oct/23-Nov (276/327)	05-Oct-14-Oct			

GAP group name potatoes 1X, assessment name Early

Table 9.2.5- 30: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	30-May - 20-Jul
	D4 Pond/Stream	17-Jun - 07-Aug
	D6 Ditch	24-Apr - 14-Jun
	D6 Ditch (2nd)	21-Aug - 11-Oct
	R1 Pond/Stream	20-May - 10-Jul
	R2 Stream	06-Apr - 27-May
	R3 Stream	24-Apr - 14-Jun

Table 9.2.5- 31: Full FOCUS Step 3 application data

Run IDs		DGR IV / PMT VII			
GAP group name (DGR)		Potatoes 1X			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		0.1 kg a.s./ha			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 30 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	30-May/20-Jul (150/201)	14-Jun	R1 Pond/Stream	20-May/10-Jul (140/197)	13-Jun
D4 Pond/Stream	17-Jun/07-Aug (168/219)	21-Jun	R2 Stream	06-Apr/27-May (96/147)	2-Apr
D6 Ditch	24-Apr/14-Jun (114/165)	24-Apr	R3 Stream	4-Apr/14-Jun (114/165)	24-Apr
D6 Ditch (2nd)	21-Aug/11-Oct (233/284)	23-Aug			

GAP group name potatoes 1X, assessment name Late

Table 9.2.5- 32: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	24-Jul - 13-Sep
	D4 Pond/Stream	02-Aug - 22-Sep
	D5 Ditch	23-May - 13-Jul
	D6 Ditch (2nd)	03-Oct - 23-Nov
	R1 Pond/Stream	17-Jul - 06-Sep
	R2 Stream	24-Apr - 14-Jun
	R3 Stream	09-Jul - 29-Aug

Table 9.2.5- 33: Full FOCUS Step 3 application data

Run IDs		DGR IV / PMT VIII			
GAP group name (DGR)		Potatoes 1X			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		0.1 kg a.s./ha			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 30 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	24-Jul/13-Sep (205/256)	24-Jul	R1 Pond/Stream	17-Jul/06-Sep (198/249)	28-Jul
D4 Pond/Stream	02-Aug/22-Sep (214/265)	27-Aug	R2 Stream	24-Apr/14-Jun (114/165)	14-Apr
D6 Ditch	23-May/13-Jul (143/194)	24-May	R3 Stream	09-Jul/29-Aug (190/241)	13-Jul
D6 Ditch (2nd)	03-Oct/23-Nov (276/327)	05-Oct			

Steps 1-2 calculations were performed according to formulas implemented in FOCUS STEPS 1+2 version 3.2.

Step 3 calculations were performed using the FOCUS WASH 5.3 suite, including
 FOCUS PRZM 4.3.1
 FOCUS MACRO 5.5.4
 FOCUS TOXSWA 5.5.3

Refinement at Step 4 level was performed with the SWAN tool, version 5.0.1.

Standard procedures and settings were used for Steps 1-2 and 3 assessments. At Step 4 the following mitigation settings were used Table 9.2.5- 34 and Table 9.2.5- 35.

Table 9.2.5- 34: Mitigation approaches used

Buffer length	Mitigation type	Drift reduction nozzles
0 m	Spray drift	0 %, 50 %, 75 %, 90 %
5 m	Spray drift	
10 m	Spray drift & RunOff	
15 m	Spray drift & RunOff	
20 m	Spray drift & RunOff	

Table 9.2.5- 35: Runoff mitigation parameters used for the assessment

Fractional reduction in:	10 m, 15 m	20 m
Runoff: Volume	0.60	0.80
Flux	0.60	0.80
Erosion: Mass	0.85	0.95
Flux	0.85	0.95

Substance related parameters which have been used for fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) and whose derivation is described in detail in the core modelling document KCP 9.2.5/04 have been used in the calculations at FOCUS SW Steps 1-2 level are summarised in Table 9.2.5- 36 and at Step 3/4 level in Table 9.2.5- 37.

Table 9.2.5- 36: Substance parameters used at FOCUS Steps 1/2 level

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03 (AE 0608000)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58
Water solubility	(mg/L)	2.8	1830	972	10
Koc	(mL/g)	267.74	24.7	6	106.9
Degradation					
Soil	(days)	182	146	1.6	17.9
Total system	(days)	4000	1000	1000	19
Water	(days)	1000	1000	1000	1.9
Sediment	(days)	1000	1000	1000	1000
Max occurrence					
Water / sediment	(%)	100	20.3	8	0.001
Soil	(%)	100	48	16.4	10.6

Table 9.2.5- 37: Substance parameters used for fluopicolide and its metabolite M-03 (AE 0608000) at Step 3/4 level

Parameter	Unit	Parent	Metabolite
Substance		Fluopicolide	M-03 (AE 0608000)
SWASH code		Flu	M03
General			
Molar mass	(g/mol)	383.59	399.58
Water solubility (temp.)	(mg/L)	2.8 (20 °C)	10 (20 °C)
Vapour pressure (temp.)	(Pa)	3.03E-07 (20 °C)	0 (20 °C)
Crop processes			
Coefficient for uptake by plants (TSCF)	(-)	0.5	0
Wash-off factor	(l/m)	50	50
Sorption			
Koc	(mL/g)	267.74	106.89
K _{OM}	(mL/g)	155.3	62
Freundlich exponent (1/n)	(-)	0.888	0.971
Transformation			
DT50 in soil	(days)	182	17.9
temperature	(°C)	20	20
moisture content (MF)	(log(cm))	2	2
formation fraction in soil	(-)	-	0.53
DT50 in water	(days)	1000	1.9
temperature	(°C)	20	20
formation fraction in water	(-)	-	-
DT50 in sediment	(days)	1000	1000
temperature	(°C)	20	20
formation fraction in sediment	(-)	-	-
DT50 on canopy	(days)	10	10

Parameter	Unit	Parent	Metabolite
Exponent for the effect of moisture			
PRZM and TOXSWA (Walker exp.)	(-)	0.7	0.7
MACRO (calibrated value)	(-)	0.49	0.49
Effect of temperature			
TOXSWA (molar activation energy)	(kJ/mol)	65.4	65.4
MACRO (effect of temperature)	(1/K)	0.0948	0.0948
PRZM (Q ₁₀)	(-)	2.58	2.58

II. Results and Discussion

The PEC values were calculated for fluopicolide and its metabolites M-01 (AE C657111), M-02 (AE C657188) and M-03 (AE 0608000) according to the equations implemented in the “STEP 1-2 in FOCUS” calculator Table 9.2.5- 38 to Table 9.2.5- 39.

Parent substance fluopicolide

Potatoes 4X - Early – 4 × 100g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 38: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	102	RunOff	101	270
Step 2					
Northern Europe	Mar. - May (Spring)	11.1	RunOff	11.1	29.7
Southern Europe	Mar. - May (Spring)	20.6	RunOff	20.4	54.6

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 4X - Late – 4 × 100g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 39: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1		102	RunOff	101	270
Step 2					
Northern Europe	Jun. - Sep. (Summer)	7.39	RunOff	7.39	19.8
Southern Europe	Jun. - Sep. (Summer)	10.4	RunOff	10.2	27.2

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Early – 3 × 100g a.s./ha, 7d int. (DGR II / PMT III)
Table 9.2.5- 40: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	76.5	RunOff	75.6	203
Step 2					
Northern Europe	Mar. - May(Spring)	8.69	RunOff	8.54	2.9
Southern Europe	Mar. - May(Spring)	15.8	RunOff	15.6	41.8

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Late – 3 × 100g a.s./ha, 7d int. (DGR II / PMT IV)
Table 9.2.5- 41: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	76.5	RunOff	75.6	203
Step 2					
Northern Europe	Jun. - Sep.(Summer)	8.86	RunOff	5.72	15.3
Southern Europe	Jun. - Sep.(Summer)	9.8	RunOff	7.83	21.0

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Early – 2 × 100g a.s./ha, 7d int. (DGR III / PMT V)
Table 9.2.5- 42: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	51.9	RunOff	50.4	135
Step 2					
Northern Europe	Mar. - May(Spring)	6.08	RunOff	5.96	16.0
Southern Europe	Mar. - May(Spring)	10.9	RunOff	10.7	28.7

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Late – 2 × 100g a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 43: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	51.0	RunOff	50.4	135
Step 2					
Northern Europe	Jun. - Sep.(Summer)	4.17	RunOff	4.06	9.9
Southern Europe	Jun. - Sep.(Summer)	5.60	RunOff	5.48	14.7

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Early – 1 × 100g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 44: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	25.5	RunOff	25.2	67.5
Step 2					
Northern Europe	Mar. - May(Spring)	3.16	RunOff	3.09	8.28 *
Southern Europe	Mar. - May(Spring)	5.58	RunOff	5.51	14.8 *

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Late – 1 × 100g a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 45: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	25.5	RunOff	25.2	67.5
Step 2					
Northern Europe	Jun. - Sep.(Summer)	2.19 *	RunOff	2.13	5.69 *
Southern Europe	Jun. - Sep.(Summer)	2.92 *	RunOff	2.85	7.63 *

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-01 (AE C653711)
Potatoes 4X - Early – 4 × 100g a.s./ha, 7d int. (DGR I / PMT I)
Table 9.2.5- 46: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	44.1	-	44.0	10.6
Step 2	-	-	-	-	-
Northern Europe	Mar. - May(Spring)	4.34	-	4.33	1.04
Southern Europe	Mar. - May(Spring)	8.44	-	8.42	2.03

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 4X - Late – 4 × 100g a.s./ha, 7d int. (DGR I / PMT II)
Table 9.2.5- 47: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	44.1	-	44.0	10.6
Step 2	-	-	-	-	-
Northern Europe	Jun. - Sep.(Summer)	2.70	-	2.69	0.650
Southern Europe	Jun. - Sep.(Summer)	3.93	-	3.92	0.946

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Early – 3 × 100g a.s./ha, 7d int. (DGR II / PMT III)
Table 9.2.5- 48: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	33.1	-	33.0	7.96
Step 2	-	-	-	-	-
Northern Europe	Mar. - May(Spring)	3.32	-	3.31	0.799
Southern Europe	Mar. - May(Spring)	6.44	-	6.42	1.55

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Late – 3 × 100g a.s./ha, 7d int. (DGR II / PMT IV)
Table 9.2.5- 49: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-01 (AE C653711), GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	33.1	-	33.0	0.96
Step 2					
Northern Europe	Jun. - Sep.(Summer)	2.07	-	2.06	0.498
Southern Europe	Jun. - Sep.(Summer)	3.01	-	3.00	0.724

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Early – 2 × 100g a.s./ha, 7d int. (DGR III / PMT V)
Table 9.2.5- 50: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-01 (AE C653711), GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	22.0	-	22.0	5.31
Step 2					
Northern Europe	Mar. - May(Spring)	2.27	-	2.27	0.547
Southern Europe	Mar. - May(Spring)	4.39	-	4.37	1.06

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Late – 2 × 100g a.s./ha, 7d int. (DGR III / PMT VI)
Table 9.2.5- 51: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-01 (AE C653711), GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	22.0	-	22.0	5.31
Step 2					
Northern Europe	Jun. - Sep.(Summer)	1.43	-	1.42	0.343
Southern Europe	Jun. - Sep.(Summer)	2.06	-	2.06	0.496

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Early – 1 × 100g a.s./ha (DGR IV / PMT VII)
Table 9.2.5- 52: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-01 (AE C653711), GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	11.0	-	1.0	2.65
Step 2					
Northern Europe	Mar. - May(Spring)	1.16 *	-	1.16	0.80 *
Southern Europe	Mar. - May(Spring)	2.24 *	-	2.23	0.539 *

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Late – 1 × 100g a.s./ha (DGR IV / PMT VIII)
Table 9.2.5- 53: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-01 (AE C653711), GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	11.0	-	1.0	2.65
Step 2					
Northern Europe	Jul. - Sep.(Summer)	0.734 *	-	0.732	0.177 *
Southern Europe	Jun. - Sep.(Summer)	1.06 *	-	1.05	0.254 *

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-02 (AE C657188)
Potatoes 4X - Early – 4 × 100g a.s./ha, 7d int. (DGR I / PMT I)
Table 9.2.5- 54: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-02 (AE C657188), GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	19.3	-	19.3	1.10
Step 2					
Northern Europe	Mar. - May(Spring)	0.781	-	0.779	0.045
Southern Europe	Mar. - May(Spring)	1.44	-	1.44	0.082

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 4X - Late – 4 × 100g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 55: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-02 (AE C657188), GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	19.3	-	19.3	0.10
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.516	-	0.514	0.029
Southern Europe	Jun. - Sep.(Summer)	0.715	-	0.713	0.041

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Early – 3 × 100g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 56: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-02 (AE C657188), GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	14.5	-	14.5	0.825
Step 2					
Northern Europe	Mar. - May(Spring)	0.615	-	0.613	0.035
Southern Europe	Mar. - May(Spring)	1.13	-	1.13	0.065

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Late – 3 × 100g a.s./ha, 7d int. (DGR II / PMT IV)

Table 9.2.5- 57: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-02 (AE C657188), GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	14.5	-	14.5	0.825
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.407	-	0.406	0.023
Southern Europe	Jun. - Sep.(Summer)	0.563	-	0.561	0.032

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Early – 2 × 100g a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 58: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-02 (AE C657188), GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	9.66	-	9.64	0.550
Step 2					
Northern Europe	Mar. - May(Spring)	0.447	-	0.446	0.025
Southern Europe	Mar. - May(Spring)	0.816	-	0.814	0.047

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Late – 2 × 100g a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 59: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-02 (AE C657188), GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	9.66	-	9.64	0.550
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.299	-	0.298	0.017
Southern Europe	Jun. - Sep.(Summer)	0.410	-	0.409	0.023

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Early – 1 × 100g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 60: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-02 (AE C657188), GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	4.83	-	4.82	0.275
Step 2					
Northern Europe	Mar. - May(Spring)	0.258 *	-	0.257	0.015 *
Southern Europe	Mar. - May(Spring)	0.471 *	-	0.470	0.027 *

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Late – 1 × 100g a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 61: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-02 (AE C657188), GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	4.83	-	4.83	0.275
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.172 *	-	0.172	0.010 *
Southern Europe	Jun. - Sep.(Summer)	0.236 *	-	0.236	0.013

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-03 (AE 0608000)

Potatoes 4X - Early – 4 × 100g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 62: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1		3.2		1.17	3.44
Step 2					
Northern Europe	Mar - May(Spring)	0.759	-	0.302	0.822
Southern Europe	Mar. - May(Spring)	1.54	-	0.604	1.64

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 4X - Late – 4 × 100g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 63: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1		3.22		1.17	3.44
Step 2					
Northern Europe	Jun - Sep.(Summer)	0.462	-	0.181	0.493
Southern Europe	Jun. - Sep.(Summer)	0.692	-	0.272	0.740

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Early – 3 × 100g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 64: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Mar. - May(Spring)	0.647	-	0.254	0.692
Southern Europe	Mar. - May(Spring)	1.29	-	0.508	1.38

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Late – 3 × 100g a.s./ha, 7d int. (DGR II / PMT IV)

Table 9.2.5- 65: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Jun - Sep(Summer)	0.388	-	0.152	0.415
Southern Europe	Jun - Sep(Summer)	0.82	-	0.229	0.622

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Early – 2 × 100g a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 66: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Mar. - May(Spring)	0.486	-	0.191	0.520
Southern Europe	Mar. - May(Spring)	0.973	-	0.382	1.04

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Late – 2 × 100g a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 67: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.292	-	0.115	0.312
Southern Europe	Jun. - Sep.(Summer)	0.438	-	0.172	0.468

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Early – 1 × 100g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 68: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Mar. - May(Spring)	0.276	-	0.098	0.295 *
Southern Europe	Mar. - May(Spring)	0.552	-	0.217	0.590 *

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Late – 1 × 100g a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 69: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.166 *	-	0.065	0.177 *
Southern Europe	Jun. - Sep.(Summer)	0.248 *	-	0.098	0.266 *

* Single applications are marked.

** TWA interval as required by ecotox

Step 3 calculations were conducted for fluopicolide and its metabolite M-03 (AE 0608000) employing

the models of the FOCUS SW suite. Reported values represent loadings *via* all relevant entry routes and are shown in Table 9.2.5- 70 to Table 9.2.5- 85.

Parent substance fluopicolide

Potatoes 4X - Early – 4 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 70: FOCUS Step 3 PEC_{sw} and PEC_{sd} for fluopicolide, GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)
Step 3					
D3	Ditch	0.524	Spray drift	0.078	0.246
D4	Pond	3.70	Drainage	3.70	18.1
D4	Stream	3.47	Drainage	2.92	6.52
D6	Ditch	1.51	Spray drift	0.390	3.10
D6	Ditch 2nd	7.36	Drainage	3.47	7.56
R1	Pond	0.260	RunOff	0.154	1.43
R1	Stream	2.86	RunOff	0.348	1.37
R2	Stream	1.82	RunOff	0.27	1.53
R3	Stream	4.00	RunOff	0.335	2.08

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 4X - Late – 4 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 71: FOCUS Step 3 PEC_{sw} and PEC_{sd} for fluopicolide, GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.524 *	Spray drift	0.083	0.264
D4	Pond	3.65	Drainage	3.64	17.0
D4	Stream	3.54	Drainage	2.91	6.07
D6	Ditch	1.96	Spray drift	1.18	4.10
D6	Ditch 2nd	14.4	Drainage	6.16	12.6
R1	Pond	0.125	RunOff	0.122	0.736
R1	Stream	2.77	RunOff	0.276	0.643
R2	Stream	2.01	RunOff	0.311	1.94
R3	Stream	4.05	RunOff	0.512	3.08

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Early – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT III)
Table 9.2.5- 72: FOCUS Step 3 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	0.524 *	Spray drift	0.078	0.225
D4	Pond	2.66	Drainage	2.66	7.1
D4	Stream	2.50	Drainage	2.09	4.61
D6	Ditch	1.12	Spray drift	0.657	2.8
D6	Ditch 2nd	4.93	Drainage	2.7	5.37
R1	Pond	0.217	RunOff	0.209	1.11
R1	Stream	2.86	RunOff	0.348	1.37
R2	Stream	1.88	RunOff	0.192	0.979
R3	Stream	1.58	RunOff	0.346	1.9

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Late – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT IV)
Table 9.2.5- 73: FOCUS Step 3 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	0.524 *	Spray drift	0.083	0.242
D4	Pond	2.59	Drainage	2.58	12.2
D4	Stream	2.49	Drainage	2.03	4.42
D6	Ditch	1.55	Spray drift	0.789	2.73
D6	Ditch 2nd	14.11	Drainage	5.82	10.5
R1	Pond	0.072	RunOff	0.071	0.462
R1	Stream	1.54	RunOff	0.154	0.366
R2	Stream	1.33	RunOff	0.206	1.24
R3	Stream	1.67	RunOff	0.467	2.49

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Early – 2 × 100 g a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 74: FOCUS Step 3 PEC_{sw} and PEC_{sd} for fluopicolide, GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.524 *	Spray drift	0.078	0.22
D4	Pond	1.72	Drainage	1.72	5.4
D4	Stream	1.62	Drainage	1.35	3.03
D6	Ditch	0.742	Spray drift	0.435	1.5
D6	Ditch 2nd	2.98	Drainage	1.45	3.40
R1	Pond	0.152	RunOff	0.149	0.85
R1	Stream	1.42 *	RunOff	0.170	0.764 *
R2	Stream	1.33	RunOff	0.115	0.599
R3	Stream	1.58	RunOff	0.346	0.889

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Late – 2 × 100 g a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 75: FOCUS Step 3 PEC_{sw} and PEC_{sd} for fluopicolide, GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.524 *	Spray drift	0.083	0.246
D4	Pond	1.71	Drainage	1.71	8.23
D4	Stream	1.62	Drainage	1.31	3.00
D6	Ditch	0.796	Spray drift	0.465	1.57
D6	Ditch 2nd	7.70	Drainage	3.46	6.33
R1	Pond	0.059	RunOff	0.058	0.379
R1	Stream	1.15	RunOff	0.116	0.279
R2	Stream	1.16	RunOff	0.129	0.690
R3	Stream	2.98	RunOff	0.407	1.83

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Early – 100 g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 76: FOCUS Step 3 PEC_{sw} and PEC_{sd} for fluopicolide, GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.524 *	Spray drift	0.078	0.206 *
D4	Pond	0.823 *	Drainage	0.822	1.17 *
D4	Stream	0.777 *	Drainage	0.634	1.50 *
D6	Ditch	0.564 *	Spray drift	0.217	0.598 *
D6	Ditch 2nd	1.33	Drainage	0.657	1.60 *
R1	Pond	0.111 *	RunOff	0.105	0.52 *
R1	Stream	1.42 *	RunOff	0.170	0.764 *
R2	Stream	0.570 *	RunOff	0.052	0.291 *
R3	Stream	0.864 *	RunOff	0.076	0.276 *

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Late – 100 g a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 77: FOCUS Step 3 PEC_{sw} and PEC_{sd} for fluopicolide, GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.524 *	Spray drift	0.083	0.213 *
D4	Pond	0.754 *	Drainage	0.752	3.84 *
D4	Stream	0.701 *	Drainage	0.538	1.41 *
D6	Ditch	0.555 *	Spray drift	0.227	0.744 *
D6	Ditch 2nd	3.00	Drainage	1.37	2.59 *
R1	Pond	0.026 *	RunOff	0.025	0.187 *
R1	Stream	0.469 *	RunOff	0.047	0.118 *
R2	Stream	0.589 *	RunOff	0.054	0.299 *
R3	Stream	1.50 *	RunOff	0.221	0.917 *

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-03 (AE 0608000)

Potatoes 4X - Early – 4 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 78: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.021	-	0.021	0.084
D4	Pond	0.206	-	0.200	0.275
D4	Stream	0.365	-	0.309	0.513
D6	Ditch	0.191	-	0.126	0.308
D6	Ditch 2nd	0.489	-	0.257	0.478
R1	Pond	0.003	-	0.002	0.002
R1	Stream	0.007	-	0.009	0.022
R2	Stream	0.081	-	0.072	0.024
R3	Stream	0.086	-	0.012	0.024

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 4X - Late – 4 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 79: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.011	-	0.011	0.043
D4	Pond	0.150	-	0.147	0.202
D4	Stream	0.266	-	0.231	0.382
D6	Ditch	0.226	-	0.146	0.374
D6	Ditch 2nd	0.360	-	0.231	0.598
R1	Pond	0.001	-	0.001	0.001
R1	Stream	0.085	-	0.008	0.012
R2	Stream	0.092	-	0.011	0.027
R3	Stream	0.118	-	0.019	0.036

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Early – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 80: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.014	-	0.014	0.058
D4	Pond	0.153	-	0.149	0.205
D4	Stream	0.272	-	0.230	0.379
D6	Ditch	0.144	-	0.095	0.233
D6	Ditch 2nd	0.364	-	0.288	0.394
R1	Pond	0.003	-	0.002	0.009
R1	Stream	0.067	-	0.009	0.016
R2	Stream	0.069	-	0.010	0.019
R3	Stream	0.069	-	0.009	0.017

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Late – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT IV)

Table 9.2.5- 81: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.067	-	0.007	0.030
D4	Pond	0.108	-	0.106	0.147
D4	Stream	0.162	-	0.166	0.283
D6	Ditch	0.161	-	0.103	0.258
D6	Ditch 2nd	0.326	-	0.180	0.436
R1	Pond	0.001	-	<0.001	<0.001
R1	Stream	0.054	-	0.005	0.008
R2	Stream	0.064	-	0.009	0.019
R3	Stream	0.109	-	0.013	0.031

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Early – 2 × 100 g a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 82: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.008	-	0.008	0.034
D4	Pond	0.101	-	0.098	0.435
D4	Stream	0.181	-	0.153	0.249
D6	Ditch	0.098	-	0.065	0.159
D6	Ditch 2nd	0.242	-	0.225	0.261
R1	Pond	0.002	-	0.001	0.006
R1	Stream	0.054	-	0.005	0.012
R2	Stream	0.040	-	0.006	0.013
R3	Stream	0.040	-	0.005	0.010

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Late – 2 × 100 g a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 83: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.065	-	0.005	0.019
D4	Pond	0.075	-	0.073	0.101
D4	Stream	0.133	-	0.115	0.192
D6	Ditch	0.100	-	0.063	0.157
D6	Ditch 2nd	0.243	-	0.125	0.292
R1	Pond	0.001	-	<0.001	<0.001
R1	Stream	0.041	-	0.004	0.006
R2	Stream	0.003	-	0.007	0.013
R3	Stream	0.083	-	0.010	0.023

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Early – 100 g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 84: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.003 *	-	0.003	0.012 *
D4	Pond	0.049 *	-	0.049	0.067 *
D4	Stream	0.091 *	-	0.076	0.122 *
D6	Ditch	0.051 *	-	0.034	0.086 *
D6	Ditch 2nd	0.121 *	-	0.063	0.131 *
R1	Pond	<0.001 *	-	<0.001	<0.001 *
R1	Stream	0.022 *	-	0.002	0.005 *
R2	Stream	0.020 *	-	0.003	0.006 *
R3	Stream	0.016 *	-	0.002	0.003 *

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Late – 100 g a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 85: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.002 *	-	0.002	0.008 *
D4	Pond	0.039 *	-	0.038	0.053 *
D4	Stream	0.063 *	-	0.059	0.100 *
D6	Ditch	0.051 *	-	0.032	0.077 *
D6	Ditch 2nd	0.114 *	-	0.057	0.127 *
R1	Pond	0.001 *	-	<0.001	<0.001 *
R1	Stream	0.019 *	-	0.002	0.003 *
R2	Stream	0.020 *	-	0.003	0.006 *
R3	Stream	0.046 *	-	0.006	0.012 *

* Single applications are marked.

** TWA interval as required by ecotox

FOCUS Step 4 PEC_{sw}

FOCUS Step 4 calculations considering various mitigation measures for runoff and spray drift were conducted based on the Step 3 results. This section provides the summary of results in tabular form. Where applicable, the maximum of single and multiple application uses are shown Table 9.2.5- 86 to Table 9.2.5- 117.

Parent substance fluopicolide

Potatoes 4X - Early – 4 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 86: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.524	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
50 %		0.262	0.086	0.046	0.031	0.024	0.046	0.031	0.024	
75 %		0.131	0.043	0.023	0.016	0.012	0.023	0.016	0.012	
90 %		0.052	0.017	0.009	0.006	0.006	0.009	0.006	0.006	
None	D4 Pond	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	
50 %		3.70	3.70	3.69	3.69	3.69	3.69	3.69	3.69	
75 %		3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	
90 %		3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	
None	D4 Stream	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	
50 %		3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	
75 %		3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	
90 %		3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	
None	D6 Ditch	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	
50 %		1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	
75 %		1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	
90 %		1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	
None	D6 Ditch 2nd	7.36	7.36	7.36	7.36	7.36	7.36	7.36	7.36	
50 %		7.36	7.36	7.36	7.36	7.36	7.36	7.36	7.36	
75 %		7.36	7.36	7.36	7.36	7.36	7.36	7.36	7.36	
90 %		7.36	7.36	7.36	7.36	7.36	7.36	7.36	7.36	
None	R1 Pond	0.260	0.258	0.251	0.248	0.246	0.113	0.109	0.059	
50 %		0.248	0.246	0.243	0.241	0.240	0.104	0.103	0.054	
75 %		0.241	0.241	0.239	0.238	0.238	0.100	0.099	0.051	
90 %		0.238	0.237	0.237	0.236	0.236	0.098	0.097	0.049	
None	R1 Stream	2.86	2.86	2.86	2.86	2.86	1.30	1.30	0.682	
50 %		2.86	2.86	2.86	2.86	2.86	1.30	1.30	0.682	
75 %		2.86	2.86	2.86	2.86	2.86	1.30	1.30	0.682	
90 %		2.86	2.86	2.86	2.86	2.86	1.30	1.30	0.682	
None	R2 Stream	1.82	1.82	1.82	1.82	1.82	0.812	0.812	0.422	
50 %		1.82	1.82	1.82	1.82	1.82	0.812	0.812	0.422	
75 %		1.82	1.82	1.82	1.82	1.82	0.812	0.812	0.422	
90 %		1.82	1.82	1.82	1.82	1.82	0.812	0.812	0.422	

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	R3 Stream	4.00	4.00	4.00	4.00	4.00	1.82	1.82	0.957
50 %		4.00	4.00	4.00	4.00	4.00	1.82	1.82	0.957
75 %		4.00	4.00	4.00	4.00	4.00	1.82	1.82	0.957
90 %		4.00	4.00	4.00	4.00	4.00	1.82	1.82	0.957

* Maximum values coming from multiple applications are marked in italics

Potatoes 4X - Late – 4 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 87: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	0.524	0.102	0.091	0.062	0.047	0.091	0.062	0.047
50 %		0.262	0.086	0.046	0.031	0.024	0.046	0.031	0.024
75 %		0.131	0.043	0.023	0.016	0.012	0.023	0.016	0.012
90 %		0.052	0.017	0.009	0.006	0.005	0.009	0.006	0.005
None	D4 Pond	3.65	3.65	3.65	3.64	3.64	3.65	3.64	3.64
50 %		3.64	3.64	3.64	3.64	3.64	3.64	3.64	3.64
75 %		3.64	3.64	3.64	3.64	3.64	3.64	3.64	3.64
90 %		3.64	3.64	3.63	3.63	3.63	3.63	3.63	3.63
None	D4 Stream	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54
50 %		3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54
75 %		3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54
90 %		3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54
None	D6 Ditch	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
50 %		1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
75 %		1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
90 %		1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
None	D6 Ditch 2nd	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
50 %		14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
75 %		14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
90 %		14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
None	R1 Pond	0.125	0.123	0.118	0.115	0.114	0.055	0.053	0.030



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PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
90 %		2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
None	D6 Ditch	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	
50 %		1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	
75 %		1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	
90 %		1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	
None	D6 Ditch 2nd	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	
50 %		4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	
75 %		4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	
90 %		4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	
None	R1 Pond	0.217	0.216	0.203	0.199	0.196	0.196	0.091	0.052	
50 %		0.199	0.198	0.195	0.193	0.192	0.084	0.081	0.044	
75 %		0.193	0.193	0.190	0.190	0.09	0.078	0.040		
90 %		0.190	0.190	0.189	0.189	0.077	0.077	0.039		
None	R1 Stream	2.86	2.86	2.86	2.86	2.86	1.30	1.30	0.682	
50 %		2.86	2.86	2.86	2.86	2.86	1.30	1.30	0.682	
75 %		2.86	2.86	2.86	2.86	2.86	1.30	1.30	0.682	
90 %		2.86	2.86	2.86	2.86	2.86	1.30	1.30	0.682	
None	R2 Stream	1.82	1.82	1.82	1.82	1.82	0.812	0.812	0.422	
50 %		1.82	1.82	1.82	1.82	1.82	0.812	0.812	0.422	
75 %		1.82	1.82	1.82	1.82	1.82	0.812	0.812	0.422	
90 %		1.82	1.82	1.82	1.82	1.82	0.812	0.812	0.422	
None	R3 Stream	2.58	2.58	2.58	2.58	2.58	1.17	1.17	0.612	
50 %		2.58	2.58	2.58	2.58	2.58	1.17	1.17	0.612	
75 %		2.58	2.58	2.58	2.58	2.58	1.17	1.17	0.612	
90 %		2.58	2.58	2.58	2.58	2.58	1.17	1.17	0.612	

* Maximum values coming from multiple applications are marked in italics

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Potatoes 3X - Late – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT IV)

Table 9.2.5- 89: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name potatoes^o 3X, assessment name Late (DGR II / PMT IV)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.524	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
50 %		0.262	0.086	0.046	0.031	0.024	0.046	0.031	0.024	
75 %		0.131	0.043	0.023	0.016	0.012	0.023	0.016	0.012	
90 %		0.052	0.017	0.009	0.006	0.005	0.009	0.006	0.005	
None	D4 Pond	2.59	2.58	2.59	2.58	2.58	2.59	2.58	2.58	
50 %		2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	
75 %		2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	
90 %		2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	
None	D4 Stream	2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	
50 %		2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	
75 %		2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	
90 %		2.49	2.49	2.49	2.49	2.49	2.49	2.49	2.49	
None	D6 Ditch	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	
50 %		1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	
75 %		1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	
90 %		1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	
None	D6 Ditch 2nd	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	
50 %		14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	
75 %		14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	
90 %		14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	
None	R1 Pond	0.072	0.064	0.067	0.065	0.064	0.033	0.031	0.018	
50 %		0.06	0.064	0.066	0.061	0.061	0.028	0.028	0.015	
75 %		0.061	0.061	0.060	0.060	0.059	0.026	0.026	0.014	
90 %		0.059	0.059	0.059	0.059	0.058	0.025	0.025	0.013	
None	R1 Stream	1.54	1.54	1.54	1.54	1.54	0.690	0.690	0.359	
50 %		1.54	1.54	1.54	1.54	1.54	0.690	0.690	0.359	
75 %		1.54	1.54	1.54	1.54	1.54	0.690	0.690	0.359	
90 %		1.54	1.54	1.54	1.54	1.54	0.690	0.690	0.359	
None	R2 Stream	1.33	1.33	1.33	1.33	1.33	0.607	0.607	0.318	
50 %		1.33	1.33	1.33	1.33	1.33	0.607	0.607	0.318	
75 %		1.33	1.33	1.33	1.33	1.33	0.607	0.607	0.318	
90 %		1.33	1.33	1.33	1.33	1.33	0.607	0.607	0.318	
None	R3 Stream	3.67	3.67	3.67	3.67	3.67	1.67	1.67	0.877	



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PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
50 %		3.67	3.67	3.67	3.67	3.67	1.67	1.67	0.877
75 %		3.67	3.67	3.67	3.67	3.67	1.67	1.67	0.877
90 %		3.67	3.67	3.67	3.67	3.67	1.67	1.67	0.877

* Maximum values coming from multiple applications are marked in italics

Potatoes 2X - Early – 2 × 100 g a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 90: FOCUS Step 4 PEC_{sw} results for Fluopicolide, GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	0.324	0.172	0.091	0.062	0.047	0.091	0.062	0.047
50 %		0.262	0.086	0.046	0.031	0.024	0.046	0.031	0.024
75 %		0.130	0.043	0.023	0.016	0.012	0.023	0.016	0.012
90 %		0.052	0.017	0.009	0.006	0.005	0.009	0.006	0.005
None		D4 Pond	1.72	1.72	1.72	1.72	1.72	1.72	1.72
50 %	1.71		1.71	1.71	1.71	1.71	1.71	1.71	1.71
75 %	1.71		1.71	1.71	1.71	1.71	1.71	1.71	1.71
90 %	1.71		1.71	1.71	1.71	1.71	1.71	1.71	1.71
None	D4 Stream	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62
50 %		1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62
75 %		1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62
90 %		1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62
None	D6 Ditch	0.742	0.742	0.742	0.742	0.742	0.742	0.742	0.742
50 %		0.742	0.742	0.742	0.742	0.742	0.742	0.742	0.742
75 %		0.742	0.742	0.742	0.742	0.742	0.742	0.742	0.742
90 %		0.742	0.742	0.742	0.742	0.742	0.742	0.742	0.742
None	D6 Ditch 2nd	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98
50 %		2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98
75 %		2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98
90 %		2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98
None	R1 Pond	0.152	0.150	0.146	0.144	0.143	0.066	0.064	0.035
50 %		0.144	0.143	0.141	0.140	0.139	0.061	0.060	0.031
75 %		0.140	0.139	0.138	0.138	0.138	0.058	0.058	0.030



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PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
50 %	D6 Ditch 2nd	0.796	0.796	0.796	0.796	0.796	0.796	0.796	0.796	0.796
75 %		0.796	0.796	0.796	0.796	0.796	0.796	0.796	0.796	0.796
90 %		0.796	0.796	0.796	0.796	0.796	0.796	0.796	0.796	0.796
None		7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70
50 %	R1 Pond	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70
75 %		7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70
90 %		7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70	7.70
None		0.059	0.058	0.055	0.053	0.052	0.027	0.025	0.015	0.015
50 %	R1 Stream	0.053	0.053	0.050	0.051	0.050	0.024	0.023	0.013	0.013
75 %		0.051	0.050	0.050	0.050	0.049	0.022	0.022	0.012	0.012
90 %		0.049	0.049	0.049	0.049	0.049	0.021	0.021	0.011	0.011
None		1.15	1.15	1.15	1.15	1.15	0.515	0.515	0.268	0.268
50 %	R2 Stream	1.15	1.15	1.15	1.15	1.15	0.515	0.515	0.268	0.268
75 %		1.15	1.15	1.15	1.15	1.15	0.515	0.515	0.268	0.268
90 %		1.15	1.15	1.15	1.15	1.15	0.515	0.515	0.268	0.268
None		1.16	1.16	1.16	1.16	1.16	0.515	0.515	0.268	0.268
50 %	R3 Stream	1.16	1.16	1.16	1.16	1.16	0.515	0.515	0.268	0.268
75 %		1.16	1.16	1.16	1.16	1.16	0.515	0.515	0.268	0.268
90 %		1.16	1.16	1.16	1.16	1.16	0.515	0.515	0.268	0.268
None		2.98	2.98	2.98	2.98	2.98	1.36	1.36	0.713	0.713
50 %	R3 Stream	2.98	2.98	2.98	2.98	2.98	1.36	1.36	0.713	0.713
75 %		2.98	2.98	2.98	2.98	2.98	1.36	1.36	0.713	0.713
90 %		2.98	2.98	2.98	2.98	2.98	1.36	1.36	0.713	0.713
None		2.98	2.98	2.98	2.98	2.98	1.36	1.36	0.713	0.713

* Maximum values coming from multiple applications are marked in italics

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Potatoes 1X - Early – 100 g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 92: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name potatoes^o 1X, assessment name Early (DGR IV / PMT VII)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.524	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
50 %		0.262	0.086	0.046	0.031	0.024	0.046	0.031	0.024	
75 %		0.131	0.043	0.023	0.016	0.012	0.023	0.016	0.012	
90 %		0.052	0.017	0.009	0.006	0.005	0.009	0.006	0.005	
None	D4 Pond	0.823	0.823	0.822	0.822	0.821	0.822	0.822	0.821	
50 %		0.822	0.821	0.821	0.821	0.821	0.821	0.821	0.821	
75 %		0.821	0.821	0.820	0.820	0.820	0.820	0.820	0.820	
90 %		0.820	0.820	0.820	0.820	0.820	0.820	0.820	0.820	
None	D4 Stream	0.777	0.777	0.777	0.777	0.777	0.777	0.777	0.777	
50 %		0.777	0.777	0.777	0.777	0.777	0.777	0.777	0.777	
75 %		0.777	0.777	0.777	0.777	0.777	0.777	0.777	0.777	
90 %		0.777	0.777	0.777	0.777	0.777	0.777	0.777	0.777	
None	D6 Ditch	0.367	0.367	0.367	0.367	0.367	0.367	0.367	0.367	
50 %		0.367	0.367	0.367	0.367	0.367	0.367	0.367	0.367	
75 %		0.367	0.367	0.367	0.367	0.367	0.367	0.367	0.367	
90 %		0.367	0.367	0.367	0.367	0.367	0.367	0.367	0.367	
None	D6 Ditch 2nd	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	
50 %		1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	
75 %		1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	
90 %		1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	
None	R1 Pond	0.111	0.109	0.105	0.102	0.101	0.049	0.047	0.027	
50 %		0.102	0.101	0.098	0.097	0.097	0.043	0.042	0.023	
75 %		0.097	0.097	0.096	0.095	0.095	0.040	0.040	0.021	
90 %		0.095	0.094	0.094	0.094	0.094	0.039	0.038	0.020	
None	R1 Stream	1.42	1.42	1.42	1.42	1.42	0.648	0.648	0.339	
50 %		1.42	1.42	1.42	1.42	1.42	0.648	0.648	0.339	
75 %		1.42	1.42	1.42	1.42	1.42	0.648	0.648	0.339	
90 %		1.42	1.42	1.42	1.42	1.42	0.648	0.648	0.339	
None	R2 Stream	0.574	0.574	0.574	0.574	0.574	0.256	0.256	0.133	
50 %		0.574	0.574	0.574	0.574	0.574	0.256	0.256	0.133	
75 %		0.574	0.574	0.574	0.574	0.574	0.256	0.256	0.133	
90 %		0.574	0.574	0.574	0.574	0.574	0.256	0.256	0.133	
None	R3 Stream	0.864	0.864	0.864	0.864	0.864	0.390	0.390	0.204	

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
50 %		0.864	0.864	0.864	0.864	0.864	0.390	0.390	0.204
75 %		0.864	0.864	0.864	0.864	0.864	0.390	0.390	0.204
90 %		0.864	0.864	0.864	0.864	0.864	0.390	0.390	0.204

Potatoes 1X - Late – 100 g a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 93: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	0.526	0.172	0.091	0.062	0.047	0.091	0.062	0.047
50 %		0.262	0.086	0.046	0.031	0.024	0.046	0.031	0.024
75 %		0.131	0.043	0.023	0.016	0.012	0.023	0.016	0.012
90 %		0.052	0.017	0.009	0.006	0.005	0.009	0.006	0.005
None	D4 Pond	0.754	0.753	0.752	0.751	0.751	0.752	0.751	0.751
50 %		0.751	0.751	0.750	0.750	0.749	0.750	0.750	0.749
75 %		0.749	0.749	0.749	0.749	0.749	0.749	0.749	0.749
90 %		0.749	0.748	0.748	0.748	0.748	0.748	0.748	0.748
None	D4 Stream	0.701	0.701	0.701	0.701	0.701	0.701	0.701	0.701
50 %		0.701	0.701	0.701	0.701	0.701	0.701	0.701	0.701
75 %		0.701	0.701	0.701	0.701	0.701	0.701	0.701	0.701
90 %		0.701	0.701	0.701	0.701	0.701	0.701	0.701	0.701
None	D6 Ditch	0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393
50 %		0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393
75 %		0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393
90 %		0.393	0.393	0.393	0.393	0.393	0.393	0.393	0.393
None	D6 Ditch, 2nd	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
50 %		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
75 %		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
90 %		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
None	R1 Pond	0.026	0.025	0.024	0.023	0.022	0.014	0.012	0.009
50 %		0.023	0.023	0.022	0.022	0.021	0.010	0.010	0.006
75 %		0.021	0.021	0.021	0.021	0.021	0.010	0.009	0.005
90 %		0.021	0.021	0.021	0.020	0.020	0.009	0.009	0.005



Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	D6 Ditch 2nd	0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.191	
75 %		0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.191	
90 %		0.191	0.191	0.191	0.191	0.191	0.191	0.191	0.191	
None		0.489	0.489	0.489	0.489	0.489	0.489	0.489	0.489	
50 %	R1 Pond	0.489	0.489	0.489	0.489	0.489	0.489	0.489	0.489	
75 %		0.489	0.489	0.489	0.489	0.489	0.489	0.489	0.489	
90 %		0.489	0.489	0.489	0.489	0.489	0.489	0.489	0.489	
None		0.003	0.003	0.003	0.003	0.003	0.001	0.001	0.001	
50 %	R1 Stream	0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
75 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
90 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
None		0.097	0.097	0.097	0.097	0.097	0.043	0.043	0.023	
50 %	R2 Stream	0.097	0.097	0.097	0.097	0.097	0.043	0.043	0.023	
75 %		0.097	0.097	0.097	0.097	0.097	0.043	0.043	0.023	
90 %		0.097	0.097	0.097	0.097	0.097	0.043	0.043	0.023	
None		0.081	0.081	0.081	0.081	0.081	0.037	0.037	0.019	
50 %	R3 Stream	0.081	0.081	0.081	0.081	0.081	0.037	0.037	0.019	
75 %		0.081	0.081	0.081	0.081	0.081	0.037	0.037	0.019	
90 %		0.081	0.081	0.081	0.081	0.081	0.037	0.037	0.019	
None		0.086	0.086	0.086	0.086	0.086	0.039	0.039	0.021	
50 %	R3 Stream	0.086	0.086	0.086	0.086	0.086	0.039	0.039	0.021	
75 %		0.086	0.086	0.086	0.086	0.086	0.039	0.039	0.021	
90 %		0.086	0.086	0.086	0.086	0.086	0.039	0.039	0.021	
90 %			0.086	0.086	0.086	0.086	0.086	0.039	0.039	0.021

* Maximum values coming from multiple applications are marked in italics

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Potatoes 4X - Late – 4 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 95: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	
50 %		0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	
75 %		0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	
90 %		0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	
None	D4 Pond	0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	
50 %		0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	
75 %		0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	
90 %		0.150	0.150	0.150	0.150	0.150	0.150	0.150	0.150	
None	D4 Stream	0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	
50 %		0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	
75 %		0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	
90 %		0.266	0.266	0.266	0.266	0.266	0.266	0.266	0.266	
None	D6 Ditch	0.226	0.226	0.226	0.226	0.226	0.226	0.226	0.226	
50 %		0.226	0.226	0.226	0.226	0.226	0.226	0.226	0.226	
75 %		0.226	0.226	0.226	0.226	0.226	0.226	0.226	0.226	
90 %		0.226	0.226	0.226	0.226	0.226	0.226	0.226	0.226	
None	D6 Ditch 2nd	0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	
50 %		0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	
75 %		0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	
90 %		0.360	0.360	0.360	0.360	0.360	0.360	0.360	0.360	
None	R1 Pond	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
50 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
75 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
90 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
None	R1 Stream	0.085	0.085	0.085	0.085	0.085	0.038	0.038	0.020	
50 %		0.085	0.085	0.085	0.085	0.085	0.038	0.038	0.020	
75 %		0.085	0.085	0.085	0.085	0.085	0.038	0.038	0.020	
90 %		0.085	0.085	0.085	0.085	0.085	0.038	0.038	0.020	
None	R2 Stream	0.092	0.092	0.092	0.092	0.092	0.042	0.042	0.022	
50 %		0.092	0.092	0.092	0.092	0.092	0.042	0.042	0.022	
75 %		0.092	0.092	0.092	0.092	0.092	0.042	0.042	0.022	
90 %		0.092	0.092	0.092	0.092	0.092	0.042	0.042	0.022	
None	R3 Stream	0.118	0.118	0.118	0.118	0.118	0.054	0.054	0.028	



Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
50 %		<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.054</i>	<i>0.054</i>	<i>0.028</i>
75 %		<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.054</i>	<i>0.054</i>	<i>0.028</i>
90 %		<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.118</i>	<i>0.054</i>	<i>0.054</i>	<i>0.028</i>

* Maximum values coming from multiple applications are marked in italics

Potatoes 3X - Early – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 96: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>
50 %		<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>
75 %		<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>
90 %		<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>	<i>0.014</i>
None	D4 Pond	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>
50 %		<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>
75 %		<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>
90 %		<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>	<i>0.153</i>
None	D4 Stream	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>
50 %		<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>
75 %		<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>
90 %		<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>	<i>0.272</i>
None	D6 Ditch	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>
50 %		<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>
75 %		<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>
90 %		<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>	<i>0.144</i>
None	D6 Ditch 2nd	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>
50 %		<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>
75 %		<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>
90 %		<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>	<i>0.364</i>
None	R1 Pond	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.001</i>	<i>0.001</i>	<i><0.001</i>
50 %		<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.001</i>	<i>0.001</i>	<i><0.001</i>
75 %		<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.003</i>	<i>0.001</i>	<i>0.001</i>	<i><0.001</i>

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PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
50 %	D6 Ditch 2nd	0.161	0.161	0.161	0.161	0.161	0.161	0.161	0.161	0.161
75 %		0.161	0.161	0.161	0.161	0.161	0.161	0.161	0.161	0.161
90 %		0.161	0.161	0.161	0.161	0.161	0.161	0.161	0.161	0.161
None		0.326	0.326	0.326	0.326	0.326	0.326	0.326	0.326	0.326
50 %	R1 Pond	0.326	0.326	0.326	0.326	0.326	0.326	0.326	0.326	0.326
75 %		0.326	0.326	0.326	0.326	0.326	0.326	0.326	0.326	0.326
90 %		0.326	0.326	0.326	0.326	0.326	0.326	0.326	0.326	0.326
None		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
50 %	R1 Stream	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
None		0.054	0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013
50 %	R2 Stream	0.054	0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013
75 %		0.054	0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013
90 %		0.054	0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013
None		0.064	0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015
50 %	R3 Stream	0.064	0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015
75 %		0.064	0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015
90 %		0.064	0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015
None		0.109	0.109	0.109	0.109	0.109	0.109	0.050	0.050	0.026
50 %	R3 Stream	0.109	0.109	0.109	0.109	0.109	0.109	0.050	0.050	0.026
75 %		0.109	0.109	0.109	0.109	0.109	0.109	0.050	0.050	0.026
90 %		0.109	0.109	0.109	0.109	0.109	0.109	0.050	0.050	0.026
None		0.109	0.109	0.109	0.109	0.109	0.109	0.050	0.050	0.026

* Maximum values coming from multiple applications are marked in italics

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Potatoes 2X - Early – 2 × 100 g a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 98: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
50 %		0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
75 %		0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
90 %		0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
None	D4 Pond	0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	
50 %		0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	
75 %		0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	
90 %		0.101	0.101	0.101	0.101	0.101	0.101	0.101	0.101	
None	D4 Stream	0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	
50 %		0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	
75 %		0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	
90 %		0.181	0.181	0.181	0.181	0.181	0.181	0.181	0.181	
None	D6 Ditch	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	
50 %		0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	
75 %		0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	
90 %		0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	
None	D6 Ditch 2nd	0.242	0.242	0.242	0.242	0.242	0.242	0.242	0.242	
50 %		0.242	0.242	0.242	0.242	0.242	0.242	0.242	0.242	
75 %		0.242	0.242	0.242	0.242	0.242	0.242	0.242	0.242	
90 %		0.242	0.242	0.242	0.242	0.242	0.242	0.242	0.242	
None	R1 Pond	0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
50 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
75 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
90 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
None	R1 Stream	0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013	
50 %		0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013	
75 %		0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013	
90 %		0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013	
None	R2 Stream	0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	
50 %		0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	
75 %		0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	
90 %		0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	
None	R3 Stream	0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	



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PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	D6 Ditch 2nd	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051
75 %		0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051
90 %		0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051
None		0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121
50 %	R1 Pond	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121
75 %		0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121
90 %		0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121	0.121
None		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
50 %	R1 Stream	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
None		0.022	0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005
50 %	R2 Stream	0.022	0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005
75 %		0.022	0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005
90 %		0.022	0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005
None		0.020	0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005
50 %	R3 Stream	0.020	0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005
75 %		0.020	0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005
90 %		0.020	0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005
None		0.016	0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004
50 %	R3 Stream	0.016	0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004
75 %		0.016	0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004
90 %		0.016	0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004
None		0.016	0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004

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Potatoes 1X - Late – 100 g a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 101: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
50 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
75 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
90 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
None	D4 Pond	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	
50 %		0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	
75 %		0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	
90 %		0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	
None	D4 Stream	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	
50 %		0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	
75 %		0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	
90 %		0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	
None	D6 Ditch	0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	
50 %		0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	
75 %		0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	
90 %		0.051	0.051	0.051	0.051	0.051	0.051	0.051	0.051	
None	D6 Ditch 2nd	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	
50 %		0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	
75 %		0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	
90 %		0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	
None	R1 Pond	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None	R1 Stream	0.019	0.019	0.019	0.019	0.019	0.009	0.009	0.005	
50 %		0.019	0.019	0.019	0.019	0.019	0.009	0.009	0.005	
75 %		0.019	0.019	0.019	0.019	0.019	0.009	0.009	0.005	
90 %		0.019	0.019	0.019	0.019	0.019	0.009	0.009	0.005	
None	R2 Stream	0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005	
50 %		0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005	
75 %		0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005	
90 %		0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005	
None	R3 Stream	0.046	0.046	0.046	0.046	0.046	0.021	0.021	0.011	



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PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %	D6 Ditch	6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	
90 %		6.07	6.07	6.07	6.07	6.07	6.07	6.07	6.07	
None		4.10	4.10	4.09	4.09	4.09	4.09	4.09	4.09	
50 %		4.10	4.09	4.09	4.09	4.09	4.09	4.09	4.09	
75 %	D6 Ditch 2nd	4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	
90 %		4.09	4.09	4.09	4.09	4.09	4.09	4.09	4.09	
None		12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
50 %		12.6	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
75 %	R1 Pond	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
90 %		12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5	
None		0.736	0.717	0.674	0.651	0.637	0.367	0.344	0.213	
50 %		0.650	0.641	0.619	0.608	0.601	0.309	0.297	0.173	
75 %	R1 Stream	0.607	0.600	0.592	0.586	0.582	0.280	0.274	0.153	
90 %		0.580	0.579	0.575	0.573	0.571	0.262	0.260	0.141	
None		0.643	0.637	0.633	0.634	0.634	0.290	0.289	0.154	
50 %		0.638	0.635	0.634	0.633	0.633	0.289	0.289	0.154	
75 %	R2 Stream	0.635	0.634	0.633	0.633	0.633	0.288	0.288	0.153	
90 %		0.634	0.633	0.633	0.633	0.633	0.288	0.288	0.153	
None		1.94	1.93	1.93	1.93	1.93	0.629	0.629	0.312	
50 %		1.93	1.93	1.93	1.93	1.93	0.628	0.628	0.311	
75 %	R3 Stream	1.93	1.93	1.93	1.93	1.93	0.628	0.627	0.311	
90 %		1.93	1.93	1.93	1.93	1.93	0.627	0.627	0.311	
None		3.05	3.06	3.05	3.05	3.05	1.17	1.17	0.604	
50 %		3.06	3.05	3.05	3.05	3.05	1.16	1.16	0.602	
75 %	R3 Stream	3.05	3.05	3.05	3.05	3.05	1.16	1.16	0.601	
90 %		3.05	3.05	3.05	3.05	3.05	1.16	1.16	0.600	

* Maximum values coming from multiple applications are marked in italics

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Potatoes 3X - Early – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 104: FOCUS Step 4 PECsed results for fluopicolide, GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.225	0.078	0.043	0.031	0.027	0.043	0.031	0.027	
50 %		0.117	0.041	0.027	0.026	0.026	0.027	0.026	0.026	
75 %		0.062	0.027	0.026	0.026	0.025	0.026	0.026	0.025	
90 %		0.028	0.026	0.025	0.025	0.025	0.025	0.025	0.025	
None	D4 Pond	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	
50 %		13.1	13.1	13.0	13.0	13.0	13.0	13.0	13.0	
75 %		13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	
90 %		13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0	
None	D4 Stream	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	
50 %		4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	
75 %		4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	
90 %		4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	
None	D6 Ditch	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	
50 %		2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	
75 %		2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	
90 %		2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28	
None	D6 Ditch 2nd	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	
50 %		5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	
75 %		5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	
90 %		5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	
None	R1 Pond	1.16	1.09	1.11	1.09	1.08	0.531	0.512	0.292	
50 %		1.09	1.09	1.07	1.06	1.05	0.485	0.475	0.260	
75 %		1.06	1.05	1.05	1.04	1.04	0.461	0.457	0.245	
90 %		1.04	1.04	1.03	1.03	1.03	0.447	0.445	0.235	
None	R1 Stream	1.36	1.36	1.36	1.36	1.36	0.572	0.572	0.301	
50 %		1.36	1.36	1.36	1.36	1.36	0.571	0.571	0.300	
75 %		1.36	1.36	1.36	1.36	1.36	0.571	0.571	0.300	
90 %		1.36	1.36	1.36	1.36	1.36	0.571	0.571	0.300	
None	R2 Stream	0.979	0.977	0.976	0.975	0.975	0.382	0.381	0.198	
50 %		0.977	0.976	0.975	0.975	0.975	0.381	0.381	0.198	
75 %		0.976	0.975	0.975	0.975	0.975	0.381	0.381	0.197	
90 %		0.975	0.975	0.975	0.975	0.975	0.381	0.381	0.197	
None	R3 Stream	1.19	1.18	1.17	1.17	1.17	0.518	0.516	0.275	

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Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
50 %		<i>1.18</i>	<i>1.17</i>	<i>1.17</i>	<i>1.17</i>	<i>1.17</i>	<i>0.515</i>	<i>0.514</i>	<i>0.273</i>
75 %		<i>1.17</i>	<i>1.17</i>	<i>1.17</i>	<i>1.17</i>	<i>1.17</i>	<i>0.513</i>	<i>0.513</i>	<i>0.273</i>
90 %		<i>1.17</i>	<i>1.17</i>	<i>1.17</i>	<i>1.17</i>	<i>1.17</i>	<i>0.513</i>	<i>0.512</i>	<i>0.273</i>

* Maximum values coming from multiple applications are marked in italics

Potatoes 3X - Late – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT IV)

Table 9.2.5- 105: FOCUS Step 4 PEC_{sed} results for fluopicolide GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	0.342	0.082	0.031	0.031	0.024	0.045	0.031	0.024
50 %		0.125	0.043	0.023	0.016	0.012	0.023	0.016	0.012
75 %		0.066	0.022	0.012	0.009	0.007	0.012	0.009	0.007
90 %		0.027	0.009	0.006	0.006	0.006	0.006	0.006	0.006
None	D4 Pond	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
50 %		12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
75 %		12.2	12.2	12.1	12.1	12.1	12.1	12.1	12.1
90 %		12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
None	D4 Stream	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42
50 %		4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42
75 %		4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42
90 %		4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42
None	D6 Ditch	2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72
50 %		2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72
75 %		2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72
90 %		2.72	2.72	2.72	2.72	2.72	2.72	2.72	2.72
None	D6 Ditch 2nd	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
50 %		10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
75 %		10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
90 %		10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
None	R1 Pond	0.462	0.447	0.411	0.393	0.381	0.238	0.218	0.141
50 %		0.392	0.384	0.367	0.357	0.352	0.190	0.181	0.108
75 %		0.357	0.353	0.344	0.340	0.337	0.167	0.162	0.092

Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
75 %		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
90 %		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
None	D6 Ditch 2nd	3.40	3.39	3.39	3.39	3.39	3.39	3.39	3.39	
50 %		3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	
75 %		3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	
90 %		3.39	3.39	3.39	3.39	3.39	3.39	3.39	3.39	
None	R1 Pond	0.840	0.828	0.800	0.786	0.777	0.387	0.321	0.214	
50 %		0.786	0.780	0.766	0.759	0.754	0.361	0.343	0.189	
75 %		0.759	0.756	0.749	0.745	0.743	0.333	0.329	0.177	
90 %		0.742	0.741	0.738	0.733	0.736	0.322	0.320	0.169	
None	R1 Stream	0.764	0.758	0.756	0.756	0.755	0.299	0.299	0.156	
50 %		0.759	0.756	0.755	0.755	0.755	0.299	0.299	0.155	
75 %		0.755	0.755	0.755	0.755	0.754	0.298	0.298	0.155	
90 %		0.755	0.755	0.754	0.754	0.754	0.298	0.298	0.155	
None	R2 Stream	0.599	0.597	0.596	0.596	0.596	0.239	0.239	0.125	
50 %		0.596	0.596	0.596	0.595	0.595	0.239	0.238	0.124	
75 %		0.596	0.596	0.595	0.595	0.595	0.238	0.238	0.124	
90 %		0.596	0.595	0.595	0.595	0.595	0.238	0.238	0.124	
None	R3 Stream	0.869	0.871	0.865	0.863	0.862	0.397	0.395	0.212	
50 %		0.874	0.865	0.862	0.861	0.860	0.394	0.393	0.210	
75 %		0.866	0.862	0.860	0.860	0.859	0.392	0.392	0.209	
90 %		0.862	0.860	0.859	0.859	0.859	0.391	0.391	0.208	

* Maximum values coming from multiple applications are marked in italics

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Potatoes 2X - Late – 2 × 100 g a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 107: FOCUS Step 4 PECsed results for fluopicolide, GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.246	0.082	0.044	0.030	0.023	0.044	0.030	0.023	
50 %		0.127	0.043	0.023	0.016	0.012	0.023	0.016	0.012	
75 %		0.066	0.022	0.011	0.008	0.006	0.012	0.008	0.006	
90 %		0.028	0.009	0.005	0.003	0.003	0.005	0.003	0.003	
None	D4 Pond	8.23	8.22	8.20	8.19	8.18	8.20	8.19	8.18	
50 %		8.19	8.19	8.18	8.17	8.17	8.18	8.17	8.17	
75 %		8.17	8.17	8.16	8.16	8.16	8.16	8.16	8.16	
90 %		8.16	8.16	8.15	8.15	8.15	8.15	8.15	8.15	
None	D4 Stream	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
50 %		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
75 %		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
90 %		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	
None	D6 Ditch	1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	
50 %		1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	
75 %		1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	
90 %		1.56	1.56	1.56	1.56	1.56	1.56	1.56	1.56	
None	D6 Ditch 2nd	6.25	6.27	6.26	6.25	6.25	6.26	6.25	6.25	
50 %		6.29	6.26	6.25	6.25	6.25	6.25	6.25	6.25	
75 %		6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	
90 %		6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25	
None	R1 Pond	0.379	0.367	0.339	0.325	0.315	0.194	0.178	0.114	
50 %		0.321	0.319	0.303	0.297	0.293	0.157	0.149	0.089	
75 %		0.297	0.291	0.287	0.284	0.282	0.139	0.135	0.076	
90 %		0.281	0.280	0.277	0.276	0.275	0.127	0.126	0.069	
None	R1 Stream	0.279	0.276	0.275	0.274	0.274	0.127	0.126	0.067	
50 %		0.276	0.275	0.274	0.274	0.274	0.126	0.126	0.067	
75 %		0.275	0.274	0.274	0.273	0.273	0.126	0.126	0.067	
90 %		0.274	0.273	0.273	0.273	0.273	0.125	0.125	0.067	
None	R2 Stream	0.690	0.687	0.686	0.686	0.686	0.260	0.260	0.134	
50 %		0.688	0.686	0.686	0.686	0.686	0.260	0.260	0.134	
75 %		0.686	0.686	0.686	0.686	0.686	0.260	0.260	0.134	
90 %		0.686	0.686	0.685	0.685	0.685	0.260	0.260	0.134	
None	R3 Stream	1.83	1.81	1.80	1.80	1.79	0.702	0.700	0.365	

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %		<i>1.81</i>	<i>1.80</i>	<i>1.79</i>	<i>1.79</i>	<i>1.79</i>	<i>0.698</i>	<i>0.697</i>	<i>0.363</i>	
75 %		<i>1.80</i>	<i>1.79</i>	<i>1.79</i>	<i>1.79</i>	<i>1.79</i>	<i>0.696</i>	<i>0.696</i>	<i>0.361</i>	
90 %		<i>1.79</i>	<i>1.79</i>	<i>1.79</i>	<i>1.79</i>	<i>1.79</i>	<i>0.695</i>	<i>0.695</i>	<i>0.361</i>	

* Maximum values coming from multiple applications are marked in italics

Potatoes 1X - Early – 100 g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 108: FOCUS Step 4 PEC_{sed} results for fluopicolide GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.006	0.071	0.020	0.027	0.024	0.039	0.027	0.021	
50 %		0.106	0.037	0.020	0.014	0.011	0.020	0.014	0.011	
75 %		0.055	0.019	0.010	0.007	0.006	0.010	0.007	0.006	
90 %		0.023	0.008	0.004	0.003	0.003	0.004	0.003	0.002	
None	D4 Pond	4.17	4.4	4.16	4.15	4.15	4.16	4.15	4.15	
50 %		4.15	4.15	4.14	4.14	4.14	4.14	4.14	4.14	
75 %		4.14	4.14	4.14	4.14	4.13	4.14	4.14	4.13	
90 %		4.13	4.13	4.13	4.13	4.13	4.13	4.13	4.13	
None	D4 Stream	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
50 %		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
75 %		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
90 %		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	
None	D6 Ditch	0.768	0.765	0.765	0.765	0.765	0.765	0.765	0.765	
50 %		0.766	0.765	0.765	0.765	0.765	0.765	0.765	0.765	
75 %		0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.765	
90 %		0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.765	
None	D6 Ditch 2nd	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
50 %		1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
75 %		1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
90 %		1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
None	R1 Pond	0.524	0.517	0.500	0.491	0.485	0.241	0.232	0.134	
50 %		0.490	0.486	0.478	0.473	0.471	0.218	0.213	0.118	
75 %		0.473	0.471	0.467	0.465	0.463	0.206	0.204	0.110	



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PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %	D6 Ditch 2nd	0.739	0.738	0.738	0.738	0.738	0.738	0.738	0.738	
90 %		0.738	0.738	0.737	0.737	0.737	0.737	0.737	0.737	
None		2.59	2.57	2.57	2.56	2.56	2.57	2.56	2.56	
50 %		2.58	2.57	2.56	2.56	2.56	2.56	2.56	2.56	
75 %	R1 Pond	2.57	2.56	2.56	2.56	2.56	2.56	2.56	2.56	
90 %		2.56	2.56	2.56	2.56	2.56	2.56	2.56	2.56	
None		0.187	0.179	0.162	0.153	0.142	0.099	0.090	0.060	
50 %		0.152	0.143	0.140	0.135	0.132	0.076	0.071	0.044	
75 %	R1 Stream	0.135	0.133	0.129	0.126	0.125	0.064	0.062	0.036	
90 %		0.124	0.124	0.122	0.121	0.120	0.057	0.056	0.031	
None		0.118	0.116	0.116	0.115	0.115	0.053	0.053	0.028	
50 %		0.116	0.116	0.116	0.115	0.115	0.053	0.053	0.028	
75 %	R2 Stream	0.116	0.115	0.115	0.115	0.115	0.053	0.053	0.028	
90 %		0.115	0.115	0.115	0.115	0.115	0.053	0.053	0.028	
None		0.299	0.298	0.298	0.297	0.297	0.116	0.116	0.060	
50 %		0.298	0.298	0.297	0.297	0.297	0.116	0.116	0.060	
75 %	R3 Stream	0.298	0.297	0.297	0.297	0.297	0.116	0.116	0.060	
90 %		0.297	0.297	0.297	0.297	0.297	0.116	0.116	0.060	
None		0.917	0.904	0.904	0.904	0.902	0.348	0.347	0.180	
50 %		0.903	0.903	0.902	0.901	0.901	0.346	0.346	0.179	
75 %	R3 Stream	0.904	0.902	0.901	0.900	0.900	0.345	0.345	0.179	
90 %		0.903	0.901	0.900	0.900	0.900	0.345	0.344	0.178	

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Metabolite M-03 (AE 0608000)

Potatoes 4X - Early – 4 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 110: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	
50 %		0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	
75 %		0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	
90 %		0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	
None	D4 Pond	0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	
50 %		0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	
75 %		0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	
90 %		0.275	0.275	0.275	0.275	0.275	0.275	0.275	0.275	
None	D4 Stream	0.513	0.513	0.513	0.513	0.513	0.513	0.513	0.513	
50 %		0.513	0.513	0.513	0.513	0.513	0.513	0.513	0.513	
75 %		0.513	0.513	0.513	0.513	0.513	0.513	0.513	0.513	
90 %		0.513	0.513	0.513	0.513	0.513	0.513	0.513	0.513	
None	D6 Ditch	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	
50 %		0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	
75 %		0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	
90 %		0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308	
None	D6 Ditch 2nd	0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	
50 %		0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	
75 %		0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	
90 %		0.528	0.528	0.528	0.528	0.528	0.528	0.528	0.528	
None	R1 Pond	0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
50 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
75 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
90 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
None	R1 Stream	0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005	
50 %		0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005	
75 %		0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005	
90 %		0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005	
None	R2 Stream	0.024	0.024	0.024	0.024	0.024	0.011	0.011	0.006	
50 %		0.024	0.024	0.024	0.024	0.024	0.011	0.011	0.006	
75 %		0.024	0.024	0.024	0.024	0.024	0.011	0.011	0.006	
90 %		0.024	0.024	0.024	0.024	0.024	0.011	0.011	0.006	



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PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m
No spray buffer (m)	0 m		5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	R3 Stream	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.011</i>	<i>0.011</i>	<i>0.006</i>	
50 %		<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.011</i>	<i>0.011</i>	<i>0.006</i>	
75 %		<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.011</i>	<i>0.011</i>	<i>0.006</i>	
90 %		<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.024</i>	<i>0.011</i>	<i>0.011</i>	<i>0.006</i>	

* Maximum values coming from multiple applications are marked in italics

Potatoes 4X - Late – 4 × 100 g a.s./ha, 7d int (DGR I / PMT II)

Table 9.2.5- 111: FOCUS Step 4 PEC_{sed} results for M-03 (AE 0608000), GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m
No spray buffer (m)	0 m		5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	
50 %		<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	
75 %		<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	
90 %		<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	<i>0.043</i>	
None	D4 Pond	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	
50 %		<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	
75 %		<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	
90 %		<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	<i>0.202</i>	
None	D4 Stream	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	
50 %		<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	
75 %		<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	
90 %		<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	<i>0.382</i>	
None	D6 Ditch	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	
50 %		<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	
75 %		<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	
90 %		<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	<i>0.374</i>	
None	D6 Ditch 2nd	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	
50 %		<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	
75 %		<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	
90 %		<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	<i>0.598</i>	
None	R1 Pond	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i><0.001</i>	<i><0.001</i>	<i><0.001</i>	
50 %		<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i><0.001</i>	<i><0.001</i>	<i><0.001</i>	



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PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D6 Ditch	0.233	0.233	0.233	0.233	0.233	0.233	0.233	0.233	
50 %		0.233	0.233	0.233	0.233	0.233	0.233	0.233	0.233	
75 %		0.233	0.233	0.233	0.233	0.233	0.233	0.233	0.233	
90 %		0.233	0.233	0.233	0.233	0.233	0.233	0.233	0.233	
None	D6 Ditch 2nd	0.394	0.394	0.394	0.394	0.394	0.394	0.394	0.394	
50 %		0.394	0.394	0.394	0.394	0.394	0.394	0.394	0.394	
75 %		0.394	0.394	0.394	0.394	0.394	0.394	0.394	0.394	
90 %		0.394	0.394	0.394	0.394	0.394	0.394	0.394	0.394	
None	R1 Pond	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
50 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
75 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
90 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
None	R1 Stream	0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004	
50 %		0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004	
75 %		0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004	
90 %		0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004	
None	R2 Stream	0.019	0.019	0.019	0.019	0.019	0.009	0.009	0.005	
50 %		0.019	0.019	0.019	0.019	0.019	0.009	0.009	0.005	
75 %		0.019	0.019	0.019	0.019	0.019	0.009	0.009	0.005	
90 %		0.019	0.019	0.019	0.019	0.019	0.009	0.009	0.005	
None	R3 Stream	0.017	0.017	0.017	0.017	0.017	0.008	0.008	0.004	
50 %		0.017	0.017	0.017	0.017	0.017	0.008	0.008	0.004	
75 %		0.017	0.017	0.017	0.017	0.017	0.008	0.008	0.004	
90 %		0.017	0.017	0.017	0.017	0.017	0.008	0.008	0.004	

* Maximum values coming from multiple applications are marked in italics

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Potatoes 3X - Late – 3 × 100 g a.s./ha, 7d int. (DGR II / PMT IV)

Table 9.2.5- 113: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	
50 %		0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	
75 %		0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	
90 %		0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	
None	D4 Pond	0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	
50 %		0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	
75 %		0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	
90 %		0.147	0.147	0.147	0.147	0.147	0.147	0.147	0.147	
None	D4 Stream	0.283	0.283	0.283	0.283	0.283	0.283	0.283	0.283	
50 %		0.283	0.283	0.283	0.283	0.283	0.283	0.283	0.283	
75 %		0.283	0.283	0.283	0.283	0.283	0.283	0.283	0.283	
90 %		0.283	0.283	0.283	0.283	0.283	0.283	0.283	0.283	
None	D6 Ditch	0.258	0.258	0.258	0.258	0.258	0.258	0.258	0.258	
50 %		0.258	0.258	0.258	0.258	0.258	0.258	0.258	0.258	
75 %		0.258	0.258	0.258	0.258	0.258	0.258	0.258	0.258	
90 %		0.258	0.258	0.258	0.258	0.258	0.258	0.258	0.258	
None	D6 Ditch 2nd	0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	
50 %		0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	
75 %		0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	
90 %		0.436	0.436	0.436	0.436	0.436	0.436	0.436	0.436	
None	R1 Pond	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None	R1 Stream	0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.002	
50 %		0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.002	
75 %		0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.002	
90 %		0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.002	
None	R2 Stream	0.019	0.019	0.019	0.019	0.019	0.008	0.008	0.004	
50 %		0.019	0.019	0.019	0.019	0.019	0.008	0.008	0.004	
75 %		0.019	0.019	0.019	0.019	0.019	0.008	0.008	0.004	
90 %		0.019	0.019	0.019	0.019	0.019	0.008	0.008	0.004	
None	R3 Stream	0.031	0.031	0.031	0.031	0.031	0.014	0.014	0.007	



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PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
50 %		<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.014</i>	<i>0.014</i>	<i>0.007</i>
75 %		<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.014</i>	<i>0.014</i>	<i>0.007</i>
90 %		<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.031</i>	<i>0.014</i>	<i>0.014</i>	<i>0.007</i>

* Maximum values coming from multiple applications are marked in italics

Potatoes 2X - Early – 2 × 100 g a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 114: FOCUS Step 4 PEC_{sed} results for M-03 (AE 0608000), GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>
50 %		<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>
75 %		<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>
90 %		<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>	<i>0.034</i>
None	D4 Pond	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>
50 %		<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>
75 %		<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>
90 %		<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>	<i>0.135</i>
None	D4 Stream	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>
50 %		<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>
75 %		<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>
90 %		<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>	<i>0.249</i>
None	D6 Ditch	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>
50 %		<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>
75 %		<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>
90 %		<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>	<i>0.159</i>
None	D6 Ditch 2nd	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>
50 %		<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>
75 %		<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>
90 %		<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>	<i>0.261</i>
None	R1 Pond	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i><0.001</i>	<i><0.001</i>	<i><0.001</i>
50 %		<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i><0.001</i>	<i><0.001</i>	<i><0.001</i>
75 %		<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i>0.001</i>	<i><0.001</i>	<i><0.001</i>	<i><0.001</i>



Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	D6 Ditch 2nd	0.157	0.157	0.157	0.157	0.157	0.157	0.157	0.157	
75 %		0.157	0.157	0.157	0.157	0.157	0.157	0.157	0.157	
90 %		0.157	0.157	0.157	0.157	0.157	0.157	0.157	0.157	
None		0.292	0.292	0.292	0.292	0.292	0.292	0.292	0.292	
50 %	R1 Pond	0.292	0.292	0.292	0.292	0.292	0.292	0.292	0.292	
75 %		0.292	0.292	0.292	0.292	0.292	0.292	0.292	0.292	
90 %		0.292	0.292	0.292	0.292	0.292	0.292	0.292	0.292	
None		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %	R1 Stream	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	
50 %	R2 Stream	0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	
75 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	
90 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	
None		0.013	0.013	0.013	0.013	0.013	0.006	0.006	0.003	
50 %	R3 Stream	0.013	0.013	0.013	0.013	0.013	0.006	0.006	0.003	
75 %		0.013	0.013	0.013	0.013	0.013	0.006	0.006	0.003	
90 %		0.013	0.013	0.013	0.013	0.013	0.006	0.006	0.003	
None		0.023	0.023	0.023	0.023	0.023	0.010	0.010	0.005	
50 %	R3 Stream	0.023	0.023	0.023	0.023	0.023	0.010	0.010	0.005	
75 %		0.023	0.023	0.023	0.023	0.023	0.010	0.010	0.005	
90 %		0.023	0.023	0.023	0.023	0.023	0.010	0.010	0.005	
None		0.023	0.023	0.023	0.023	0.023	0.010	0.010	0.005	

* Maximum values coming from multiple applications are marked in italics

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Potatoes 1X - Early – 100 g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 116: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	
50 %		0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	
75 %		0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	
90 %		0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	
None	D4 Pond	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	
50 %		0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	
75 %		0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	
90 %		0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	
None	D4 Stream	0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	
50 %		0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	
75 %		0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	
90 %		0.122	0.122	0.122	0.122	0.122	0.122	0.122	0.122	
None	D6 Ditch	0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	
50 %		0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	
75 %		0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	
90 %		0.086	0.086	0.086	0.086	0.086	0.086	0.086	0.086	
None	D6 Ditch 2nd	0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131	
50 %		0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131	
75 %		0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131	
90 %		0.131	0.131	0.131	0.131	0.131	0.131	0.131	0.131	
None	R1 Pond	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None	R1 Stream	0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
50 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
75 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
90 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
None	R2 Stream	0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
50 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
75 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
90 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
None	R3 Stream	0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	



PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	R1 Stream	0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
50 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
75 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
90 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
None	R2 Stream	0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
50 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
75 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
90 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
None	R3 Stream	0.012	0.012	0.012	0.012	0.012	0.005	0.005	0.003	
50 %		0.012	0.012	0.012	0.012	0.012	0.005	0.005	0.003	
75 %		0.012	0.012	0.012	0.012	0.012	0.005	0.005	0.003	
90 %		0.012	0.012	0.012	0.012	0.012	0.005	0.005	0.003	

III. Conclusion

Predicted environmental concentrations of the fungicide fluopicolide and its metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use on potatoes in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered.

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2001,2015) and is considered valid to assess predicted environmental concentrations in surface water (PEC_{sw}) and sediment (PEC_{sed}) for fluopicolide and its metabolites in potatoes.

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Data Point:	KCP 9.2.5/10
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (FLC) and metabolites: PEC _{sw} , sed FOCUS EUR - Use in leafy vegetables in Europe
Report No:	EnSa-20-0398
Document No:	M-687155-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

Predicted environmental concentrations of the fungicide fluopicolide and metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The uses of fluopicolide in lettuce were assessed according to the Good Agricultural Practice (GAP) in Europe.

I Materials and Methods

Predicted environmental concentrations of the fungicide fluopicolide and its metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The uses of fluopicolide in relevant crops were assessed according to the Good Agricultural Practice (GAP) in Europe. Intended GAPs for the use of fluopicolide in Europe were analysed and consolidated according to regulatory and modelling requirements. As a result, one or more uses may be covered by a single modelling GAP row (DGR). The translation of the regulatory GAP for modelling purposes is shown in Table 9.2.5-118.

Table 9.2.5-118: GAP translation for modelling purposes

GAP group ID	GAP group name (DGR) and use IDs	Covered crop(s)	Growth stage	Max. apps	Interval (days)	Rate (kg a.s./ha)
DGR I	lettuce	lettuce	BBCH 13 - 49	1	-	1 × 0.1
DGR II	lettuce	lettuce	BBCH 41 - 49	2	7	2 × 0.1

The implementation of the modelling GAP (Table 9.2.5-118) at Steps 1-2 level is shown in Table 9.2.5-119. One or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Table 9.2.5- 119: FOCUS Steps 1-2 specific data for the GAPs assessed

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)	Season	Crop cover
DGR I PMT I	lettuce	early	vegetables, leafy (arable crops)	spring (Mar. - May)	min crop cover
DGR I PMT II	lettuce	late	vegetables, leafy (arable crops)	summer (Jun. - Sep.)	full canopy
DGR II PMT III	lettuce 2x	double	vegetables, leafy (arable crops)	summer (Jun. - Sep.)	full canopy

This section provides the implementation of the modelling GAP (Table 9.2.5-118) at Step 3 level. Also here one or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Please note that PMTs at Steps 1-2 and Step 3 do not necessarily fully correspond to each other due to inherent differences in the models.

The application dates for this assessment were set with the help of the tool AppDate (Klein 2018), which proposes dates for specific crop stages (given as BBCH code) based on the crop development as defined in the FOCUS model scenarios for groundwater and surface water.

The summary of all Step 3 PMTs is provided in Table 9.2.5- 120. The detailed information on individual uses is given in the tables that follow.

Table 9.2.5- 120: Overview of FOCUS Step 3 assessments

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)
DGR I PMT I	Lettuce	Early	Vegetables, leafy (arable crops)
DGR I PMT II	Lettuce	Late	Vegetables, leafy (arable crops)
DGR II PMT III	Lettuce 2x	Double	Vegetables, leafy (arable crops)

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GAP group name lettuce, assessment name early

Table 9.2.5- 121: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	08-May - 03-Jun
	D3 Ditch (2nd)	17-Aug - 16-Sep
	D4 Pond/Stream	01-Jun - 01-Jul
	D6 Ditch	30-Aug - 29-Sep
	R1 Pond/Stream	03-May - 02-Jun
	R1 Pond/Stream (2nd)	12-Aug - 11-Sep
	R2 Stream	24-Mar - 23-Apr
	R2 Stream (2nd)	10-Aug - 09-Sep
	R3 Stream	20-Mar - 19-Apr
	R3 Stream (2nd)	02-Jul - 01-Aug
	R4 Stream	20-Mar - 19-Apr
R4 Stream (2nd)	04-Jul - 03-Aug	

Table 9.2.5- 122: Full FOCUS Step 3 application data

Run IDs		DGR1/ PM11			
GAP group name (DGR)		Lettuce			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Vegetables, leafy (arable crops)			
Use pattern		0.1 kg a.s./ha			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 x appln for linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		30 days for all scenarios (min = 30 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	08-May/07-Jun (128/153)	14-May	R1 Pond/Stream	03-May/02-Jun (123/153)	03-May
D3 Ditch (2nd)	17-Aug/16-Sep (229/259)	18-Aug	R1 Pond/Stream (2nd)	12-Aug/11-Sep (224/254)	20-Aug
D4 Pond/Stream	01-Jun/01-Jul (150/182)	01-Jun	R2 Stream	24-Mar/23-Apr (83/113)	22-Apr
D6 Ditch	30-Aug/29-Sep (242/272)	31-Aug	R2 Stream (2nd)	10-Aug/09-Sep (222/252)	10-Aug
			R3 Stream	20-Mar/19-Apr (79/109)	28-Mar
			R3 Stream (2nd)	02-Jul/01-Aug (183/213)	06-Jul
			R4 Stream	20-Mar/19-Apr (79/109)	03-Apr
			R4 Stream (2nd)	04-Jul/03-Aug (185/215)	12-Jul

GAP group name lettuce, assessment name late

Table 9.2.5- 123: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	09-Jun - 16-Jul
	D3 Ditch (2nd)	09-Sep - 18-Oct
	D4 Pond/Stream	13-Aug - 19-Sep
	D6 Ditch	18-Oct - 24-Nov
	R1 Pond/Stream	04-Jun - 11-Jul
	R1 Pond/Stream (2nd)	04-Sep - 11-Oct
	R2 Stream	20-May - 26-Jun
	R2 Stream (2nd)	01-Oct - 07-Nov
	R3 Stream	22-Apr - 29-May
	R3 Stream (2nd)	06-Aug - 12-Sep
	R4 Stream	22-Apr - 29-May
	R4 Stream (2nd)	06-Aug - 12-Sep

Table 9.2.5- 124: Full FOCUS Step 3 application data

Run IDs		DGR IPMT			
GAP group name (DGR)		Lettuce			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Vegetables, leafy (arable crops)			
Use pattern		0.1 kg a.s./ha			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar lines, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		37 days for all scenarios (min = 30 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	09-Jun/16-Jul (160/197)	14-Jun	R1 Pond/Stream	04-Jun/11-Jul (155/192)	29-Jun
D3 Ditch (2nd)	09-Sep/16-Oct (252/289)	17-Sep	R1 Pond/Stream (2nd)	04-Sep/11-Oct (247/284)	19-Sep
D4 Pond/Stream	13-Aug/19-Sep (225/262)	27-Aug	R2 Stream	20-May/26-Jun (140/177)	20-May
D6 Ditch	18-Oct/24-Nov (291/328)	18-Oct	R2 Stream (2nd)	01-Oct/07-Nov (274/311)	01-Oct
			R3 Stream	22-Apr/29-May (112/149)	22-Apr
			R3 Stream (2nd)	06-Aug/12-Sep (218/255)	28-Aug
			R4 Stream	22-Apr/29-May (112/149)	23-Apr
			R4 Stream (2nd)	06-Aug/12-Sep (218/255)	12-Aug

GAP group name lettuce 2x, assessment name double

Table 9.2.5- 125: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Lettuce 2x	D3 Ditch	09-Jun - 16-Jul
	D3 Ditch (2nd)	09-Sep - 16-Oct
	D4 Pond/Stream	13-Aug - 19-Sep
	D6 Ditch	18-Oct - 24-Nov
	R1 Pond/Stream	04-Jun - 11-Jul
	R1 Pond/Stream (2nd)	04-Sep - 11-Oct
	R2 Stream	20-May - 26-Jun
	R2 Stream (2nd)	01-Oct - 07-Nov
	R3 Stream	22-Apr - 29-May
	R3 Stream (2nd)	06-Aug - 12-Sep
	R4 Stream	22-Apr - 29-May
	R4 Stream (2nd)	06-Aug - 12-Sep

Table 9.2.5- 126: Full FOCUS Step 3 application data

Run IDs		DGR ID: PMT11			
GAP group name (DGR)		Lettuce 2x			
Assessment name (PMT)		Double			
FOCUS model crop (crop group)		Vegetables, leafy (arable crops)			
Use pattern		2×0.1 kg a.s./ha, 7d int			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar lines, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		37 days for all scenarios (min = 37 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	09-Jun/16-Jul (160/197)	14-Jun 25-Jun	R1 Pond/Stream	04-Jun/11-Jul (155/192)	29-Jun 11-Jul
D3 Ditch (2nd)	09-Sep/16-Oct (252/289)	17-Sep 24-Sep	R1 Pond/Stream (2nd)	04-Sep/11-Oct (247/284)	19-Sep 06-Oct
D4 Pond/Stream	13-Aug/19-Sep (225/262)	17-Aug 10-Sep	R2 Stream	20-May/26-Jun (140/177)	20-May 27-May
D6 Ditch	18-Oct/24-Nov (291/328)	28-Oct 25-Oct	R2 Stream (2nd)	01-Oct/07-Nov (274/311)	01-Oct 11-Oct
			R3 Stream	22-Apr/29-May (112/149)	22-Apr 18-May
			R3 Stream (2nd)	06-Aug/12-Sep (218/255)	07-Aug 19-Aug
			R4	22-Apr/29-May	23-Apr



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			Stream	(112/149)	04-May
			R4 Stream (2nd)	06-Aug/12-Sep (218/255)	12-Aug 19-Aug

Steps 1-2 calculations were performed according to formulas implemented in FOCUS STEPS v2 version 3.2.

Step 3 calculations were performed using the FOCUS SWASH 5.3 suite including
 FOCUS PRZM 4.3.1
 FOCUS MACRO 5.5.4
 FOCUS TOXSWA 5.5.3

Refinement at Step 4 level was performed with the SWAN tool version 5.0.0.

Standard procedures and settings were used for Steps 1-3 and 3 assessments. At Step 4 the following mitigation settings were used Table 9.2.5-127 and Table 9.2.5-128.

Table 9.2.5- 127: Mitigation approaches used

Buffer length	Mitigation type	Drift reduction nozzles
0 m	Spray drift	0%, 50%, 75%, 90 %
5 m	Spray drift	
10 m	Spray drift & RunOff	
15 m	Spray drift & RunOff	
20 m	Spray drift & RunOff	

Table 9.2.5- 128: Runoff mitigation parameters used for the assessment

Fractional reduction in:	10 m	15 m	20 m
Runoff: Volume	0.60	0.60	0.80
Flux	0.60	0.60	0.80
Erosion: Mass	0.85	0.85	0.95
Flux	0.85	0.85	0.95

Substance related parameters which have been used for fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) and whose derivation is described in detail in the core modelling document MCP 9.2.5/04 have been used in the calculations at FOCUS SW Steps 1-2 level are summarised in Table 9.2.5- 129 and at Step 3/4 level in Table 9.2.5- 130.

Table 9.2.5- 129: Substance parameters used at FOCUS Steps 1-2 level

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03 (AE 0608000)
Molar mass	(g/mol)	383.59	190.03	225.56	399.58
Water solubility	(mg/L)	2.8	1830	9721	10
Koc	(mL/g)	267.7	24.1	5.7	106.9
Degradation					
Soil	(days)	182	146	17.9	17.9
Total system	(days)	1000	1000	1000	1.9
Water	(days)	1000	1000	1000	1.9
Sediment	(days)	1000	1000	1000	1000
Max occurrence					
Water / sediment	(%)	100	20.3	8.2	0.001
Soil	(%)	100	48	16.4	10.6

Table 9.2.5- 130: Substance parameters used for fluopicolide and its metabolite M-03 (AE 0608000) at Step 3/4 level

Parameter	Unit	Parent	Metabolite
Substance		Fluopicolide	M-03 (AE 0608000)
SWASH code		FLC	M03
General			
Molar mass	(g/mol)	383.59	399.58
Water solubility (temp.)	(mg/L)	2.8 (20 °C)	10 (20 °C)
Vapour pressure (temp.)	(Pa)	3.03E-07 (20 °C)	0 (20 °C)
Crop processes			
Coefficient for uptake by plant (TSCF)	(-)	0.5	0
Wash-off factor	(1/10)	50	50
Sorption			
Koc	(mL/g)	267.74	106.89
KOM	(mL/g)	18.3	62
Freundlich exponent (1/n)	(-)	2.888	0.971
Transformation			
DT50 in soil	(days)	182	17.9
temperature	(°C)	20	20
moisture content (pF)	(log(Ωm))	2	2
formation fraction in soil	(-)	-	0.53
DT50 in water	(days)	1000	1.9
temperature	(°C)	20	20
formation fraction in water	(-)	-	-
DT50 in sediment	(days)	1000	1000
temperature	(°C)	20	20
formation fraction in sediment	(-)	-	-
DT50 on canopy	(days)	10	10
Exponent for the effect of moisture			
PRZM and TOXSWA (Walker exp)	(-)	0.7	0.7
MACRO (calibrated value)	(-)	0.49	0.49
Effect of temperature			
TOXSWA (molar activation energy)	(kJ/mol)	65.4	65.4
MACRO (effect of temperature)	(1/K)	0.0948	0.0948
PRZM (Q ₁₀)	(-)	2.58	2.58

II. Results and Discussion

The PEC values were calculated for fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) according to the equations implemented in the “STEPS 1-2 in FOCUS” calculator Table 9.2.5- 131 to Table 9.2.5- 142.

Parent substance fluopicolide

Lettuce - early – 1 × 100g a.s./ha (DGR I / PMT I)

Table 9.2.5- 131: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for fluopicolide, GAP group name lettuce, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	25.5	RunOff	25.2	67.5
Step 2					
Northern Europe	Mar. - May(Spring)	4.37	RunOff	4.30	11.5 *
Southern Europe	Mar. - May(Spring)	8.90 *	RunOff	7.92	21.5 *

* Single applications are marked

** TWA interval as required by ecotox

Lettuce - late – 1 × 100g a.s./ha (DGR I / PMT II)

Table 9.2.5- 132: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for fluopicolide, GAP group name lettuce, assessment name late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	25.5	RunOff	25.2	67.5
Step 2					
Northern Europe	Jun. - Sep.(Summer)	2.19	RunOff	2.13	5.69 *
Southern Europe	Jun - Sep.(Summer)	2.92 *	RunOff	2.85	7.63 *

* Single applications are marked

** TWA interval as required by ecotox

Lettuce 2x - double – 2 × 100g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 133: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	51.0	RunOff	50.4	13.5
Step 2					
Northern Europe	Jun. - Sep.(Summer)	4.17	RunOff	4.06	10.9
Southern Europe	Jun. - Sep.(Summer)	5.60	RunOff	5.48	14.7

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-01 (AE C653711)

Lettuce - early – 1 × 100g a.s./ha (DGR I / PMT I)

Table 9.2.5- 134: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name lettuce, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	11.0	-	11.0	2.65
Step 2					
Northern Europe	Mar - May(Spring)	0.70 *		1.70	0.409 *
Southern Europe	Mar - May(Spring)	3.91 *		3.30	0.797 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce - late – 1 × 100g a.s./ha (DGR I / PMT II)

Table 9.2.5- 135: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name lettuce, assessment name late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	11.0	-	11.0	2.65
Step 2					
Northern Europe	Jun - Sep.(Summer)	0.734 *	-	0.732	0.177 *
Southern Europe	Jun. - Sep.(Summer)	1.06 *	-	1.05	0.254 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce 2x - double – 2 × 100g a.s./ha, 7d int. (DGR II / PMT III)
Table 9.2.5- 136: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	22.0	-	22.0	5.31
Step 2					
Northern Europe	Jun. - Sep.(Summer)	1.43	-	1.42	0.343
Southern Europe	Jun. - Sep.(Summer)	2.06	-	2.06	0.496

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-02 (AE C657188)
Lettuce - early – 1 × 100g a.s./ha (DGR I / PMT I)
Table 9.2.5- 137: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-02 (AE C657188), GAP group name lettuce, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	4.83	-	4.82	0.275
Step 2					
Northern Europe	Mar. - May(Spring)	0.364	-	0.363	0.021 *
Southern Europe	Mar. - May(Spring)	0.685	-	0.683	0.039 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce - late – 1 × 100g a.s./ha (DGR I / PMT II)
Table 9.2.5- 138: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-02 (AE C657188), GAP group name lettuce, assessment name late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	4.83	-	4.82	0.275
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.172 *	-	0.172	0.010 *
Southern Europe	Jun. - Sep.(Summer)	0.236 *	-	0.236	0.013 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce 2x - double – 2 × 100g a.s./ha, 7d int. (DGR II / PMT III)
Table 9.2.5- 139: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-02 (AE C657188), GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	9.66	-	9.64	0.550
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.299	-	0.298	0.117
Southern Europe	Jun. - Sep.(Summer)	0.410	-	0.409	0.023

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-03 (AE 0608000)
Lettuce - early – 1 × 100g a.s./ha (DGR I / PMT I)
Table 9.2.5- 140: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name lettuce, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Mar. - May(Spring)	0.414	-	0.163	0.443 *
Southern Europe	Mar. - May(Spring)	0.828	-	0.325	0.885 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce - late 1 × 100g a.s./ha (DGR I / PMT II)
Table 9.2.5- 141: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name lettuce, assessment name late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.166 *	-	0.065	0.177 *
Southern Europe	Jun. - Sep.(Summer)	0.248 *	-	0.098	0.266 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce 2x - double – 2 × 100g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 142: FOCUS Steps 1-2 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 1	-	3.22	-	1.17	3.44
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.292	-	0.115	0.12
Southern Europe	Jun. - Sep.(Summer)	0.438	-	0.172	0.468

* Single applications are marked.

** TWA interval as required by ecotox

Step 3 calculations were conducted for flupicolide and its metabolite M-03 (AE 0608000) employing the models of the FOCUS SW suite. Reported values represent loadings via all relevant entry routes, are shown in Table 9.2.5- 143 to Table 9.2.5- 146.

Parent substance flupicolide

Lettuce - early – 100 g a.s./ha (DGR I / PMT I)

Table 9.2.5- 143: FOCUS Step 3 PEC_{sw} and PEC_{sd} for flupicolide, GAP group name lettuce, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	0.634 *	Spray drift	0.106	0.262 *
D3	Ditch 2nd	0.634 *	Spray drift	0.114	0.276 *
D4	Pond	0.714 *	Drainage	0.713	3.66 *
D4	Stream	0.674 *	Drainage	0.546	1.32 *
D6	Ditch	1.67 *	Drainage	0.815	1.73 *
R1	Pond	0.094 *	RunOff	0.090	0.431 *
R1	Pond 2nd	0.094 *	RunOff	0.075	0.430 *
R1	Stream	0.12 *	RunOff	0.126	0.357 *
R1	Stream 2nd	0.985 *	RunOff	0.112	0.409 *
R2	Stream	0.553 *	Spray drift	0.045	0.258 *
R2	Stream 2nd	0.562 *	Spray drift	0.126	0.536 *
R3	Stream	1.31 *	RunOff	0.188	0.616 *
R3	Stream 2nd	2.00 *	RunOff	0.411	1.05 *
R4	Stream	2.27 *	RunOff	0.255	0.932 *
R4	Stream 2nd	2.40 *	RunOff	0.399	0.972 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce - late -100 g a.s./ha (DGR I / PMT II)

Table 9.2.5- 144: FOCUS Step 3 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name lettuce, assessment name late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	0.634 *	Spray drift	0.107	0.265 *
D3	Ditch 2nd	0.631 *	Spray drift	0.065	0.196 *
D4	Pond	0.646 *	Drainage	0.644	3.29
D4	Stream	0.599 *	Drainage	0.464	2.22 *
D6	Ditch	4.67	Drainage	1.57	3.22
R1	Pond	0.288 *	RunOff	0.279	1.18 *
R1	Pond 2nd	0.084 *	RunOff	0.081	0.441 *
R1	Stream	1.11 *	RunOff	0.271	0.886 *
R1	Stream 2nd	0.685 *	RunOff	0.044	0.211 *
R2	Stream	0.562 *	Spray drift	0.055	0.478 *
R2	Stream 2nd	0.596 *	RunOff	0.132	0.770 *
R3	Stream	0.862 *	RunOff	0.127	0.321 *
R3	Stream 2nd	1.90 *	RunOff	0.194	0.870 *
R4	Stream	2.01 *	RunOff	0.237	0.840 *
R4	Stream 2nd	1.90 *	RunOff	0.228	0.805 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce 2x - double 2 × 100 g a.s./ha, 70 int. (DGR II / PMT III)

Table 9.2.5- 145: FOCUS Step 3 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	0.634 *	Spray drift	0.107	0.297
D3	Ditch 2nd	0.631 *	Spray drift	0.065	0.233
D4	Pond	1.53	Drainage	1.52	7.29
D4	Stream	1.46	Drainage	1.18	2.69
D6	Ditch	13.1	Drainage	4.74	8.45
R1	Pond	0.437	RunOff	0.424	1.90
R1	Pond 2nd	0.222	RunOff	0.215	1.07
R1	Stream	2.39	RunOff	0.271	1.47

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
R1	Stream 2nd	1.92	RunOff	0.115	0.543
R2	Stream	0.963	Spray drift	0.149	1.14
R2	Stream 2nd	1.09	RunOff	0.143	1.08
R3	Stream	2.18	RunOff	0.318	0.834
R3	Stream 2nd	2.65	RunOff	0.704	2.22
R4	Stream	3.17	RunOff	0.494	1.43
R4	Stream 2nd	3.29	RunOff	0.466	1.78

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-03 (AE 0608000)

Lettuce - early – 100 g a.s./ha (DGR0/PM1)

Table 9.2.5- 146: FOCUS Step 3 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000) GAP group name lettuce, assessment name early (DGR0/PM1)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	0.003 *	-	0.003	0.014 *
D3	Ditch 2nd	0.003 *	-	0.003	0.013 *
D4	Pond	0.046 *	-	0.045	0.062 *
D4	Stream	0.084 *	-	0.070	0.112 *
D6	Ditch	0.136 *	-	0.067	0.139 *
R1	Pond	<0.001 *	-	<0.001	<0.001 *
R1	Pond 2nd	0.002 *	-	0.001	<0.001 *
R1	Stream	0.008 *	-	0.002	0.003 *
R1	Stream 2nd	0.031 *	-	0.004	0.007 *
R2	Stream	0.018 *	-	0.003	0.006 *
R2	Stream 2nd	0.056 *	-	0.012	0.015 *
R3	Stream	0.033 *	-	0.005	0.008 *
R3	Stream 2nd	0.062 *	-	0.014	0.017 *
R4	Stream	0.015 *	-	0.002	0.004 *
R4	Stream 2nd	0.040 *	-	0.007	0.009 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce - late – 100 g a.s./ha (DGR I / PMT II)

Table 9.2.5- 147: FOCUS Step 3 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name lettuce, assessment name late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	0.002 *	-	0.002	0.008 *
D3	Ditch 2nd	0.002 *	-	0.002	0.007 *
D4	Pond	0.031 *	-	0.030	0.041 *
D4	Stream	0.055 *	-	0.047	0.039 *
D6	Ditch	0.092 *	-	0.056	0.136 *
R1	Pond	0.001 *	-	<0.001	<0.001 *
R1	Pond 2nd	0.001 *	-	<0.001	0.001 *
R1	Stream	0.015 *	-	0.002	0.003 *
R1	Stream 2nd	0.015 *	-	<0.001	0.002 *
R2	Stream	0.022 *	-	0.002	0.006 *
R2	Stream 2nd	0.015 *	-	0.001	0.004 *
R3	Stream	0.030 *	-	0.003	0.005 *
R3	Stream 2nd	0.064 *	-	0.009	0.012 *
R4	Stream	0.016 *	-	0.002	0.004 *
R4	Stream 2nd	0.023 *	-	0.003	0.006 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce 2x - double – 2 x 100 g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 148: FOCUS Step 3 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	0.005 *	-	0.005	0.021
D3	Ditch 2nd	0.005 *	-	0.005	0.019
D4	Pond	0.061 *	-	0.059	0.081
D4	Stream	0.108 *	-	0.094	0.154
D6	Ditch	0.184 *	-	0.121	0.310
R1	Pond	0.003 *	-	0.001	0.001
R1	Pond 2nd	0.003 *	-	0.002	0.002
R1	Stream	0.047 *	-	0.006	0.009
R1	Stream 2nd	0.033 *	-	0.002	0.005



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PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %		1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	
90 %		1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	
None	R1 Pond	0.094	0.092	0.088	0.086	0.085	0.041	0.039	0.022	
50 %		0.086	0.085	0.083	0.082	0.082	0.037	0.036	0.019	
75 %		0.082	0.082	0.081	0.080	0.080	0.034	0.034	0.018	
90 %		0.080	0.080	0.079	0.079	0.079	0.033	0.032	0.017	
None	R1 Pond 2nd	0.079	0.076	0.073	0.071	0.069	0.035	0.033	0.019	
50 %		0.071	0.070	0.068	0.067	0.066	0.030	0.029	0.016	
75 %		0.067	0.066	0.065	0.065	0.065	0.028	0.027	0.014	
90 %		0.065	0.064	0.064	0.064	0.064	0.026	0.026	0.013	
None	R1 Stream	1.12	1.12	1.12	1.12	1.12	0.507	0.507	0.265	
50 %		1.12	1.12	1.12	1.12	1.12	0.507	0.507	0.265	
75 %		1.12	1.12	1.12	1.12	1.12	0.507	0.507	0.265	
90 %		1.12	1.12	1.12	1.12	1.12	0.507	0.507	0.265	
None	R1 Stream 2nd	0.985	0.985	0.985	0.985	0.985	0.448	0.448	0.235	
50 %		0.985	0.985	0.985	0.985	0.985	0.448	0.448	0.235	
75 %		0.985	0.985	0.985	0.985	0.985	0.448	0.448	0.235	
90 %		0.985	0.985	0.985	0.985	0.985	0.448	0.448	0.235	
None	R2 Stream	0.553	0.463	0.463	0.463	0.463	0.207	0.207	0.107	
50 %		0.463	0.463	0.463	0.463	0.463	0.207	0.207	0.107	
75 %		0.463	0.463	0.463	0.463	0.463	0.207	0.207	0.107	
90 %		0.463	0.463	0.463	0.463	0.463	0.207	0.207	0.107	
None	R2 Stream 2nd	0.475	0.475	0.475	0.475	0.475	0.213	0.213	0.111	
50 %		0.475	0.475	0.475	0.475	0.475	0.213	0.213	0.111	
75 %		0.475	0.475	0.475	0.475	0.475	0.213	0.213	0.111	
90 %		0.475	0.475	0.475	0.475	0.475	0.213	0.213	0.111	
None	R3 Stream	1.31	1.31	1.31	1.31	1.31	0.599	0.599	0.314	
50 %		1.31	1.31	1.31	1.31	1.31	0.599	0.599	0.314	
75 %		1.31	1.31	1.31	1.31	1.31	0.599	0.599	0.314	
90 %		1.31	1.31	1.31	1.31	1.31	0.599	0.599	0.314	
None	R3 Stream 2nd	2.00	2.00	2.00	2.00	2.00	0.912	0.912	0.478	
50 %		2.00	2.00	2.00	2.00	2.00	0.912	0.912	0.478	
75 %		2.00	2.00	2.00	2.00	2.00	0.912	0.912	0.478	
90 %		2.00	2.00	2.00	2.00	2.00	0.912	0.912	0.478	
None	R4 Stream	2.27	2.27	2.27	2.27	2.27	1.03	1.03	0.540	
50 %		2.27	2.27	2.27	2.27	2.27	1.03	1.03	0.540	
75 %		2.27	2.27	2.27	2.27	2.27	1.03	1.03	0.540	

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
90 %		2.27	2.27	2.27	2.27	2.27	1.03	1.03	0.540
None	R4 Stream 2nd	2.40	2.40	2.40	2.40	2.40	1.09	1.09	0.571
50 %		2.40	2.40	2.40	2.40	2.40	1.09	1.09	0.571
75 %		2.40	2.40	2.40	2.40	2.40	1.09	1.09	0.571
90 %		2.40	2.40	2.40	2.40	2.40	1.09	1.09	0.571

Lettuce - late – 100 g a.s./ha (DGR I / PMT II)

Table 9.2.5- 150: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name lettuce, assessment name late (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	0.631	0.172	0.091	0.062	0.047	0.091	0.062	0.047
50 %		0.317	0.086	0.046	0.031	0.024	0.046	0.031	0.024
75 %		0.159	0.043	0.023	0.016	0.012	0.023	0.016	0.012
90 %		0.063	0.017	0.009	0.006	0.005	0.009	0.006	0.005
None	D3 Ditch 2nd	0.631	0.171	0.091	0.062	0.047	0.091	0.062	0.047
50 %		0.316	0.086	0.045	0.031	0.024	0.045	0.031	0.024
75 %		0.158	0.043	0.023	0.016	0.012	0.023	0.016	0.012
90 %		0.063	0.017	0.009	0.006	0.005	0.009	0.006	0.005
None	D4 Pond	0.642	0.645	0.643	0.642	0.642	0.643	0.642	0.642
50 %		0.642	0.642	0.641	0.641	0.641	0.641	0.641	0.641
75 %		0.641	0.641	0.640	0.640	0.640	0.640	0.640	0.640
90 %		0.640	0.640	0.640	0.640	0.639	0.640	0.640	0.639
None	R4 Stream	0.599	0.599	0.599	0.599	0.599	0.599	0.599	0.599
50 %		0.599	0.599	0.599	0.599	0.599	0.599	0.599	0.599
75 %		0.599	0.599	0.599	0.599	0.599	0.599	0.599	0.599
90 %		0.599	0.599	0.599	0.599	0.599	0.599	0.599	0.599
None	D6 Ditch	4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
50 %		4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
75 %		4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
90 %		4.67	4.67	4.67	4.67	4.67	4.67	4.67	4.67
None	R1 Pond	0.288	0.286	0.282	0.280	0.279	0.121	0.119	0.063



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PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
50 %	R1 Pond 2nd	0.280	0.279	0.277	0.276	0.275	0.116	0.115	0.059	0.058
75 %		0.276	0.275	0.275	0.274	0.274	0.114	0.113	0.058	0.058
90 %		0.274	0.273	0.273	0.273	0.273	0.112	0.112	0.057	0.057
None		0.084	0.083	0.080	0.080	0.080	0.038	0.037	0.020	0.020
50 %	R1 Stream	0.080	0.080	0.079	0.078	0.078	0.035	0.035	0.018	0.018
75 %		0.078	0.078	0.078	0.077	0.077	0.033	0.033	0.017	0.017
90 %		0.077	0.077	0.077	0.077	0.077	0.033	0.033	0.017	0.017
None		1.11	1.11	1.11	1.11	1.11	0.499	0.499	0.262	0.262
50 %	R1 Stream 2nd	1.11	1.11	1.11	1.11	1.11	0.499	0.499	0.262	0.262
75 %		1.11	1.11	1.11	1.11	1.11	0.499	0.499	0.262	0.262
90 %		1.11	1.11	1.11	1.11	1.11	0.499	0.499	0.262	0.262
None		0.685	0.685	0.685	0.685	0.685	0.312	0.312	0.163	0.163
50 %	R2 Stream	0.685	0.685	0.685	0.685	0.685	0.312	0.312	0.163	0.163
75 %		0.685	0.685	0.685	0.685	0.685	0.312	0.312	0.163	0.163
90 %		0.685	0.685	0.685	0.685	0.685	0.312	0.312	0.163	0.163
None		0.562	0.354	0.354	0.354	0.354	0.161	0.161	0.084	0.084
50 %	R2 Stream 2nd	0.354	0.354	0.354	0.354	0.354	0.161	0.161	0.084	0.084
75 %		0.354	0.354	0.354	0.354	0.354	0.161	0.161	0.084	0.084
90 %		0.354	0.354	0.354	0.354	0.354	0.161	0.161	0.084	0.084
None		0.596	0.596	0.596	0.596	0.596	0.271	0.271	0.142	0.142
50 %	R3 Stream	0.596	0.596	0.596	0.596	0.596	0.271	0.271	0.142	0.142
75 %		0.596	0.596	0.596	0.596	0.596	0.271	0.271	0.142	0.142
90 %		0.596	0.596	0.596	0.596	0.596	0.271	0.271	0.142	0.142
None		0.862	0.862	0.862	0.862	0.862	0.376	0.376	0.194	0.194
50 %	R3 Stream 2nd	0.862	0.862	0.862	0.862	0.862	0.376	0.376	0.194	0.194
75 %		0.862	0.862	0.862	0.862	0.862	0.376	0.376	0.194	0.194
90 %		0.862	0.862	0.862	0.862	0.862	0.376	0.376	0.194	0.194
None		1.50	1.50	1.50	1.50	1.50	0.683	0.683	0.358	0.358
50 %	R4 Stream	1.50	1.50	1.50	1.50	1.50	0.683	0.683	0.358	0.358
75 %		1.50	1.50	1.50	1.50	1.50	0.683	0.683	0.358	0.358
90 %		1.50	1.50	1.50	1.50	1.50	0.683	0.683	0.358	0.358
None		2.01	2.01	2.01	2.01	2.01	0.915	0.915	0.479	0.479
50 %	R4 Stream 2nd	2.01	2.01	2.01	2.01	2.01	0.915	0.915	0.479	0.479
75 %		2.01	2.01	2.01	2.01	2.01	0.915	0.915	0.479	0.479
90 %		2.01	2.01	2.01	2.01	2.01	0.915	0.915	0.479	0.479
None		1.90	1.90	1.90	1.90	1.90	0.866	0.866	0.454	0.454
50 %	R4 Stream 2nd	1.90	1.90	1.90	1.90	1.90	0.866	0.866	0.454	0.454

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m
No spray buffer (m)	0 m		5 m	10 m	15 m	20 m	10 m	15 m	20 m
75 %		1.90	1.90	1.90	1.90	1.90	0.866	0.866	0.454
90 %		1.90	1.90	1.90	1.90	1.90	0.866	0.866	0.454

Lettuce 2x - double – 2 × 100 g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 151: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide							
		Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m
No spray buffer (m)	0 m		5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	0.634	0.172	0.091	0.062	0.047	0.091	0.062	0.047
50 %		0.317	0.086	0.046	0.031	0.024	0.046	0.031	0.024
75 %		0.159	0.043	0.023	0.016	0.012	0.023	0.016	0.012
90 %		0.063	0.017	0.009	0.006	0.005	0.009	0.006	0.005
None	D3 Ditch 2nd	0.631	0.171	0.091	0.062	0.047	0.091	0.062	0.047
50 %		0.316	0.086	0.045	0.031	0.024	0.045	0.031	0.024
75 %		0.158	0.043	0.023	0.016	0.012	0.023	0.016	0.012
90 %		0.063	0.017	0.009	0.006	0.005	0.009	0.006	0.005
None	D4 Pond	1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
50 %		1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
75 %		1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.52
90 %		1.52	1.52	1.52	1.51	1.51	1.52	1.51	1.51
None	D4 Stream	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
50 %		1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
75 %		1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
90 %		1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46
None	D6 Ditch	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
50 %		13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
75 %		13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
90 %		13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1
None	R1 Pond	0.437	0.433	0.426	0.422	0.420	0.184	0.180	0.095
50 %		0.423	0.421	0.417	0.415	0.414	0.175	0.173	0.089
75 %		0.416	0.415	0.413	0.412	0.411	0.170	0.169	0.086
90 %		0.411	0.411	0.410	0.410	0.409	0.168	0.167	0.085



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PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	R1 Pond 2nd	0.222	0.220	0.217	0.215	0.214	0.098	0.096	0.054	
50 %		0.215	0.215	0.213	0.212	0.211	0.093	0.092	0.048	
75 %		0.212	0.212	0.211	0.210	0.210	0.091	0.090	0.047	
90 %		0.210	0.210	0.209	0.209	0.209	0.089	0.089	0.046	
None	R1 Stream	2.39	2.39	2.39	2.39	2.39	1.09	1.09	0.569	
50 %		2.39	2.39	2.39	2.39	2.39	1.09	1.09	0.569	
75 %		2.39	2.39	2.39	2.39	2.39	1.09	1.09	0.569	
90 %		2.39	2.39	2.39	2.39	2.39	1.09	1.09	0.569	
None	R1 Stream 2nd	1.92	1.92	1.92	1.92	1.92	0.872	0.872	0.457	
50 %		1.92	1.92	1.92	1.92	1.92	0.872	0.872	0.457	
75 %		1.92	1.92	1.92	1.92	1.92	0.872	0.872	0.457	
90 %		1.92	1.92	1.92	1.92	1.92	0.872	0.872	0.457	
None	R2 Stream	0.963	0.963	0.963	0.963	0.963	0.438	0.438	0.230	
50 %		0.963	0.963	0.963	0.963	0.963	0.438	0.438	0.230	
75 %		0.963	0.963	0.963	0.963	0.963	0.438	0.438	0.230	
90 %		0.963	0.963	0.963	0.963	0.963	0.438	0.438	0.230	
None	R2 Stream 2nd	1.09	1.09	1.09	1.09	1.09	0.496	0.496	0.260	
50 %		1.09	1.09	1.09	1.09	1.09	0.496	0.496	0.260	
75 %		1.09	1.09	1.09	1.09	1.09	0.496	0.496	0.260	
90 %		1.09	1.09	1.09	1.09	1.09	0.496	0.496	0.260	
None	R3 Stream	2.18	2.18	2.18	2.18	2.18	0.992	0.992	0.519	
50 %		2.18	2.18	2.18	2.18	2.18	0.992	0.992	0.519	
75 %		2.18	2.18	2.18	2.18	2.18	0.992	0.992	0.519	
90 %		2.18	2.18	2.18	2.18	2.18	0.992	0.992	0.519	
None	R3 Stream 2nd	2.65	2.65	2.65	2.65	2.65	1.21	1.21	0.634	
50 %		2.65	2.65	2.65	2.65	2.65	1.21	1.21	0.634	
75 %		2.65	2.65	2.65	2.65	2.65	1.21	1.21	0.634	
90 %		2.65	2.65	2.65	2.65	2.65	1.21	1.21	0.634	
None	R4 Stream	3.17	3.17	3.17	3.17	3.17	1.44	1.44	0.752	
50 %		3.17	3.17	3.17	3.17	3.17	1.44	1.44	0.752	
75 %		3.17	3.17	3.17	3.17	3.17	1.44	1.44	0.752	
90 %		3.17	3.17	3.17	3.17	3.17	1.44	1.44	0.752	
None	R4 Stream 2nd	3.29	3.29	3.29	3.29	3.29	1.50	1.50	0.786	
50 %		3.29	3.29	3.29	3.29	3.29	1.50	1.50	0.786	
75 %		3.29	3.29	3.29	3.29	3.29	1.50	1.50	0.786	
90 %		3.29	3.29	3.29	3.29	3.29	1.50	1.50	0.786	

* Maximum values coming from multiple applications are marked in italics

Metabolite M-03 (AE 0608000)

Lettuce - early – 100 g a.s./ha (DGR I / PMT I)

Table 9.2.5- 152: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name lettuce, assessment name early (DGR I / PMT I)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
50 %		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
75 %		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
90 %		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
None	D3 Ditch 2nd	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
50 %		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
75 %		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
90 %		0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
None	D4 Pond	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	
50 %		0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	
75 %		0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	
90 %		0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	
None	D4 Stream	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	
50 %		0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	
75 %		0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	
90 %		0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084	
None	D6 Ditch	0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	
50 %		0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	
75 %		0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	
90 %		0.130	0.130	0.130	0.130	0.130	0.130	0.130	0.130	
None	R1 Pond	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None	R1 Pond 2nd	0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
50 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
75 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
90 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
None	R1 Stream	0.018	0.018	0.018	0.018	0.018	0.008	0.008	0.004	
50 %		0.018	0.018	0.018	0.018	0.018	0.008	0.008	0.004	
75 %		0.018	0.018	0.018	0.018	0.018	0.008	0.008	0.004	



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PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
90 %		0.018	0.018	0.018	0.018	0.018	0.008	0.008	0.004	0.004
None	R1 Stream 2nd	0.031	0.031	0.031	0.031	0.031	0.014	0.014	0.008	0.008
50 %		0.031	0.031	0.031	0.031	0.031	0.014	0.014	0.008	0.008
75 %		0.031	0.031	0.031	0.031	0.031	0.014	0.014	0.008	0.008
90 %		0.031	0.031	0.031	0.031	0.031	0.014	0.014	0.008	0.008
None	R2 Stream	0.018	0.018	0.018	0.018	0.018	0.008	0.008	0.004	0.004
50 %		0.018	0.018	0.018	0.018	0.018	0.008	0.008	0.004	0.004
75 %		0.018	0.018	0.018	0.018	0.018	0.008	0.008	0.004	0.004
90 %		0.018	0.018	0.018	0.018	0.018	0.008	0.008	0.004	0.004
None	R2 Stream 2nd	0.056	0.056	0.056	0.056	0.056	0.025	0.025	0.013	0.013
50 %		0.056	0.056	0.056	0.056	0.056	0.025	0.025	0.013	0.013
75 %		0.056	0.056	0.056	0.056	0.056	0.025	0.025	0.013	0.013
90 %		0.056	0.056	0.056	0.056	0.056	0.025	0.025	0.013	0.013
None	R3 Stream	0.033	0.033	0.033	0.033	0.033	0.015	0.015	0.008	0.008
50 %		0.033	0.033	0.033	0.033	0.033	0.015	0.015	0.008	0.008
75 %		0.033	0.033	0.033	0.033	0.033	0.015	0.015	0.008	0.008
90 %		0.033	0.033	0.033	0.033	0.033	0.015	0.015	0.008	0.008
None	R3 Stream 2nd	0.062	0.062	0.062	0.062	0.062	0.028	0.028	0.015	0.015
50 %		0.062	0.062	0.062	0.062	0.062	0.028	0.028	0.015	0.015
75 %		0.062	0.062	0.062	0.062	0.062	0.028	0.028	0.015	0.015
90 %		0.062	0.062	0.062	0.062	0.062	0.028	0.028	0.015	0.015
None	R4 Stream	0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
50 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
75 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
90 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
None	R4 Stream 2nd	0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	0.010
50 %		0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	0.010
75 %		0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	0.010
90 %		0.040	0.040	0.040	0.040	0.040	0.018	0.018	0.010	0.010

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Lettuce - late – 100 g a.s./ha (DGR I / PMT II)

Table 9.2.5- 153: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name lettuce, assessment name late (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
50 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
75 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
90 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
None	D3 Ditch 2nd	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
50 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
75 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
90 %		0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	
None	D4 Pond	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	
50 %		0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	
75 %		0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	
90 %		0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	
None	D4 Stream	0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	
50 %		0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	
75 %		0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	
90 %		0.055	0.055	0.055	0.055	0.055	0.055	0.055	0.055	
None	D6 Ditch	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	
50 %		0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	
75 %		0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	
90 %		0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	
None	R1 Pond	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
50 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
75 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
90 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
None	R1 Pond 2nd	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
50 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
75 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
90 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
None	R1 Stream	0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	
50 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	
75 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	
90 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	
None	R1 Stream	0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	



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PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
50 %	2nd	0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
75 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
90 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
None	R2 Stream	0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005	0.005
50 %		0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005	0.005
75 %		0.022	0.022	0.022	0.022	0.022	0.010	0.010	0.005	0.005
90 %	R2 Stream 2nd	0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
50 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
75 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	0.004
90 %	R3 Stream	0.030	0.030	0.030	0.030	0.030	0.013	0.013	0.007	0.007
50 %		0.030	0.030	0.030	0.030	0.030	0.013	0.013	0.007	0.007
75 %		0.030	0.030	0.030	0.030	0.030	0.013	0.013	0.007	0.007
90 %	R3 Stream 2nd	0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015	0.015
50 %		0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015	0.015
75 %		0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015	0.015
90 %	R4 Stream	0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004	0.004
50 %		0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004	0.004
75 %		0.016	0.016	0.016	0.016	0.016	0.007	0.007	0.004	0.004
90 %	R4 Stream 2nd	0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006
50 %		0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006
75 %		0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006
90 %	R4 Stream 2nd	0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006
50 %		0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006
75 %		0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006
90 %	R4 Stream 2nd	0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006
50 %		0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006
75 %		0.023	0.023	0.023	0.023	0.023	0.011	0.011	0.006	0.006

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Lettuce 2x - double – 2 × 100 g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 154: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
50 %		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
75 %		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
90 %		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
None	D3 Ditch 2nd	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
50 %		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
75 %		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
90 %		0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	
None	D4 Pond	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	
50 %		0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	
75 %		0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	
90 %		0.061	0.061	0.061	0.061	0.061	0.061	0.061	0.061	
None	D4 Stream	0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.108	
50 %		0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.108	
75 %		0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.108	
90 %		0.108	0.108	0.108	0.108	0.108	0.108	0.108	0.108	
None	D6 Ditch	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	
50 %		0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	
75 %		0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	
90 %		0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	
None	R1 Pond	0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
50 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
75 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
90 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
None	R1 Pond 2nd	0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
50 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
75 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
90 %		0.003	0.003	0.003	0.003	0.003	0.001	0.001	<0.001	
None	R1 Stream	0.047	0.047	0.047	0.047	0.047	0.021	0.021	0.011	
50 %		0.047	0.047	0.047	0.047	0.047	0.021	0.021	0.011	
75 %		0.047	0.047	0.047	0.047	0.047	0.021	0.021	0.011	
90 %		0.047	0.047	0.047	0.047	0.047	0.021	0.021	0.011	
None	R1 Stream	0.033	0.033	0.033	0.033	0.033	0.015	0.015	0.008	



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PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	2nd	0.033	0.033	0.033	0.033	0.033	0.015	0.015	0.008	
75 %		0.033	0.033	0.033	0.033	0.033	0.015	0.015	0.008	
90 %		0.033	0.033	0.033	0.033	0.033	0.015	0.015	0.008	
None	R2 Stream	0.052	0.052	0.052	0.052	0.052	0.024	0.024	0.012	
50 %		0.052	0.052	0.052	0.052	0.052	0.024	0.024	0.012	
75 %		0.052	0.052	0.052	0.052	0.052	0.024	0.024	0.012	
90 %		0.052	0.052	0.052	0.052	0.052	0.024	0.024	0.012	
None	R2 Stream 2nd	0.029	0.029	0.029	0.029	0.029	0.013	0.013	0.007	
50 %		0.029	0.029	0.029	0.029	0.029	0.013	0.013	0.007	
75 %		0.029	0.029	0.029	0.029	0.029	0.013	0.013	0.007	
90 %		0.029	0.029	0.029	0.029	0.029	0.013	0.013	0.007	
None	R3 Stream	0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013	
50 %		0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013	
75 %		0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013	
90 %		0.054	0.054	0.054	0.054	0.054	0.024	0.024	0.013	
None	R3 Stream 2nd	0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015	
50 %		0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015	
75 %		0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015	
90 %		0.064	0.064	0.064	0.064	0.064	0.029	0.029	0.015	
None	R4 Stream	0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005	
50 %		0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005	
75 %		0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005	
90 %		0.020	0.020	0.020	0.020	0.020	0.009	0.009	0.005	
None	R4 Stream 2nd	0.032	0.032	0.032	0.032	0.032	0.014	0.014	0.008	
50 %		0.032	0.032	0.032	0.032	0.032	0.014	0.014	0.008	
75 %		0.032	0.032	0.032	0.032	0.032	0.014	0.014	0.008	
90 %		0.032	0.032	0.032	0.032	0.032	0.014	0.014	0.008	

* Maximum values coming from multiple applications are marked in italics

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FOCUS Step 4 PECsed

Parent substance fluopicolide

Lettuce - early – 100 g a.s./ha (DGR I / PMT I)

Table 9.2.5- 155: FOCUS Step 4 PECsed results for fluopicolide, GAP group name lettuce, assessment name early (DGR I / PMT I)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	None	None	None	None
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	None	None	None	None
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
None	D3 Ditch	0.262	0.076	0.041	0.029	0.022	0.041	0.029	0.022	0.022
50 %		0.135	0.039	0.021	0.005	0.011	0.024	0.015	0.011	0.011
75 %		0.070	0.020	0.011	0.008	0.006	0.011	0.008	0.006	0.006
90 %		0.029	0.008	0.005	0.003	0.003	0.005	0.003	0.003	0.003
None	D3 Ditch 2nd	0.276	0.079	0.043	0.030	0.023	0.043	0.030	0.023	0.023
50 %		0.142	0.041	0.022	0.016	0.012	0.022	0.016	0.012	0.012
75 %		0.073	0.021	0.012	0.008	0.006	0.012	0.008	0.006	0.006
90 %		0.031	0.009	0.005	0.003	0.003	0.005	0.003	0.003	0.003
None	D4 Pond	3.66	3.65	3.64	3.63	3.63	3.64	3.63	3.63	3.63
50 %		3.63	3.63	3.62	3.62	3.62	3.62	3.62	3.62	3.62
75 %		3.62	3.62	3.61	3.61	3.61	3.62	3.61	3.61	3.61
90 %		3.61	3.61	3.61	3.61	3.61	3.61	3.61	3.61	3.61
None	D4 Stream	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
50 %		1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
75 %		1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
90 %		1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
None	D6 Ditch	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73
50 %		1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73
75 %		1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73
90 %		1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73
None	R1 Pond	0.431	0.421	0.405	0.396	0.391	0.205	0.196	0.116	0.116
50 %		0.396	0.392	0.383	0.379	0.376	0.182	0.178	0.100	0.100
75 %		0.379	0.372	0.373	0.370	0.369	0.171	0.169	0.092	0.092
90 %		0.369	0.368	0.366	0.365	0.365	0.164	0.163	0.088	0.088
None	R1 Pond 2nd	0.430	0.421	0.404	0.395	0.389	0.204	0.194	0.115	0.115
50 %		0.395	0.390	0.381	0.377	0.374	0.181	0.176	0.099	0.099
75 %		0.377	0.375	0.370	0.368	0.367	0.169	0.167	0.091	0.091
90 %		0.366	0.366	0.364	0.363	0.362	0.162	0.161	0.086	0.086
None	R1 Stream	0.357	0.353	0.352	0.352	0.352	0.160	0.160	0.085	0.085
50 %		0.354	0.352	0.352	0.352	0.352	0.160	0.159	0.085	0.085



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PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %	R1 Stream 2nd	0.353	0.352	0.352	0.352	0.351	0.159	0.159	0.084	
90 %		0.352	0.352	0.351	0.351	0.351	0.159	0.159	0.084	
None		0.409	0.405	0.404	0.403	0.403	0.186	0.186	0.100	
50 %		0.406	0.403	0.403	0.403	0.403	0.186	0.185	0.099	
75 %	R2 Stream	0.404	0.403	0.403	0.402	0.402	0.185	0.185	0.099	
90 %		0.403	0.402	0.402	0.402	0.402	0.185	0.185	0.099	
None		0.258	0.256	0.256	0.256	0.256	0.099	0.098	0.051	
50 %		0.257	0.256	0.256	0.256	0.256	0.098	0.098	0.051	
75 %	R2 Stream 2nd	0.256	0.256	0.256	0.256	0.256	0.098	0.098	0.051	
90 %		0.256	0.256	0.256	0.256	0.256	0.098	0.098	0.051	
None		0.536	0.535	0.534	0.534	0.534	0.182	0.181	0.091	
50 %		0.535	0.534	0.534	0.534	0.534	0.181	0.181	0.091	
75 %	R3 Stream	0.534	0.534	0.534	0.534	0.534	0.181	0.181	0.091	
90 %		0.534	0.534	0.534	0.534	0.534	0.181	0.181	0.091	
None		0.616	0.608	0.606	0.605	0.605	0.277	0.276	0.149	
50 %		0.610	0.606	0.605	0.604	0.604	0.276	0.275	0.148	
75 %	R3 Stream 2nd	0.607	0.605	0.604	0.604	0.604	0.275	0.275	0.147	
90 %		0.605	0.604	0.603	0.603	0.603	0.275	0.275	0.147	
None		1.05	1.03	1.03	1.02	1.02	0.417	0.415	0.218	
50 %		1.04	1.02	1.02	1.02	1.02	0.413	0.412	0.216	
75 %	R4 Stream	1.03	1.02	1.02	1.02	1.02	0.411	0.411	0.215	
90 %		1.02	1.02	1.02	1.02	1.02	0.410	0.410	0.214	
None		0.932	0.925	0.924	0.923	0.923	0.418	0.417	0.223	
50 %		0.927	0.923	0.923	0.922	0.922	0.417	0.416	0.222	
75 %	R4 Stream 2nd	0.924	0.923	0.922	0.922	0.922	0.416	0.416	0.222	
90 %		0.923	0.922	0.922	0.922	0.922	0.416	0.416	0.222	
None		0.972	0.964	0.962	0.962	0.961	0.436	0.435	0.232	
50 %		0.966	0.962	0.961	0.961	0.961	0.435	0.434	0.231	
75 %	R4 Stream 2nd	0.963	0.961	0.961	0.960	0.960	0.434	0.434	0.231	
90 %		0.961	0.960	0.960	0.960	0.960	0.434	0.434	0.231	

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Lettuce - late – 100 g a.s./ha (DGR I / PMT II)

Table 9.2.5- 156: FOCUS Step 4 PECsed results for fluopicolide, GAP group name lettuce, assessment name late (DGR I / PMT II)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.265	0.076	0.042	0.029	0.022	0.042	0.029	0.022	
50 %		0.137	0.039	0.021	0.015	0.011	0.021	0.015	0.011	
75 %		0.070	0.020	0.011	0.008	0.006	0.011	0.008	0.006	
90 %		0.029	0.008	0.005	0.003	0.003	0.005	0.003	0.003	
None	D3 Ditch 2nd	0.196	0.056	0.030	0.021	0.016	0.030	0.021	0.016	
50 %		0.101	0.029	0.016	0.011	0.008	0.016	0.011	0.008	
75 %		0.052	0.015	0.008	0.006	0.004	0.008	0.006	0.004	
90 %		0.021	0.006	0.003	0.002	0.002	0.003	0.002	0.002	
None	D4 Pond	3.29	3.29	3.27	3.27	3.26	3.27	3.27	3.26	
50 %		3.27	3.26	3.26	3.25	3.25	3.26	3.25	3.25	
75 %		3.25	3.25	3.25	3.25	3.24	3.25	3.25	3.24	
90 %		3.24	3.24	3.24	3.24	3.24	3.24	3.24	3.24	
None	D4 Stream	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	
50 %		1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	
75 %		1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	
90 %		1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	
None	D6 Ditch	3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	
50 %		3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	
75 %		3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	
90 %		3.21	3.21	3.21	3.21	3.21	3.21	3.21	3.21	
None	R1 Pond	1.18	1.15	1.14	1.14	1.14	0.528	0.519	0.285	
50 %		1.13	1.13	1.13	1.13	1.13	0.506	0.501	0.269	
75 %		1.13	1.13	1.12	1.12	1.12	0.495	0.493	0.261	
90 %		1.12	1.12	1.12	1.12	1.12	0.488	0.487	0.257	
None	R1 Pond 2nd	0.441	0.432	0.416	0.407	0.401	0.213	0.203	0.120	
50 %		0.407	0.405	0.394	0.390	0.387	0.190	0.185	0.104	
75 %		0.390	0.388	0.384	0.382	0.380	0.179	0.176	0.096	
90 %		0.380	0.379	0.378	0.377	0.376	0.172	0.171	0.092	
None	R1 Stream	0.886	0.880	0.879	0.878	0.878	0.327	0.327	0.168	
50 %		0.881	0.878	0.878	0.877	0.877	0.326	0.326	0.167	
75 %		0.879	0.878	0.877	0.877	0.877	0.326	0.326	0.167	
90 %		0.878	0.877	0.877	0.877	0.877	0.325	0.325	0.167	
None	R1 Stream	0.211	0.208	0.207	0.207	0.207	0.095	0.094	0.050	



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PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	2nd	0.209	0.207	0.207	0.206	0.206	0.094	0.094	0.050	
75 %		0.207	0.207	0.206	0.206	0.206	0.094	0.094	0.050	
90 %		0.207	0.206	0.206	0.206	0.206	0.094	0.094	0.050	
None	R2 Stream	0.478	0.475	0.474	0.474	0.474	0.132	0.132	0.062	
50 %		0.476	0.474	0.474	0.474	0.474	0.131	0.131	0.062	
75 %		0.475	0.474	0.474	0.474	0.473	0.131	0.131	0.062	
90 %		0.474	0.474	0.473	0.473	0.473	0.131	0.131	0.062	
None	R2 Stream 2nd	0.770	0.766	0.765	0.765	0.764	0.227	0.226	0.109	
50 %		0.767	0.765	0.764	0.764	0.764	0.226	0.226	0.109	
75 %		0.765	0.764	0.764	0.764	0.764	0.226	0.226	0.109	
90 %		0.764	0.764	0.764	0.764	0.764	0.226	0.226	0.109	
None	R3 Stream	0.321	0.312	0.309	0.308	0.307	0.144	0.143	0.077	
50 %		0.314	0.306	0.307	0.307	0.306	0.142	0.142	0.076	
75 %		0.310	0.307	0.306	0.306	0.306	0.141	0.141	0.075	
90 %		0.307	0.306	0.306	0.306	0.306	0.141	0.141	0.075	
None	R3 Stream 2nd	0.870	0.853	0.848	0.846	0.845	0.307	0.305	0.156	
50 %		0.855	0.847	0.845	0.844	0.843	0.304	0.303	0.154	
75 %		0.849	0.845	0.843	0.843	0.843	0.303	0.302	0.154	
90 %		0.845	0.843	0.842	0.842	0.842	0.302	0.301	0.153	
None	R4 Stream	0.840	0.833	0.831	0.830	0.829	0.374	0.373	0.199	
50 %		0.834	0.830	0.829	0.829	0.829	0.373	0.372	0.198	
75 %		0.831	0.829	0.829	0.829	0.828	0.372	0.372	0.198	
90 %		0.829	0.829	0.828	0.828	0.828	0.372	0.372	0.198	
None	R4 Stream 2nd	0.805	0.799	0.797	0.797	0.797	0.357	0.356	0.190	
50 %		0.800	0.797	0.797	0.796	0.796	0.356	0.355	0.189	
75 %		0.798	0.797	0.796	0.796	0.796	0.355	0.355	0.189	
90 %		0.797	0.796	0.796	0.796	0.796	0.355	0.354	0.189	

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Lettuce 2x - double – 2 × 100 g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 157: FOCUS Step 4 PECsed results for fluopicolide, GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.297	0.082	0.044	0.030	0.023	0.044	0.030	0.023	
50 %		0.153	0.043	0.023	0.016	0.012	0.023	0.016	0.012	
75 %		0.079	0.022	0.013	0.008	0.006	0.012	0.008	0.006	
90 %		0.033	0.009	0.005	0.005	0.003	0.005	0.003	0.003	
None	D3 Ditch 2nd	0.233	0.064	0.035	0.024	0.018	0.035	0.024	0.018	
50 %		0.120	0.033	0.018	0.013	0.010	0.018	0.013	0.010	
75 %		0.062	0.016	0.010	0.007	0.005	0.010	0.007	0.005	
90 %		0.026	0.008	0.004	0.004	0.004	0.004	0.004	0.004	
None	D4 Pond	7.29	7.27	7.26	7.24	7.23	7.25	7.24	7.23	
50 %		7.24	7.22	7.22	7.22	7.22	7.22	7.22	7.22	
75 %		7.22	7.22	7.21	7.21	7.21	7.21	7.21	7.21	
90 %		7.21	7.20	7.20	7.20	7.20	7.20	7.20	7.20	
None	D4 Stream	2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	
50 %		2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	
75 %		2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	
90 %		2.69	2.69	2.69	2.69	2.69	2.69	2.69	2.69	
None	D6 Ditch	8.45	8.42	8.42	8.42	8.41	8.42	8.42	8.41	
50 %		8.43	8.42	8.41	8.41	8.41	8.41	8.41	8.41	
75 %		8.42	8.41	8.41	8.41	8.41	8.41	8.41	8.41	
90 %		8.42	8.41	8.41	8.41	8.41	8.41	8.41	8.41	
None	R1 Pond	1.90	1.88	1.86	1.84	1.84	0.847	0.832	0.455	
50 %		1.85	1.84	1.83	1.82	1.81	0.812	0.805	0.431	
75 %		1.82	1.82	1.81	1.81	1.80	0.795	0.791	0.419	
90 %		1.80	1.80	1.80	1.80	1.80	0.785	0.783	0.412	
None	R1 Pond 2nd	1.07	1.05	1.03	1.01	1.00	0.501	0.487	0.277	
50 %		0.982	0.986	0.995	0.988	0.984	0.466	0.459	0.252	
75 %		0.989	0.986	0.979	0.976	0.974	0.449	0.445	0.240	
90 %		0.974	0.972	0.969	0.968	0.967	0.438	0.437	0.233	
None	R1 Stream	1.47	1.46	1.46	1.46	1.46	0.497	0.496	0.249	
50 %		1.46	1.46	1.46	1.46	1.46	0.496	0.496	0.248	
75 %		1.46	1.46	1.46	1.45	1.45	0.495	0.495	0.248	
90 %		1.46	1.45	1.45	1.45	1.45	0.495	0.495	0.247	
None	R1 Stream	0.543	0.537	0.535	0.534	0.534	0.242	0.241	0.128	



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PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	2nd	0.538	0.535	0.534	0.534	0.533	0.241	0.241	0.127	
75 %		0.535	0.534	0.533	0.533	0.533	0.240	0.240	0.127	
90 %		0.534	0.533	0.533	0.533	0.533	0.240	0.240	0.127	
None	R2 Stream	1.14	1.14	1.13	1.14	1.13	0.329	0.328	0.156	
50 %		1.14	1.14	1.13	1.13	1.13	0.328	0.327	0.156	
75 %		1.14	1.13	1.13	1.13	1.13	0.327	0.327	0.156	
90 %		1.13	1.13	1.13	1.13	1.13	0.327	0.327	0.156	
None	R2 Stream 2nd	1.08	1.08	1.08	1.08	1.08	0.318	0.317	0.152	
50 %		1.08	1.08	1.08	1.08	1.08	0.317	0.317	0.152	
75 %		1.08	1.08	1.08	1.08	1.08	0.317	0.317	0.152	
90 %		1.08	1.08	1.08	1.08	1.08	0.316	0.316	0.152	
None	R3 Stream	0.834	0.810	0.803	0.801	0.800	0.308	0.306	0.196	
50 %		0.815	0.800	0.800	0.799	0.798	0.305	0.303	0.194	
75 %		0.806	0.800	0.798	0.797	0.797	0.303	0.302	0.193	
90 %		0.800	0.798	0.797	0.797	0.797	0.302	0.301	0.193	
None	R3 Stream 2nd	2.22	2.19	2.19	2.19	2.18	0.824	0.822	0.427	
50 %		2.20	2.19	2.18	2.08	2.18	0.821	0.820	0.425	
75 %		2.19	2.18	2.18	2.18	2.18	0.819	0.819	0.424	
90 %		2.19	2.18	2.18	2.18	2.18	0.818	0.818	0.424	
None	R4 Stream	1.43	1.42	1.42	1.42	1.42	0.633	0.632	0.336	
50 %		1.43	1.42	1.42	1.42	1.42	0.632	0.631	0.335	
75 %		1.42	1.42	1.42	1.42	1.42	0.631	0.631	0.335	
90 %		1.42	1.42	1.42	1.42	1.42	0.631	0.631	0.335	
None	R4 Stream 2nd	1.78	1.76	1.76	1.76	1.76	0.777	0.776	0.413	
50 %		1.77	1.76	1.76	1.76	1.76	0.776	0.775	0.412	
75 %		1.76	1.76	1.76	1.76	1.76	0.775	0.774	0.412	
90 %		1.76	1.76	1.76	1.76	1.76	0.774	0.774	0.412	

* Maximum values coming from multiple applications are marked in italics

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Metabolite M-03 (AE 0608000)

Lettuce - early – 100 g a.s./ha (DGR I / PMT I)

Table 9.2.5- 158: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name lettuce, assessment name early (DGR I / PMT I)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	
50 %		0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	
75 %		0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	
90 %		0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	
None	D3 Ditch 2nd	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	
50 %		0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	
75 %		0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	
90 %		0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	
None	D4 Pond	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	
50 %		0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	
75 %		0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	
90 %		0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	
None	D5 Stream	0.112	0.112	0.112	0.112	0.112	0.112	0.112	0.112	
50 %		0.112	0.112	0.112	0.112	0.112	0.112	0.112	0.112	
75 %		0.112	0.112	0.112	0.112	0.112	0.112	0.112	0.112	
90 %		0.112	0.112	0.112	0.112	0.112	0.112	0.112	0.112	
None	D6 Ditch	0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	
50 %		0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	
75 %		0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	
90 %		0.139	0.139	0.139	0.139	0.139	0.139	0.139	0.139	
None	R1 Pond	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None	R1 Pond 2nd	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None	R1 Stream	0.003	0.003	0.003	0.003	0.003	0.002	0.002	<0.001	
50 %		0.003	0.003	0.003	0.003	0.003	0.002	0.002	<0.001	
75 %		0.003	0.003	0.003	0.003	0.003	0.002	0.002	<0.001	
90 %		0.003	0.003	0.003	0.003	0.003	0.002	0.002	<0.001	



Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
None	R1 Stream 2nd	0.007	0.007	0.007	0.007	0.007	0.003	0.003	0.002	0.002
50 %		0.007	0.007	0.007	0.007	0.007	0.003	0.003	0.002	0.002
75 %		0.007	0.007	0.007	0.007	0.007	0.003	0.003	0.002	0.002
90 %		0.007	0.007	0.007	0.007	0.007	0.003	0.003	0.002	0.002
None	R2 Stream	0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	0.001
50 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	0.001
75 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	0.001
90 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	0.001
None	R2 Stream 2nd	0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.003	0.003
50 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.003	0.003
75 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.003	0.003
90 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.003	0.003
None	R3 Stream	0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.002	0.002
50 %		0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.002	0.002
75 %		0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.002	0.002
90 %		0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.002	0.002
None	R3 Stream 2nd	0.017	0.017	0.017	0.017	0.017	0.008	0.008	0.004	0.004
50 %		0.017	0.017	0.017	0.017	0.017	0.008	0.008	0.004	0.004
75 %		0.017	0.017	0.017	0.017	0.017	0.008	0.008	0.004	0.004
90 %		0.017	0.017	0.017	0.017	0.017	0.008	0.008	0.004	0.004
None	R4 Stream	0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	<0.001
50 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	<0.001
75 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	<0.001
90 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	<0.001
None	R4 Stream 2nd	0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	0.002
50 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	0.002
75 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	0.002
90 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	0.002

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Lettuce - late – 100 g a.s./ha (DGR I / PMT II)

Table 9.2.5- 159: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name lettuce, assessment name late (DGR I / PMT II)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
50 %		0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
75 %		0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
90 %		0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	
None	D3 Ditch 2nd	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	
50 %		0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	
75 %		0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	
90 %		0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	
None	D4 Pond	0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	
50 %		0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	
75 %		0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	
90 %		0.041	0.041	0.041	0.041	0.041	0.041	0.041	0.041	
None	D4 Stream	0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	
50 %		0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	
75 %		0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	
90 %		0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	
None	D6 Ditch	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	
50 %		0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	
75 %		0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	
90 %		0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	
None	R1 Pond	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None	R1 Pond 2nd	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
50 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
75 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
90 %		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
None	R1 Stream	0.003	0.003	0.003	0.003	0.003	0.002	0.002	<0.001	
50 %		0.003	0.003	0.003	0.003	0.003	0.002	0.002	<0.001	
75 %		0.003	0.003	0.003	0.003	0.003	0.002	0.002	<0.001	
90 %		0.003	0.003	0.003	0.003	0.003	0.002	0.002	<0.001	
None	R1 Stream	0.002	0.002	0.002	0.002	0.002	0.001	0.001	<0.001	



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PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	2nd	0.002	0.002	0.002	0.002	0.002	0.001	0.001	<0.001	
75 %		0.002	0.002	0.002	0.002	0.002	0.001	0.001	<0.001	
90 %		0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	
None	R2 Stream	0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	
50 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	
75 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	
90 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.001	
None	R2 Stream 2nd	0.004	0.004	0.004	0.004	0.004	0.002	0.002	0.001	
50 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	
75 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	
90 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	
None	R3 Stream	0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
50 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
75 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
90 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
None	R3 Stream 2nd	0.012	0.012	0.012	0.012	0.012	0.005	0.005	0.003	
50 %		0.012	0.012	0.012	0.012	0.012	0.005	0.005	0.003	
75 %		0.012	0.012	0.012	0.012	0.012	0.005	0.005	0.003	
90 %		0.012	0.012	0.012	0.012	0.012	0.005	0.005	0.003	
None	R4 Stream	0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	
50 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	
75 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	
90 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	<0.001	
None	R4 Stream 2nd	0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
50 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
75 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
90 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	

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Lettuce 2x - double – 2 × 100 g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 160: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name lettuce 2x, assessment name double (DGR II / PMT III)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	
50 %		0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	
75 %		0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	
90 %		0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	
None	D3 Ditch 2nd	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	
50 %		0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	
75 %		0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	
90 %		0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	
None	D4 Pond	0.081	0.081	0.081	0.081	0.081	0.081	0.081	0.081	
50 %		0.081	0.081	0.081	0.081	0.081	0.081	0.081	0.081	
75 %		0.081	0.081	0.081	0.081	0.081	0.081	0.081	0.081	
90 %		0.081	0.081	0.081	0.081	0.081	0.081	0.081	0.081	
None	D4 Stream	0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	
50 %		0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	
75 %		0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	
90 %		0.154	0.154	0.154	0.154	0.154	0.154	0.154	0.154	
None	D6 Ditch	0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310	
50 %		0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310	
75 %		0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310	
90 %		0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310	
None	R1 Pond	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
50 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
75 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
90 %		0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	
None	R1 Pond 2nd	0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
50 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
75 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
90 %		0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	<0.001	
None	R1 Stream	0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	
50 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	
75 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	
90 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	
None	R1 Stream	0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	2nd	0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
75 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
90 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
None	R2 Stream	0.015	0.015	0.015	0.015	0.015	0.006	0.006	0.003	
50 %		0.015	0.015	0.015	0.015	0.015	0.006	0.006	0.003	
75 %		0.015	0.015	0.015	0.015	0.015	0.006	0.006	0.003	
90 %	R2 Stream 2nd	0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
50 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
75 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002	
90 %	R3 Stream	0.015	0.015	0.015	0.015	0.015	0.006	0.006	0.003	
50 %		0.015	0.015	0.015	0.015	0.015	0.006	0.006	0.003	
75 %		0.015	0.015	0.015	0.015	0.015	0.006	0.006	0.003	
90 %	R3 Stream 2nd	0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	
50 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	
75 %		0.015	0.015	0.015	0.015	0.015	0.007	0.007	0.004	
90 %	R4 Stream	0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
50 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
75 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001	
90 %	R4 Stream 2nd	0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	
50 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	
75 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	
90 %		0.009	0.009	0.009	0.009	0.009	0.004	0.004	0.002	

* Maximum values coming from multiple applications are marked in italics

III. Conclusion

Predicted environmental concentrations of the fungicide fluopicolide and its metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in lettuce in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered.

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2001,2015) and is considered valid to assess predicted environmental concentrations in surface water (PEC_{sw}) and sediment (PEC_{sed}) for fluopicolide and its metabolites in lettuce.

Data Point:	KCP 9.2.5/06
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Fluopicolide (FLC) and metabolites: PEC _{sw, sed} FOCUS SUR - use in cucumbers in greenhouses in Europe
Report No:	EnSa-20-0480
Document No:	M-687156-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

Predicted environmental concentrations of the fungicide fluopicolide and metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The use of fluopicolide in greenhouse cucumber were assessed according to the Good Agricultural Practice (GAP) in Europe.

1. Materials and Methods

Predicted environmental concentrations of the fungicide fluopicolide and its metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The uses of fluopicolide in relevant crops were assessed according to the Good Agricultural Practice (GAP) in Europe. Intended GAPs for the use of fluopicolide in Europe were analysed and consolidated according to regulatory and modelling requirements. As a result, one or more uses may be covered by a single modelling GAP row (DGR). The translation of the regulatory GAP for modelling purposes is shown in Table 9.2.5-161.

Table 9.2.5-161: GAP translation for modelling purposes

GAP group ID	GAP group name (DGR) and use IDs	Covered crop(s)	Growth stage	Max. apps	Interval (days)	Rate (kg a.s./ha)
DGR I	cucumber	cucumber	BBCH 21 - 89	3	7	3 × 0.1

The implementation of the modelling GAP (Table 9.2.5-161) at Steps 1-2 level is shown in Table 9.2.5-162. One or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Table 9.2.5- 162: FOCUS Steps 1-2 specific data for the GAPs assessed

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)	Season	Crop cover
DGR I PMT I	cucumber	early	vegetables, fruiting (arable crops)	spring (Mar. - May)	full canopy
DGR I PMT II	cucumber	mid	vegetables, fruiting (arable crops)	summer (Jun. - Sep.)	full canopy
DGR I PMT III	cucumber	late	vegetables, fruiting (arable crops)	autumn (Oct. - Feb.)	full canopy

This section provides the implementation of the modelling GAP (Table 9.2.5-161) at Step 3 level. Also, here one or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Please note that PMTs at Steps 1-2 and Step 3 do not necessarily fully correspond to each other due to inherent differences in the models.

The application dates for this assessment were set with the help of the Cool App Date (Klein 2018), which proposes dates for specific crop stages (given as BBCH code) based on the crop development as defined in the FOCUS model scenarios for groundwater and surface water.

The summary of all Step 3 PMTs is provided in Table 9.2.5- 163. The detailed information on individual uses is given in tables Table 9.2.5-164 to Table 9.2.5-169.

Table 9.2.5- 163: Overview of FOCUS Step 3 assessments

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)
DGR I PMT I	Cucumber	Early	Vegetables, fruiting (arable crops)
DGR I PMT II	Cucumber	Mid	Vegetables, fruiting (arable crops)
DGR I PMT III	Cucumber	Late	Vegetables, fruiting (arable crops)

GAP group name cucumber, assessment name early

Table 9.2.5- 164: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D0 Ditch R2 Stream R3 Stream R4 Stream	01-Mar - 14-Apr 01-Mar - 14-Apr 01-Mar - 14-Apr 01-Mar - 14-Apr

Table 9.2.5- 165: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT I			
GAP group name (DGR)		Cucumber			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Vegetables, fruiting (arable crops)			
Use pattern		3×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		44 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D6 Ditch	01-Mar/14-Apr (60/104)	05-Mar	R2	01-Mar/14-Apr (60/104)	01-Mar
		14-Mar	Stream		21-Mar
		03-Apr	R3		30-Mar
D6 Ditch	01-Mar/14-Apr (60/104)	01-Mar	R4	01-Mar/14-Apr (60/104)	01-Mar
		10-Mar	Stream		28-Mar
D6 Ditch	01-Mar/14-Apr (60/104)	05-Mar	R4	01-Mar/14-Apr (60/104)	05-Mar
		12-Mar	Stream		21-Mar

GAP group name cucumber, assessment name mid

Table 9.2.5- 166: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Mid	D6 Ditch	01-Jul - 14-Aug
	R2 Stream	01-Jul - 14-Aug
	R3 Stream	01-Jul - 14-Aug
	R4 Stream	01-Jul - 14-Aug

Table 9.2.5- 167: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT II			
GAP group name (DGR)		Cucumber			
Assessment name (PMT)		Mid			
FOCUS model crop (crop group)		Vegetables, fruiting (arable crops)			
Use pattern		3×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		44 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D6 Ditch	01-Jul/14-Aug (182/226)	06-Jul 17-Jul 27-Jul	R2 Stream	01-Jul/14-Aug (182/226)	31-Jul 07-Aug 15-Aug
			R3 Stream	01-Jul/14-Aug (182/226)	11-Jul 18-Jul 20-Jul
			R4 Stream	01-Jul/14-Aug (182/226)	01-Jul 25-Jul 01-Aug

GAP group name cucumber, assessment name late

Table 9.2.5- 168: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D6 Ditch	01-Nov - 15-Dec
	R2 Stream	01-Nov - 15-Dec
	R3 Stream	01-Nov - 15-Dec
	R4 Stream	01-Nov - 15-Dec

Table 9.2.5- 169: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT III			
GAP group name (DGR)		Cucumber			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Vegetables, fruiting (arable crops)			
Use pattern		3×0.1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		44 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D6 Ditch	01-Nov/15-Dec (305/349)	01-Nov 06-Dec 13-Dec	R2 Stream	01-Nov/15-Dec (305/349)	08-Nov
			R3 Stream		15-Nov
			R4 Stream		23-Nov
					05-Dec
					03-Nov
					10-Nov
					10-Dec

Steps 1-2 calculations were performed according to formulas implemented in FOCUS STEPS 1+2 version 3.2.

Step 3 calculations were performed using the FOCUS SWASH 5 suite, including
 FOCUS PRZM 4.3
 FOCUS MACRO 5.5.4
 FOCUS TOXSWA 5.3

Refinement at Step 4 level was performed with the SWAN tool, version 5.0.1.

Standard procedures and settings were used for Steps 1-2 and 3 assessments. At Step 4 the following mitigation settings were used Table 9.2.5- 170 and Table 9.2.5- 171.

Table 9.2.5- 170: Mitigation approaches used

Buffer length	Mitigation type	Drift reduction nozzles
0 m	Spray drift	0 %, 50 %, 75 %, 90 %
5 m	Spray drift	
10 m	Spray drift & RunOff	
15 m	Spray drift & RunOff	
20 m	Spray drift & RunOff	

Table 9.2.5- 171: Runoff mitigation parameters used for the assessment

Fractional reduction in:	10 m, 15 m	20 m
Runoff: Volume	0.60	0.80
Flux	0.60	0.80
Erosion: Mass	0.85	0.95
Flux	0.85	0.95

Substance related parameters which have been used for fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) and whose derivation is described in detail in the core modelling document KCP 9.2.5/04 have been used in the calculations at FOCUS SW Steps 1-2 level are summarised in Table 9.2.5- 172 and at Step 3/4 level in Table 9.2.5- 173.

Table 9.2.5- 172: Substance parameters used at FOCUS Steps 1-2 level

Parameter	Unit	Fluopicolide	M-01 (AE C653711)	M-02 (AE C657188)	M-03 (AE 0608000)
Molar mass	(g/mol)	383.59	190.03	325.56	399.58
Water solubility	(mg/L)	2.8	1830	9721	10
Koc	(mL/g)	267.7	24.1	5.7	106.9
Degradation					
Soil	(days)	182	146	1.6	17.9
Total system	(days)	1000	1000	1000	1.9
Water	(days)	1000	1000	1000	1.9
Sediment	(days)	1000	1000	1000	1000
Max occurrence					
Water / sediment	(%)	100	20.3	8.2	0.001
Soil	(%)	100	48	16.4	10.6

Table 9.2.5- 173: Substance parameters used for fluopicolide and its metabolite M-03 (AE 0608000) at Step 3/4 level

Parameter	Unit	Parent	Metabolite
Substance		Fluopicolide	M-03 (AE 0608000)
SWASH code		FLC	M03
General			
Molar mass	(g/mol)	383.59	399.58
Water solubility (temp.)	(mg/L)	2.8 (20 °C)	10 (20 °C)
Vapour pressure (temp.)	(Pa)	3.63E-07 (20 °C)	0 (20 °C)
Crop processes			
Coefficient for uptake by plant (TSCF)		0.5	0
Wash-off factor	(cm)	50	50
Sorption			
Koc	(mL/g)	267.74	106.89
K _{OM}	(mL/g)	155.3	62
Freundlich exponent (n)	(-)	0.888	0.971
Transformation			
DT50 in soil	(days)	182	17.9
temperature	(°C)	20	20
moisture content (pF)	(cm)	2	2
formation fraction in soil	(-)	-	0.53
DT50 in water	(days)	1000	1.9
temperature	(°C)	20	20
formation fraction in water	(-)	-	-
DT50 in sediment	(days)	1000	1000
temperature	(°C)	20	20
formation fraction in sediment	(-)	-	-
DT50 on canopy	(days)	10	10
Exponent for the effect of moisture			
PRZM and TOXSWA (Walker exp.)	(-)	0.7	0.7
MACRO (calibrated value)	(-)	0.49	0.49
Effect of temperature			
TOXSWA (molar activation energy)	(kJ/mol)	65.4	65.4
MACRO (effect of temperature)	(1/K)	0.0948	0.0948
PRZM (Q ₁₀)	(-)	2.58	2.58

II. Results and Discussion

The PEC values were calculated for fluopicolide and its metabolites M-01 (AE C653711), M-02 (AE C657188) and M-03 (AE 0608000) according to the equations implemented in the “STEPS in FOCUS” calculator Table 9.2.5- 174 to Table 9.2.5- 185.

Parent substance fluopicolide

Cucumber - early – 3 × 100g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 174: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name cucumber, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	76.5	RunOff	75.6	203
Step 2					
Northern Europe	Mar. - May(Spring)	5.86	RunOff	5.72	15.3
Southern Europe	Mar. - May(Spring)	19.1	RunOff	9.95	26

* Single applications are marked

** TWA interval as required by ecotox

Cucumber - mid – 3 × 100g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 175: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name cucumber, assessment name mid (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	76.5	RunOff	75.6	203
Step 2					
Northern Europe	Jun. - Sep.(Summer)	5.86	RunOff	5.72	15.3
Southern Europe	Jun - Sep.(Summer)	19.8	RunOff	7.83	21.0

* Single applications are marked

** TWA interval as required by ecotox

Cucumber - late – 3 × 100g a.s./ha, 7d int. (DGR I / PMT III)
Table 9.2.5- 176: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name cucumber, assessment name late (DGR I / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	76.5	RunOff	75.6	203
Step 2					
Northern Europe	Oct. - Feb.(Autumn)	12.2	RunOff	12.1	2.3
Southern Europe	Oct. - Feb.(Autumn)	10.1	RunOff	9.95	26

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-01 (AE C653711)
Cucumber - early – 3 × 100g a.s./ha, 7d int. (DGR I / PMT I)
Table 9.2.5- 177: FOCUS Steps 1-3 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name cucumber, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	32.4	-	33.0	7.96
Step 2					
Northern Europe	Mar. - May(Spring)	2.07	-	2.06	0.498
Southern Europe	Mar. - May(Spring)	3.94	-	3.93	0.949

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - mid – 3 × 100g a.s./ha, 7d int. (DGR I / PMT II)
Table 9.2.5- 178: FOCUS Steps 1-3 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name cucumber, assessment name mid (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	3.1	-	33.0	7.96
Step 2					
Northern Europe	Jun. - Sep.(Summer)	2.07	-	2.06	0.498
Southern Europe	Jun. - Sep.(Summer)	3.01	-	3.00	0.724

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - late – 3 × 100g a.s./ha, 7d int. (DGR I / PMT III)
Table 9.2.5- 179: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-01 (AE C653711), GAP group name cucumber, assessment name late (DGR I / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	33.1	-	33.0	7.9
Step 2					
Northern Europe	Oct. - Feb.(Autumn)	4.88	-	4.87	1.18
Southern Europe	Oct. - Feb.(Autumn)	3.94	-	3.93	0.949

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-02 (AE C657188)
Cucumber - early – 3 × 100g a.s./ha, 7d int. (DGR I / PMT I)
Table 9.2.5- 180: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-02 (AE C657188), GAP group name cucumber, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1		14.5		14.5	0.825
Step 2					
Northern Europe	Mar - May(Spring)	0.407	-	0.406	0.023
Southern Europe	Mar. - May(Spring)	0.716	-	0.716	0.041

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - mid – 3 × 100g a.s./ha, 7d int. (DGR I / PMT II)
Table 9.2.5- 181: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-02 (AE C657188), GAP group name cucumber, assessment name mid (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1		14.5		14.5	0.825
Step 2					
Northern Europe	Jun - Sep.(Summer)	0.407	-	0.406	0.023
Southern Europe	Jun. - Sep.(Summer)	0.563	-	0.561	0.032

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - late – 3 × 100g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 182: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-02 (AE C657188), GAP group name cucumber, assessment name late (DGR I / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	14.5	-	14.5	0.825
Step 2					
Northern Europe	Oct. - Feb.(Autumn)	0.874	-	0.871	0.850
Southern Europe	Oct. - Feb.(Autumn)	0.718	-	0.716	0.041

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-03 (AE 0608000)

Cucumber - early – 3 × 100g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 183: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name cucumber, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1		3.22		1.17	3.44
Step 2					
Northern Europe	Mar. - May(Spring)	0.388	-	0.152	0.415
Southern Europe	Mar. - May(Spring)	0.776	-	0.305	0.830

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - mid – 3 × 100g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 184: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name cucumber, assessment name mid (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1		1.2		1.17	3.44
Step 2					
Northern Europe	Jun. - Sep.(Summer)	0.388	-	0.152	0.415
Southern Europe	Jun. - Sep.(Summer)	0.582	-	0.229	0.622

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - late – 3 × 100g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 185: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name cucumber, assessment name late (DGR I / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	3.22	-	1.47	2.44
Step 2					
Northern Europe	Oct. - Feb.(Autumn)	0.970	-	0.381	2.04
Southern Europe	Oct. - Feb.(Autumn)	0.776	-	0.305	0.830

* Single applications are marked.

** TWA interval as required by ecotox

Step 3 calculations were conducted for fluopicolide and its metabolite M-03 (AE 0608000) employing the models of the FOCUS SW suite. Reported values represent loadings via all relevant entry routes are shown in Table 9.2.5- 186 to Table 9.2.5- 194.

Parent substance fluopicolide

Cucumber - early – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 186: FOCUS Step 3 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name cucumber, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D6	Ditch	1.54	Spray drift	0.845	2.36
R2	Stream	2.10	RunOff	0.503	3.90
R3	Stream	5.37	RunOff	0.604	2.67
R4	Stream	8.33	RunOff	0.689	1.95

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - mid – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 187: FOCUS Step 3 PEC_{sw} and PEC_{sed} for fluopicolide, GAP group name cucumber, assessment name mid (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D6	Ditch	4.75	Drainage	2.48	4.28
R2	Stream	1.14	Spray drift	0.306	1.91
R3	Stream	3.06	RunOff	0.638	2.45
R4	Stream	7.85	RunOff	0.710	2.74

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - late – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 188: FOCUS Step 3 PEC_{sw} and PEC_{sed} for flupicolide, GAP group name cucumber, assessment name late (DGR I / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D6	Ditch	10.2	Drainage	5.73	12.9
R2	Stream	2.39	RunOff	0.773	2.90
R3	Stream	6.01	RunOff	1.29	9.81
R4	Stream	9.06	RunOff	0.808	2.65

* Single applications are marked.

** TWA interval as required by ecotox

Metabolite M-03 (AE 0608000)

Cucumber - early – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 189: FOCUS Step 3 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name cucumber, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D6	Ditch	0.069	-	0.114	0.249
R2	Stream	0.047	-	0.008	0.014
R3	Stream	0.067	-	0.009	0.021
R4	Stream	0.069	-	0.006	0.011

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - mid – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 190: FOCUS Step 3 PEC_{sw} and PEC_{sed} for M-03 (AE 0608000), GAP group name cucumber, assessment name mid (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D6	Ditch	0.24	-	0.162	0.306
R2	Stream	0.124	-	0.026	0.035
R3	Stream	0.093	-	0.018	0.029
R4	Stream	0.241	-	0.025	0.047

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - late – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 191: FOCUS Step 3 PEC_{sw} and PEC_{sd} for M-03 (AE 0608000), GAP group name cucumber, assessment name late (DGR I / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,tot} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D6	Ditch	0.367		0.243	0.579
R2	Stream	0.045		0.012	0.06
R3	Stream	0.047	-	0.006	0.013
R4	Stream	0.099	-	0.010	0.049

* Single applications are marked.

** TWA interval as required by ecotox

FOCUS Step 4 calculations considering various mitigation measures for runoff and spray drift were conducted based on the Step 3 results. This section provides the summary of results in tabular form. Where applicable, the maximum of single and multiple application uses are shown Table 9.2.5- 192 to Table 9.2.5- 203.

Parent substance flupicolide

Cucumber - early – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 192: FOCUS Step 4 PEC_{sw} Results for flupicolide, GAP group name cucumber, assessment name early (DGR I / PMT I)

PEC _{sw} (µg/L)	Scenario	Step 4 flupicolide			
Nozzle reduction	Vegetated strip (m)	None			
	No spray buffer (m)	0 m			
None	D6 Ditch	5.54			
		1.54			
		1.4			
		1.54			
None	R2 Stream	2.10			
		2.0			
		2.10			
		2.7			
None	R3 Stream	2.37			
		5.37			
		5.37			
		2.37			
None	R4 Stream	8.33			
		8.33			
		8.33			
		8.33			

* Maximum values coming from multiple applications are marked in italics

Cucumber - mid – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 193: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name cucumber, assessment name mid (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	4.75						
90 %		4.75						
95 %		4.75						
99 %		4.75						
None	R2 Stream	1.14						
90 %		1.14						
95 %		1.14						
99 %		1.14						
None	R3 Stream	3.06						
90 %		3.06						
95 %		3.06						
99 %		3.06						
None	R4 Stream	7.85						
90 %		7.85						
95 %		7.85						
99 %		7.85						

* Maximum values coming from multiple applications are marked in italics

Cucumber - late – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 194: FOCUS Step 4 PEC_{sw} results for fluopicolide, GAP group name cucumber, assessment name late (DGR I / PMT III)

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	10.2						
90 %		10.2						
95 %		10.2						
99 %		10.2						
None	R2 Stream	2.39						
90 %		2.39						
95 %		2.39						

PEC _{sw} (µg/L)	Scenario	Step 4 fluopicolide					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
99 %		2.39					
None	R3 Stream	6.01					
90 %		6.01					
95 %		6.01					
99 %		6.01					
None	R4 Stream	9.06					
90 %		9.06					
95 %		9.06					
99 %		9.06					

* Maximum values coming from multiple applications are marked in *italics*

Metabolite M-03 (AE 0608000)

Cucumber - early – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 195: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name cucumber, assessment name early (DGR I / PMT I)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
None	D6 Ditch	0.169					
90 %		0.169					
95 %		0.169					
99 %		0.169					
None	R2 Stream	0.047					
90 %		0.047					
95 %		0.047					
99 %		0.047					
None	R3 Stream	0.067					
90 %		0.067					
95 %		0.067					
99 %		0.067					
None	R4 Stream	0.069					
90 %		0.069					
95 %		0.069					
99 %		0.069					

* Maximum values coming from multiple applications are marked in *italics*

Cucumber - mid – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 196: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name cucumber, assessment name mid (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	0.324						
90 %		0.324						
95 %		0.324						
99 %		0.324						
None	R2 Stream	0.124						
90 %		0.124						
95 %		0.124						
99 %		0.124						
None	R3 Stream	<i>0.093</i>						
90 %		<i>0.093</i>						
95 %		0.093						
99 %		<i>0.093</i>						
None	R4 Stream	0.241						
90 %		0.241						
95 %		0.241						
99 %		0.241						

* Maximum values coming from multiple applications are marked in italics

Cucumber - late – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 197: FOCUS Step 4 PEC_{sw} results for M-03 (AE 0608000), GAP group name cucumber, assessment name late (DGR I / PMT III)

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	0.367						
90 %		0.367						
95 %		0.367						
99 %		0.367						
None	R2 Stream	0.045						
90 %		0.045						
95 %		0.045						

PEC _{sw} (µg/L)	Scenario	Step 4 M-03 (AE 0608000)					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
99 %		0.045					
None	R3 Stream	0.047					
90 %		0.047					
95 %		0.047					
99 %		0.047					
None	R4 Stream	0.099					
90 %		0.099					
95 %		0.099					
99 %		0.099					

* Maximum values coming from multiple applications are marked in italics

FOCUS Step 4 PEC_{sed}

Parent substance fluopicolide

Cucumber - early – 3 × 100 g a.s./ha, 7d Int. (DGR I / PMT I)

Table 9.2.5- 198: FOCUS Step 4 PEC_{sed} results for fluopicolide, GAP group name Cucumber, assessment name early (DGR I / PMT I)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
None	D6 Ditch	2.56					
90 %		2.34					
95 %		2.34					
99 %		2.34					
None	R2 Stream	3.90					
90 %		3.90					
95 %		3.90					
99 %		3.90					
None	R3 Stream	2.67					
90 %		2.65					
95 %		2.65					
99 %		2.65					
None	R4 Stream	1.95					
90 %		1.93					
95 %		1.93					

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
99 %		1.93						

* Maximum values coming from multiple applications are marked in *italics*

Cucumber - mid – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 199: FOCUS Step 4 PEC_{sed} results for fluopicolide, GAP group name cucumber, assessment name mid (DGR I / PMT II)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	4.28						
90 %		<i>4.27</i>						
95 %		<i>4.27</i>						
99 %		<i>4.27</i>						
None	R1 Stream	<i>1.91</i>						
90 %		<i>1.90</i>						
95 %		<i>1.90</i>						
99 %		<i>1.90</i>						
None	R3 Stream	2.45						
90 %		2.44						
95 %		<i>2.42</i>						
99 %		<i>2.41</i>						
None	R4 Stream	2.74						
90 %		<i>2.72</i>						
95 %		<i>2.71</i>						
99 %		<i>2.71</i>						

* Maximum values coming from multiple applications are marked in *italics*

Cucumber - late – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 200: FOCUS Step 4 PECsed results for fluopicolide, GAP group name cucumber, assessment name late (DGR I / PMT III)

PEC _{sed} (µg/kg)	Scenario	Step 4 fluopicolide					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
None	D6 Ditch	<i>12.1</i>					
90 %		<i>11.8</i>					
95 %		<i>11.8</i>					
99 %		<i>11.8</i>					
None	R2 Stream	<i>5.90</i>					
90 %		<i>5.89</i>					
95 %		<i>5.89</i>					
99 %		<i>5.89</i>					
None	R3 Stream	<i>9.81</i>					
90 %		<i>9.79</i>					
95 %		<i>9.79</i>					
99 %		<i>9.79</i>					
None	R4 Stream	<i>2.65</i>					
90 %		<i>2.64</i>					
95 %		<i>2.64</i>					
99 %		<i>2.64</i>					

* Maximum values coming from multiple applications are marked in italics

Metabolite M-03 (AE 0608000)

Cucumber - early – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 201: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name cucumber, assessment name early (DGR I / PMT I)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
None	D6 Ditch	<i>0.249</i>					
90 %		<i>0.249</i>					
95 %		<i>0.249</i>					
99 %		<i>0.249</i>					
None	R2 Stream	<i>0.014</i>					
90 %		<i>0.014</i>					



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PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)							
Nozzle reduction	Vegetated strip (m)	None							
	No spray buffer (m)	0 m							
95 %	R3 Stream	<i>0.014</i>							
99 %		<i>0.014</i>							
None		<i>0.021</i>							
90 %		<i>0.021</i>							
95 %	R4 Stream	<i>0.021</i>							
99 %		<i>0.021</i>							
None		<i>0.011</i>							
90 %		<i>0.011</i>							
95 %	R4 Stream	<i>0.011</i>							
99 %		<i>0.011</i>							

* Maximum values coming from multiple applications are marked in italics

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Cucumber - mid – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 202: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name cucumber, assessment name mid (DGR I / PMT II)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	0.306						
90 %		0.306						
95 %		0.306						
99 %		0.306						
None	R2 Stream	0.035						
90 %		0.035						
95 %		0.035						
99 %		0.035						
None	R3 Stream	0.029						
90 %		0.029						
95 %		0.029						
99 %		0.029						
None	R4 Stream	0.047						
90 %		0.047						
95 %		0.047						
99 %		0.047						

* Maximum values coming from multiple applications are marked in italics

Cucumber - late – 3 × 100 g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 203: FOCUS Step 4 PECsed results for M-03 (AE 0608000), GAP group name cucumber, assessment name late (DGR I / PMT III)

PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	0.579						
90 %		0.579						
95 %		0.579						
99 %		0.579						
None	R2 Stream	0.016						
90 %		0.016						
95 %		0.016						



PEC _{sed} (µg/kg)	Scenario	Step 4 M-03 (AE 0608000)							
Nozzle reduction	Vegetated strip (m)	None							
	No spray buffer (m)	0 m							
99 %		0.016							
None	R3 Stream	0.013							
90 %		0.013							
95 %		0.013							
99 %		0.013							
None	R4 Stream	0.019							
90 %		0.019							
95 %		0.019							
99 %		0.019							

* Maximum values coming from multiple applications are marked in italics

III Conclusion

Predicted environmental concentrations of the fungicide fluopicolide and its metabolites in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in greenhouse cucumbers in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered.

Assessment and conclusion by applicant

The risk assessment report was conducted according to FOCUS (2001, 2015) and is considered valid to assess predicted environmental concentrations in surface water (PEC_{sw}) and sediment (PEC_{sed}) for fluopicolide and its metabolites in cucumber.

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PEC_{sw} for propamocarb-hydrochloride

Data Point:	KCP 9.2.5/07
Report Author:	
Report Year:	2020
Report Title:	Propamocarb-hydrochloride (PCH): PEC _{sw} ,sed FOCUS SUR - Use in potatoes in Europe
Report No:	EnSa-20-0402
Document No:	M-687163-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

Predicted environmental concentrations of the fungicide propamocarb-hydrochloride in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in potatoes in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The uses of propamocarb-hydrochloride in relevant crops were assessed according to the Good Agricultural Practice (GAP) in Europe.

I. Materials and Methods

Intended GAPs for the use of propamocarb-hydrochloride in Europe were analysed and consolidated according to regulatory and modelling requirements. As a result, one or more uses may be covered by a single modelling GAP row (DGR). The translation of the regulatory GAP for modelling purposes is shown in Table 9.2.5-204.

Table 9.2.5-204: GAP translation for modelling purposes

GAP group ID	GAP group name (DGR) and use ID	Covered crops	Growth stage	Max. apps	Interval (days)	Rate (kg a.s./ha)
DGR I	potatoes 4X	potatoes	BBCH 21 - 89	4	7	4 × 1
DGR II	potatoes 3X	potatoes	BBCH 21 - 89	3	7	3 × 1
DGR III	potatoes X	potatoes	BBCH 21 - 89	2	7	2 × 1
DGR IV	potatoes 1X	potatoes	BBCH 21 - 89	1	-	1 × 1

The implementation of the modelling GAP (Table 9.2.5-204) at Steps 1-2 level is shown in Table 9.2.5-205. One or more calculations/modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Table 9.2.5- 205: FOCUS Steps 1-2 specific data for the GAPs assessed

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)	Season	Crop cover
DGR I PMT I	potatoes 4X	Early	potatoes (arable crops)	spring (Mar. - May)	average crop cover
DGR I PMT II	potatoes 4X	Late	potatoes (arable crops)	summer (Jun. - Sep.)	full canopy
DGR II PMT III	potatoes 3X	Early	potatoes (arable crops)	spring (Mar. - May)	average crop cover
DGR II PMT IV	potatoes 3X	Late	potatoes (arable crops)	summer (Jun. - Sep.)	full canopy
DGR III PMT V	potatoes 2X	Early	potatoes (arable crops)	spring (Mar. - May)	average crop cover
DGR III PMT VI	potatoes 2X	Late	potatoes (arable crops)	summer (Jun. - Sep.)	full canopy
DGR IV PMT VII	potatoes 1X	Early	potatoes (arable crops)	spring (Mar. - May)	average crop cover
DGR IV PMT VIII	potatoes 1X	Late	potatoes (arable crops)	summer (Jun. - Sep.)	full canopy

This section provides the implementation of the modelling GAP (Table 9.2.5-204) at Step 3 level. Also, here one or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Please note that PMTs at Steps 1-2 and Step 3 do not necessarily fully correspond to each other due to inherent differences in the models.

The application dates for this assessment were set with the help of the tool AppDate (Klein 2018), which proposes dates for specific crop stages (given as BBCH code) based on the crop development as defined in the FOCUS model scenarios for groundwater and surface water.

The summary of all Step 3 PMTs is provided in Table 9.2.5- 206. The detailed information on individual uses is given in subsections that follow Table 9.2.5- 207 to Table 9.2.5- 224.

Table 9.2.5- 206: Overview of FOCUS Step 3 assessments

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)
DGR I PMT I	Potatoes 4X	Early	Potatoes (arable crops)
DGR I PMT II	Potatoes 4X	Late	Potatoes (arable crops)
DGR II PMT III	Potatoes 3X	Early	Potatoes (arable crops)
DGR II PMT IV	Potatoes 3X	Late	Potatoes (arable crops)
DGR III PMT V	Potatoes 2X	Early	Potatoes (arable crops)
DGR III PMT VI	Potatoes 2X	Late	Potatoes (arable crops)
DGR IV PMT VII	Potatoes 1X	Early	Potatoes (arable crops)
DGR IV PMT VIII	Potatoes 1X	Late	Potatoes (arable crops)

GAP group name potatoes 4X, assessment name Early

Table 9.2.5- 207: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	30-May - 20-Jul
	D4 Pond/Stream	17-Jun - 07-Aug
	D6 Ditch	24-Apr - 14-Jun
	D6 Ditch (2nd)	21-Aug - 11-Oct
	R1 Pond/Stream	20-May - 10-Jul
	R2 Stream	06-Apr - 27-May
	R3 Stream	24-Apr - 14-Jun

Table 9.2.5- 208: Full FOCUS Step 3 application data

Run IDs		DGR I, PMT 0			
GAP group name (DGR)		Potatoes 4X			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		4×1.0 kg a.s./ha, 7d int			
Appl. method (Run-off CAM, depth (mc.))		Ground spray (2 - appln foliar linear 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 51 days)			
Drainage scenarios	PAT start/end date (Julian Day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	30-May/20-Jul (150/201)	14-Jun 26-Jun 08-Jul 15-Jul	R1 Pond/Stream	20-May/10-Jul (140/191)	31-May 12-Jun 24-Jun 04-Jul
D4 Pond/Stream	17-Jun/07-Aug (168/219)	21-Jun 28-Jun 05-Jul 18-Jul	R2 Stream	06-Apr/27-May (96/147)	22-Apr 29-Apr 07-May 20-May
D6 Ditch	24-Apr/14-Jun (114/165)	24-Apr 03-May 17-May 24-May	R3 Stream	24-Apr/14-Jun (114/165)	24-Apr 18-May 01-Jun 11-Jun
D6 Ditch (2nd)	21-Aug/11-Oct (232/284)	23-Aug 04-Sep 13-Sep 21-Sep			

GAP group name potatoes 4X, assessment name Late

Table 9.2.5- 209: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	24-Jul - 13-Sep
	D4 Pond/Stream	02-Aug - 22-Sep
	D6 Ditch	23-May - 13-Jul
	D6 Ditch (2nd)	03-Oct - 23-Nov
	R1 Pond/Stream	17-Jul - 06-Sep
	R2 Stream	24-Apr - 14-Jun
	R3 Stream	09-Jul - 29-Aug

Table 9.2.5- 210: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT II			
GAP group name (DGR)		Potatoes 4X			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		4x1.0 kg a/ha, 7d/mt.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 L appln/ha linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 51 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	24-Jul/13-Sep (205/256)	24-Jul	R1	17-Jul/06-Sep (198/249)	22-Jul
		03-Aug	Pond/Stream		29-Jul
		18-Aug 26-Aug			20-Aug 02-Sep
D4 Pond/Stream	02-Aug/22-Sep (214/265)	20-Aug	R2	24-Apr/14-Jun (114/165)	24-Apr
		04-Sep	Stream		07-May
		11-Sep 18-Sep			20-May 27-May
D6 Ditch	23-May/13-Jul (143/194)	24-May	R3 Stream	09-Jul/29-Aug (190/241)	13-Jul
		04-Jun			20-Jul
		13-Jun 05-Jul			27-Jul 04-Aug
D6 Ditch (2nd)	03-Oct/23-Nov (276/327)	05-Oct			
		14-Oct			
		22-Oct			
		31-Oct			

GAP group name potatoes 3X, assessment name Early

Table 9.2.5- 211: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	30-May - 27-Jul
	D4 Pond/Stream	17-Jun - 07-Aug
	D6 Ditch	24-Apr - 14-Jun
	D6 Ditch (2nd)	21-Aug - 11-Oct
	R1 Pond/Stream	20-May - 10-Jul
	R2 Stream	06-Apr - 27-May
	R3 Stream	24-Apr - 14-Jun

Table 9.2.5- 212: Full FOCUS Step 3 application data

Run IDs		DGR ID: PMTH1			
GAP group name (DGR)		Potatoes 3X			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		8x1.0 kg a.s./ha, 7d int			
Appl. method (Run-off CAM, depth, inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian Day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	30-May/20-Jul (150/201)	24-Jun 26-Jun 08-Jul	R1 Pond/Stream	20-May/10-Jul (140/191)	31-May 12-Jun 24-Jun
D4 Pond/Stream	17-Jun/07-Aug (168/209)	21-Jun 28-Jun 05-Jul	R2 Stream	06-Apr/27-May (96/147)	22-Apr 29-Apr 07-May
D6 Ditch	24-Apr/14-Jun (114/165)	24-Apr 04-May 17-May	R3 Stream	24-Apr/14-Jun (114/165)	24-Apr 18-May 01-Jun
D6 Ditch (2nd)	21-Aug/11-Oct (235/284)	18-Aug 04-Sep 13-Sep			

GAP group name potatoes 3X, assessment name Late

Table 9.2.5- 213: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	24-Jul - 13-Sep
	D4 Pond/Stream	02-Aug - 22-Sep

Assessment name	Scenario	Application window used in modelling
	D6 Ditch	23-May - 13-Jul
	D6 Ditch (2nd)	03-Oct - 23-Nov
	R1 Pond/Stream	17-Jul - 06-Sep
	R2 Stream	24-Apr - 14-Jun
	R3 Stream	09-Jul - 29-Aug

Table 9.2.5- 214: Full FOCUS Step 3 application data

Run IDs		DGR II / PMT IV			
GAP group name (DGR)		Potatoes 3X			
Assessment name (PMT)		Date			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		3 × 1.0 kg a.s./ha, 7 d mt.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 applications, foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		52 days for all scenarios (min = 47 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	24-Jul/13-Sep (205/256)	24-Jul 03-Aug 13-Aug	R1 Pond/Stream	17-Jul/06-Sep (197/249)	22-Jul 29-Jul 20-Aug
D4 Pond/Stream	02-Aug/22-Sep (213/265)	27-Aug 10-Sep 18-Sep	R2 Stream	24-Apr/14-Jun (114/165)	24-Apr 07-May 20-May
D6 Ditch	23-May/13-Jul (143/194)	24-May 04-Jun 23-Jun	R3 Stream	09-Jul/29-Aug (190/241)	13-Jul 20-Jul 27-Jul
D6 Ditch (2nd)	03-Oct/23-Nov (276/327)	05-Oct 14-Oct 22-Oct			

GAP group name potatoes 2X, assessment name Early

Table 9.2.5- 215: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	30-May - 20-Jul
	D4 Pond/Stream	17-Jun - 07-Aug
	D6 Ditch	24-Apr - 14-Jun
	D6 Ditch (2nd)	21-Aug - 11-Oct
	R1 Pond/Stream	20-May - 10-Jul
	R2 Stream	06-Apr - 27-May
	R3 Stream	24-Apr - 14-Jun

Table 9.2.5- 216: Full FOCUS Step 3 application data

Run IDs		DGR III / PMT V			
GAP group name (DGR)		Potatoes 2X			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		2×1.0 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 37 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	30-May/20-Jul (150/201)	14-Jun-26-Jun	R1 Pond/Stream	20-May/10-Jul (140/197)	13-Jun-05-Jul
D4 Pond/Stream	17-Jun/07-Aug (168/219)	01-Jun-28-Jun	R2 Stream	06-Apr/27-May (96/147)	22-Apr-29-Apr
D6 Ditch	24-Apr/14-Jun (114/165)	04-Apr-03-May	R3 Stream	24-Apr/14-Jun (114/165)	24-Apr-18-May
D6 Ditch (2nd)	21-Aug/11-Oct (233/284)	23-Aug-04-Sep			

GAP group name potatoes 2X, assessment name Late

Table 9.2.5- 217: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	24-Jul - 13-Sep
	D4 Pond/Stream	02-Aug - 22-Sep
	D6 Ditch	23-May - 13-Jul
	D6 Ditch (2nd)	03-Oct - 23-Nov
	R1 Pond/Stream	17-Jul - 06-Sep
	R2 Stream	24-Apr - 14-Jun
	R3 Stream	09-Jul - 29-Aug

Table 9.2.5- 218: Full FOCUS Step 3 application data

Run IDs		DGR III / PMT VI			
GAP group name (DGR)		Potatoes 2X			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		2×1.0 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 37 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	24-Jul/13-Sep (205/256)	24-Jul-03-Aug	R1 Pond/Stream	17-Jul/06-Sep (198/249)	28-Jul-20-Aug
D4 Pond/Stream	02-Aug/22-Sep (214/265)	27-Aug-10-Sep	R2 Stream	24-Apr/14-Jun (114/165)	24-Apr-07-May
D6 Ditch	23-May/13-Jul (143/194)	24-May-04-Jun	R3 Stream	09-Jul/29-Aug (190/241)	13-Jul-20-Jul
D6 Ditch (2nd)	03-Oct/23-Nov (276/327)	05-Oct-14-Oct			

GAP group name potatoes 1X, assessment name Early

Table 9.2.5- 219: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	30-May - 20-Jul
	D4 Pond/Stream	17-Jun - 07-Aug
	D6 Ditch	24-Apr - 14-Jun
	D6 Ditch (2nd)	21-Aug - 11-Oct
	R1 Pond/Stream	20-May - 10-Jul
	R2 Stream	06-Apr - 27-May
	R3 Stream	24-Apr - 14-Jun

Table 9.2.5- 220: Full FOCUS Step 3 application data

Run IDs		DGR IV / PMT VII			
GAP group name (DGR)		Potatoes 1X			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		1 kg a.s./ha			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 30 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	30-May/20-Jul (150/201)	14-Jun	R1 Pond/Stream	20-May/10-Jul (140/197)	13-Jun
D4 Pond/Stream	17-Jun/07-Aug (168/219)	21-Jun	R2 Stream	06-Apr/27-May (96/147)	2-Apr
D6 Ditch	24-Apr/14-Jun (114/165)	24-Apr	R3 Stream	4-Apr/14-Jun (114/165)	24-Apr
D6 Ditch (2nd)	21-Aug/11-Oct (233/284)	23-Aug			

GAP group name potatoes 1X, assessment name Late

Table 9.2.5- 221: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	24-Jul - 13-Sep
	D4 Pond/Stream	02-Aug - 22-Sep
	D6 Ditch	23-May - 13-Jul
	D6 Ditch (2nd)	03-Oct - 23-Nov
	R1 Pond/Stream	17-Jul - 06-Sep
	R2 Stream	24-Apr - 14-Jun
	R3 Stream	09-Jul - 29-Aug

Table 9.2.5- 222: Full FOCUS Step 3 application data

Run IDs		DGR IV / PMT VIII			
GAP group name (DGR)		Potatoes 1X			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Potatoes (arable crops)			
Use pattern		1 kg a.s./ha			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		51 days for all scenarios (min = 30 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	24-Jul/13-Sep (205/256)	24-Jul	R1 Pond/Stream	17-Jul/06-Sep (198/249)	28-Jul
D4 Pond/Stream	02-Aug/22-Sep (214/265)	27-Aug	R2 Stream	24-Apr/14-Jun (114/165)	14-Apr
D6 Ditch	23-May/13-Jul (143/194)	24-May	R3 Stream	09-Jul/29-Aug (190/241)	13-Jul
D6 Ditch (2nd)	03-Oct/23-Nov (276/327)	05-Oct			

Steps 1-2 calculations were performed according to formulas implemented in FOCUS STEPS 1+2 version 3.2.

Step 3 calculations were performed using the FOCUS SWASH 5.3 suite, including
 FOCUS PKZM 4.3.1
 FOCUS MACRO 5.5.4
 FOCUS TOXSWA 5.5.3

Refinement at Step 4 level was performed with the SWAN tool, version 5.0.1.

Standard procedures and settings were used for Steps 1-2 and 3 assessments. At Step 4 the following mitigation settings were used Table 9.2.5- 223 and Table 9.2.5- 224.

Table 9.2.5- 223: Mitigation approaches used

Buffer length	Mitigation type	Drift reduction nozzles
0 m	Spray drift	0 %, 50 %, 75 %, 90 %
5 m	Spray drift	
10 m	Spray drift & RunOff	
15 m	Spray drift & RunOff	
20 m	Spray drift & RunOff	

Table 9.2.5- 224: Runoff mitigation parameters used for the assessment

Fractional reduction in:	10 m, 15 m	20 m
Runoff: Volume	0.60	0.80
Flux	0.60	0.80
Erosion: Mass	0.85	0.95
Flux	0.85	0.95

Substance related parameters which have been used as input in the calculations are based on parameters whose derivation is taken from the EFSA LoEP [EFSA Scientific Report 87, 12 May 2006]. Calculations at FOCUS SW Steps 1-2 level are summarised in Table 9.2.5- 225 and at Step 3/4 level in Table 9.2.5- 226.

Table 9.2.5- 225: Substance parameters used at FOCUS Steps 1-2 level

Parameter	Unit	Propamocarb-hydrochloride PCH
Molar mass	(g/mol)	224.7
Water solubility	(mg/L)	100500
K _{oc}	(mL/g)	263.6
Degradation		
Soil	(days)	13.91
Total system	(days)	18.3
Water	(days)	1000
Sediment	(days)	1000
Max occurrence		
Water / sediment	(%)	100
Soil	(%)	100

Table 9.2.5- 226: Substance parameters used for propamocarb-hydrochloride at Step 3/4 level

Parameter	Unit	Parent
Substance SWASH code		Propamocarb-hydrochloride PCH
General		
Molar mass	(g/mol)	224.7
Water solubility (temp)	(mg/L)	100500 (20 °C)
Vapour pressure (temp)	(Pa)	8.1E-05 (25 °C)
Crop processes		
Coefficient for uptake by plant (CSCF)	(-)	0
Wash-off factor	(l/m)	50
Sorption		
K _{oc}	(mL/g)	263.6
K _{ow}	(mL/g)	152.9
Freundlich exponent (1/n)	(-)	0.867
Transformation		
DT50 in soil	(days)	13.91
temperature	(°C)	20
moisture content (pF)	(log(cm))	2
formation fraction in soil	(-)	-
DT50 in water	(days)	18.3
temperature	(°C)	20
formation fraction in water	(-)	-
DT50 in sediment	(days)	1000

Parameter	Unit	Parent
temperature	(°C)	20
formation fraction in sediment	(-)	-
DT50 on canopy	(days)	10
Exponent for the effect of moisture		
PRZM and TOXSWA (Walker exp.)	(-)	
MACRO (calibrated value)	(-)	0.49
Effect of temperature		
TOXSWA (molar activation energy)	(kJ/mol)	65.4
MACRO (effect of temperature)	(1/K)	0.0948
PRZM (Q ₁₀)	(-)	2.58

II. Results and Discussion

The PEC values were calculated for propamocarb-hydrochloride according to the equations implemented in the “STEPS 1-2 in FOCUS” calculator Table 9.2.5- 227 to Table 9.2.5- 234.

Potatoes 4X - Early – 4 × 1000g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 227: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	1023	RunOff	891	2601
Step 2					
Northern Europe	Mar. - May (Spring)	64.8	RunOff	57.4	168
Southern Europe	Mar. - May (Spring)	116	RunOff	104	304

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 4X - Late – 4 × 1000g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 228: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1		1023	RunOff	891	2601
Step 2					
Northern Europe	Jun. - Sep. (Summer)	44.1	RunOff	38.8	113
Southern Europe	Jun. - Sep. (Summer)	59.6	RunOff	52.8	154

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Early – 3 × 1000g a.s./ha, 7d int. (DGR II / PMT III)
Table 9.2.5- 229: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	768	RunOff	668	1951
Step 2					
Northern Europe	Mar. - May(Spring)	56.3	RunOff	49.9	146
Southern Europe	Mar. - May(Spring)	101	RunOff	89.9	263

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Late – 3 × 1000g a.s./ha, 7d int. (DGR II / PMT IV)
Table 9.2.5- 230: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	768	RunOff	668	1951
Step 2					
Northern Europe	Jun. - Sep.(Summer)	88.5	RunOff	33.9	98.9
Southern Europe	Jun. - Sep.(Summer)	54.8	RunOff	45.9	134

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Early – 2 × 1000g a.s./ha, 7d int. (DGR III / PMT V)
Table 9.2.5- 231: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	512	RunOff	446	1300
Step 2					
Northern Europe	Mar. - May(Spring)	44.9	RunOff	39.7	116
Southern Europe	Mar. - May(Spring)	79.4	RunOff	70.7	207

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Late – 2 × 1000g a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 232: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	512	RunOff	446	300
Step 2					
Northern Europe	Jun. - Sep.(Summer)	31.1	RunOff	27.3	8
Southern Europe	Jun. - Sep.(Summer)	41.4	RunOff	36.6	107

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Early – 1 × 1000g a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 233: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	256	RunOff	223	650
Step 2					
Northern Europe	Mar. - May(Spring)	26.7	RunOff	8.6	69.1 *
Southern Europe	Mar. - May(Spring)	46.9 *	RunOff	41.8	122 *

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Late – 1 × 1000g a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 234: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	256	RunOff	223	650
Step 2					
Northern Europe	Jun. - Sep.(Summer)	18.7 *	RunOff	16.4	47.8 *
Southern Europe	Jun. - Sep.(Summer)	24.7 *	RunOff	21.8	63.8 *

* Single applications are marked.

** TWA interval as required by ecotox

Step 3 calculations were conducted for propamocarb-hydrochloride employing the models of the FOCUS SW suite. Reported values represent loadings *via* all relevant entry routes are shown in Table 9.2.5- 235 to Table 9.2.5- 242.

Potatoes 4X - Early – 4 × 1.0 kg a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 235: FOCUS Step 3 PEC_{sw} and PEC_{sd} for propamocarb-hydrochloride, GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	5.24 *	Spray drift	0.770	2.24
D4	Pond	0.626	Spray drift	0.620	2.86
D4	Stream	4.10	Spray drift	0.557	1.52
D6	Ditch	5.18 *	Spray drift	0.360	1.46
D6	Ditch 2nd	8.56	Spray drift	3.52	4.97
R1	Pond	1.3	RunOff	1.60	3.64
R1	Stream	24.1	RunOff	2.94	10.7
R2	Stream	16.8	RunOff	1.53	8.01
R3	Stream	30.2	Spray drift	4.07	15.0

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 4X - Late – 4 × 1.0 kg a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 236: FOCUS Step 3 PEC_{sw} and PEC_{sd} for propamocarb-hydrochloride, GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	5.24 *	Spray drift	0.813	2.44
D4	Pond	5.70	Drainage	5.65	18.1
D4	Stream	7.03	Spray drift	5.71	10.1
D6	Ditch	5.21 *	Spray drift	0.514	1.40 *
D6	Ditch 2nd	107	Drainage	44.2	57.1
R1	Pond	6.295	Spray drift	0.272	1.79
R1	Stream	13.8	Spray drift	1.32	3.21
R2	Stream	12.9	RunOff	1.99	11.7
R3	Stream	24.6	RunOff	3.17	19.4

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Early – 3 × 1.0 kg a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 237: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	5.24 *	Spray drift	0.770	2.07
D4	Pond	0.365	Spray drift	0.352	0.77
D4	Stream	4.10 *	Spray drift	0.308	0.890
D6	Ditch	5.18 *	Spray drift	0.390	1.0
D6	Ditch 2nd	5.14 *	Spray drift	1.93	2.41
R1	Pond	1.74	RunOff	1.61	3.44
R1	Stream	24.1	RunOff	2.95	10.7
R2	Stream	16.8	RunOff	1.54	7.13
R3	Stream	3.0	Spray drift	2.92	7.9

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 3X - Late – 3 × 1.0 kg a.s./ha, 7d int. (DGR II / PMT IV)

Table 9.2.5- 238: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	5.24 *	Spray drift	0.813	2.24
D4	Pond	4.13	Drainage	4.08	13.2
D4	Stream	5.09	Spray drift	4.05	7.31
D6	Ditch	5.21 *	Spray drift	0.449	1.40 *
D6	Ditch 2nd	10.7	Drainage	42.0	49.2
R1	Pond	0.264	Spray drift	0.230	1.00
R1	Stream	5.52	Spray drift	0.530	1.35
R2	Stream	11.9	RunOff	1.09	6.76
R3	Stream	23.2	RunOff	3.08	16.1

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Early – 2 × 1.0 kg a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 239: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	5.24 *	Spray drift	0.770	2.17
D4	Pond	0.313	Spray drift	0.274	0.09
D4	Stream	4.10 *	Spray drift	0.170	0.506
D6	Ditch	5.18 *	Spray drift	0.342	1.07
D6	Ditch 2nd	5.14 *	Spray drift	0.683	1.12
R1	Pond	1.10 *	RunOff	0.963	2.28
R1	Stream	14.6 *	RunOff	1.74	6.96 *
R2	Stream	13.8 *	RunOff	1.02	4.41
R3	Stream	9.0 *	Spray drift	2.92	7.32

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 2X - Late – 2 × 1.0 kg a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 240: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	5.24 *	Spray drift	0.813	2.28
D4	Pond	2.51	Drainage	2.48	8.45
D4	Stream	3.99	Spray drift	2.34	4.67
D6	Ditch	5.21 *	Spray drift	0.449	1.49
D6	Ditch 2nd	49.0 *	Drainage	19.0	24.1
R1	Pond	0.245	Spray drift	0.212	0.875
R1	Stream	4.79	Spray drift	0.463	1.18
R2	Stream	11.0	RunOff	1.04	4.69
R3	Stream	22.5	RunOff	3.11	13.2

* Single applications are marked.

** TWA interval as required by ecotox

Potatoes 1X - Early - 1 kg a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 241: FOCUS Step 3 PEC_{sw} and PEC_{sd} for propamocarb-hydrochloride, GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step 3					
D3	Ditch	5.24 *	Spray drift	0.770	1.92 *
D4	Pond	0.214 *	Spray drift	0.186	0.516 *
D4	Stream	4.10 *	Spray drift	0.064	0.212 *
D6	Ditch	5.18 *	Spray drift	0.342	1.17 *
D6	Ditch 2nd	5.14 *	Spray drift	0.222	0.864 *
R1	Pond	1.10 *	RunOff	0.963	2.94 *
R1	Stream	14.6 *	RunOff	1.74	6.96 *
R2	Stream	5.46 *	RunOff	0.386	1.87 *
R3	Stream	5.12 *	Spray drift	0.403	1.48 *

* Single applications are marked

** TWA interval as required by ecotox

Potatoes 1X - Late - 1kg a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 242: FOCUS Step 3 PEC_{sw} and PEC_{sd} for propamocarb-hydrochloride, GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sd} (µg/kg)*
Step					
D3	Ditch	5.24 *	Spray drift	0.813	1.97 *
D4	Pond	0.82 *	Drainage	0.814	3.12 *
D4	Stream	3.95 *	Spray drift	0.664	1.68 *
D6	Ditch	5.21 *	Spray drift	0.449	1.40 *
D6	Ditch 2nd	16.3 *	Drainage	6.40	8.55 *
R1	Pond	0.212 *	Spray drift	0.180	0.399 *
R1	Stream	3.60 *	Spray drift	0.106	0.380 *
R2	Stream	5.91 *	RunOff	0.418	2.02 *
R3	Stream	13.7 *	RunOff	2.02	7.03 *

* Single applications are marked

** TWA interval as required by ecotox

FOCUS Step 4 calculations considering various mitigation measures for runoff and spray drift were conducted based on the Step 3 results. This section provides the summary of results in tabular form. Where applicable, the maximum of single and multiple application uses are shown in Table 9.2.5- 243 to Table 9.2.5- 258.

Potatoes 4X - Early – 4 × 1.0 kg a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 243: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	5.24	1.72	0.91	0.622	0.473	0.911	0.622	0.473	
50 %		2.62	0.859	0.455	0.311	0.237	0.455	0.311	0.237	
75 %		1.31	0.429	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.524	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
None	D4 Pond	0.626	0.625	0.623	0.622	0.621	0.623	0.622	0.621	
50 %		0.622	0.621	0.620	0.619	0.619	0.620	0.619	0.619	
75 %		0.619	0.618	0.618	0.618	0.618	0.618	0.618	0.618	
90 %		0.618	0.618	0.618	0.617	0.617	0.618	0.617	0.617	
None	D4 Stream	4.40	1.73	0.91	0.701	0.701	0.701	0.701	0.701	
50 %		2.05	0.851	0.701	0.701	0.701	0.701	0.701	0.701	
75 %		1.03	0.701	0.701	0.701	0.701	0.701	0.701	0.701	
90 %		0.701	0.701	0.701	0.701	0.701	0.701	0.701	0.701	
None	D6 Ditch	5.18	1.70	0.902	0.617	0.470	0.902	0.617	0.470	
50 %		2.59	0.851	0.452	0.309	0.235	0.452	0.309	0.235	
75 %		1.30	0.426	0.227	0.155	0.118	0.227	0.155	0.118	
90 %		0.520	0.171	0.092	0.063	0.048	0.092	0.063	0.048	
None	D6 Ditch 2nd	8.56	8.56	8.56	8.56	8.56	8.56	8.56	8.56	
50 %		8.56	8.56	8.56	8.56	8.56	8.56	8.56	8.56	
75 %		8.56	8.56	8.56	8.56	8.56	8.56	8.56	8.56	
90 %		8.56	8.56	8.56	8.56	8.56	8.56	8.56	8.56	
None	R1 Pond	1.73	1.70	1.67	1.65	1.64	0.748	0.713	0.405	
50 %		1.65	1.64	1.62	1.61	1.60	0.682	0.671	0.350	
75 %		1.61	1.60	1.59	1.59	1.58	0.656	0.651	0.333	
90 %		1.58	1.58	1.58	1.58	1.57	0.640	0.638	0.322	
None	R1 Stream	24.1	24.1	24.1	24.1	24.1	11.0	11.0	5.75	
50 %		24.1	24.1	24.1	24.1	24.1	11.0	11.0	5.75	
75 %		24.1	24.1	24.1	24.1	24.1	11.0	11.0	5.75	
90 %		24.1	24.1	24.1	24.1	24.1	11.0	11.0	5.75	
None	R2 Stream	16.8	16.8	16.8	16.8	16.8	7.48	7.48	3.89	
50 %		16.8	16.8	16.8	16.8	16.8	7.48	7.48	3.89	
75 %		16.8	16.8	16.8	16.8	16.8	7.48	7.48	3.89	
90 %		16.8	16.8	16.8	16.8	16.8	7.48	7.48	3.89	
None	R3 Stream	30.2	30.2	30.2	30.2	30.2	13.8	13.8	7.23	
50 %		30.2	30.2	30.2	30.2	30.2	13.8	13.8	7.23	

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		75 %		30.2	30.2	30.2	30.2	30.2	13.8	13.8
90 %		30.2	30.2	30.2	30.2	30.2	13.8	13.8	7.23	

* Maximum values coming from multiple applications are marked in italics

Potatoes 4X - Late – 4 × 1.0 kg a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 244: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m
No spray buffer (m)	0 m		5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	5.24	1.70	0.911	0.623	0.474	0.911	0.623	0.474	
50 %		2.62	0.859	0.456	0.321	0.237	0.456	0.311	0.237	
75 %		1.31	0.430	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.524	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
None	D4 Pond	5.67	5.67	5.66	5.67	5.67	5.67	5.67	5.67	
50 %		5.67	5.67	5.66	5.66	5.66	5.66	5.66	5.66	
75 %		5.66	5.66	5.65	5.65	5.65	5.65	5.65	5.65	
90 %		5.65	5.65	5.65	5.65	5.65	5.65	5.65	5.65	
None	D4 Stream	7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	
50 %		7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	
75 %		7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	
90 %		7.03	7.03	7.03	7.03	7.03	7.03	7.03	7.03	
None	D6 Ditch	5.24	1.71	0.905	0.695	0.695	0.905	0.695	0.695	
50 %		0.60	0.855	0.695	0.695	0.695	0.695	0.695	0.695	
75 %		1.30	0.695	0.695	0.695	0.695	0.695	0.695	0.695	
90 %		0.695	0.695	0.695	0.695	0.695	0.695	0.695	0.695	
None	D6 Ditch 2nd	107	107	107	107	107	107	107	107	
50 %		107	107	107	107	107	107	107	107	
75 %		107	107	107	107	107	107	107	107	
90 %		107	107	107	107	107	107	107	107	
None	R1 Pond	0.295	0.285	0.273	0.266	0.262	0.188	0.150	0.125	
50 %		0.266	0.263	0.256	0.253	0.251	0.113	0.110	0.063	
75 %		0.253	0.252	0.248	0.247	0.246	0.105	0.103	0.054	
90 %		0.245	0.245	0.243	0.243	0.242	0.100	0.099	0.051	
None	R1 Stream	13.8	13.8	13.8	13.8	13.8	6.18	6.18	3.22	
50 %		13.8	13.8	13.8	13.8	13.8	6.18	6.18	3.22	
75 %		13.8	13.8	13.8	13.8	13.8	6.18	6.18	3.22	

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %		3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	
75 %		3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	
90 %		3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	
None		R1 Pond	1.74	1.72	1.66	1.65	1.64	0.639	0.718	0.47
50 %		1.65	1.64	1.62	1.61	1.60	0.685	0.674	0.352	
75 %		1.61	1.61	1.60	1.59	1.59	0.63	0.652	0.334	
90 %		1.58	1.58	1.58	1.58	1.58	0.41	0.639	0.323	
None		R1 Stream	24.1	24.1	24.1	24.1	24.1	11.0	11.0	5.75
50 %		24.1	24.1	24.1	24.1	24.1	11.0	11.0	5.75	
75 %		24.1	24.1	24.1	24.1	24.1	11.0	11.0	5.75	
90 %		24.1	24.1	24.1	24.1	24.1	11.0	11.0	5.75	
None		R2 Stream	16.8	16.8	16.8	16.8	16.8	7.48	7.48	3.89
50 %		16.8	16.8	16.8	16.8	16.8	7.48	7.48	3.89	
75 %		16.8	16.8	16.8	16.8	16.8	7.48	7.48	3.89	
90 %		16.8	16.8	16.8	16.8	16.8	7.48	7.48	3.89	
None		R3 Stream	23.0	23.0	23.0	23.0	23.0	10.5	10.5	5.47
50 %		23.0	23.0	23.0	23.0	23.0	10.5	10.5	5.47	
75 %		23.0	23.0	23.0	23.0	23.0	10.5	10.5	5.47	
90 %		23.0	23.0	23.0	23.0	23.0	10.5	10.5	5.47	

* Maximum values coming from multiple applications are marked in italics

Potatoes 3X - Late 3 × 10 kg a.s./ha, 0d int. (DGR II / PMT IV)

Table 9.2.5- 246: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	5.44	1.72	0.911	0.623	0.474	0.911	0.623	0.474	
50 %		1.62	0.859	0.456	0.311	0.237	0.456	0.311	0.237	
75 %		1.31	0.430	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.524	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
None	D4 Pond	4.13	4.12	4.11	4.10	4.10	4.11	4.10	4.10	
50 %		4.10	4.10	4.09	4.09	4.09	4.09	4.09	4.09	
75 %		4.09	4.09	4.09	4.09	4.08	4.09	4.09	4.08	



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PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
90 %		4.08	4.08	4.08	4.08	4.08	4.08	4.08	4.08	
None	D4 Stream	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
50 %		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
75 %		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
90 %		5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
None	D6 Ditch	5.21	1.71	0.905	0.638	0.470	0.905	0.618	0.470	
50 %		2.60	0.853	0.453	0.309	0.278	0.53	0.309	0.278	
75 %		1.30	0.427	0.278	0.278	0.278	0.278	0.278	0.278	
90 %		0.521	0.278	0.278	0.278	0.278	0.278	0.278	0.278	
None	D6 Ditch 2nd	107	107	107	107	107	107	107	107	
50 %		107	107	107	107	107	107	107	107	
75 %		107	107	107	107	107	107	107	107	
90 %		107	107	107	107	107	107	107	107	
None	R1 Pond	0.266	0.235	0.167	0.133	0.113	0.167	0.133	0.111	
50 %		0.132	0.117	0.107	0.108	0.106	0.084	0.066	0.055	
75 %		0.108	0.107	0.105	0.104	0.103	0.045	0.044	0.028	
90 %		0.103	0.103	0.102	0.101	0.101	0.042	0.042	0.021	
None	R1 Stream	5.52	5.52	5.52	5.52	5.52	2.47	2.47	1.28	
50 %		5.52	5.52	5.52	5.52	5.52	2.47	2.47	1.28	
75 %		5.52	5.52	5.52	5.52	5.52	2.47	2.47	1.28	
90 %		5.52	5.52	5.52	5.52	5.52	2.47	2.47	1.28	
None	R2 Stream	11.0	11.0	11.0	11.0	11.0	4.92	4.92	2.55	
50 %		11.0	11.0	11.0	11.0	11.0	4.92	4.92	2.55	
75 %		11.0	11.0	11.0	11.0	11.0	4.92	4.92	2.55	
90 %		11.0	11.0	11.0	11.0	11.0	4.92	4.92	2.55	
None	R3 Stream	23.2	23.2	23.2	23.2	23.2	10.6	10.6	5.53	
50 %		23.2	23.2	23.2	23.2	23.2	10.6	10.6	5.53	
75 %		23.2	23.2	23.2	23.2	23.2	10.6	10.6	5.53	
90 %		23.2	23.2	23.2	23.2	23.2	10.6	10.6	5.53	

* Maximum values coming from multiple applications are marked in italics

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Potatoes 2X - Early – 2 × 1.0 kg a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 247: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	5.24	1.72	0.91	0.622	0.473	0.911	0.622	0.473	
50 %		2.62	0.859	0.455	0.311	0.237	0.455	0.311	0.237	
75 %		1.31	0.429	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.524	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
None	D4 Pond	0.313	0.199	0.199	0.199	0.199	0.200	0.199	0.199	
50 %		0.199	0.199	0.198	0.198	0.198	0.198	0.198	0.198	
75 %		0.198	0.198	0.197	0.197	0.197	0.197	0.197	0.197	
90 %		0.197	0.197	0.197	0.197	0.197	0.197	0.197	0.197	
None	D4 Stream	4.40	1.73	0.93	0.627	0.478	0.917	0.627	0.478	
50 %		2.05	0.864	0.460	0.315	0.240	0.460	0.315	0.240	
75 %		1.03	0.434	0.231	0.221	0.221	0.221	0.221	0.221	
90 %		0.412	0.221	0.221	0.221	0.221	0.221	0.221	0.221	
None	D6 Ditch	5.18	1.70	0.902	0.617	0.470	0.902	0.617	0.470	
50 %		2.59	0.851	0.452	0.309	0.235	0.452	0.309	0.235	
75 %		1.30	0.426	0.227	0.155	0.118	0.227	0.155	0.118	
90 %		0.520	0.171	0.092	0.063	0.048	0.092	0.063	0.048	
None	D6 Ditch 2nd	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
50 %		1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
75 %		1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
90 %		1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	
None	R1 Pond	1.10	1.03	0.993	0.984	0.977	0.477	0.457	0.255	
50 %		1.03	0.993	0.984	0.977	0.477	0.457	0.255		
75 %		0.983	0.979	0.969	0.964	0.961	0.404	0.399	0.206	
90 %		0.960	0.958	0.955	0.953	0.951	0.390	0.388	0.197	
None	R1 Stream	14.6	14.6	14.6	14.6	14.6	6.65	6.65	3.48	
50 %		14.6	14.6	14.6	14.6	14.6	6.65	6.65	3.48	
75 %		14.6	14.6	14.6	14.6	14.6	6.65	6.65	3.48	
90 %		14.6	14.6	14.6	14.6	14.6	6.65	6.65	3.48	
None	R2 Stream	13.8	13.8	13.8	13.8	13.8	6.16	6.16	3.20	
50 %		13.8	13.8	13.8	13.8	13.8	6.16	6.16	3.20	
75 %		13.8	13.8	13.8	13.8	13.8	6.16	6.16	3.20	
90 %		13.8	13.8	13.8	13.8	13.8	6.16	6.16	3.20	
None	R3 Stream	23.0	23.0	23.0	23.0	23.0	10.5	10.5	5.47	
50 %		23.0	23.0	23.0	23.0	23.0	10.5	10.5	5.47	



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PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m
No spray buffer (m)	0 m		5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %		23.0	23.0	23.0	23.0	23.0	10.5	10.5	5.47	
90 %		23.0	23.0	23.0	23.0	23.0	10.5	10.5	5.47	

* Maximum values coming from multiple applications are marked in italics

Potatoes 2X - Late – 2 × 1.0 kg a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 248: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m
No spray buffer (m)	0 m		5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	5.24	0.72	0.91	0.623	0.474	0.91	0.623	0.474	
50 %		2.62	0.859	0.456	0.311	0.237	0.56	0.311	0.237	
75 %		1.31	0.430	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.521	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
None		D4 Pond	2.51	2.50	2.50	2.50	2.49	2.50	2.50	2.49
50 %	2.50		2.50	2.49	2.49	2.49	2.49	2.49	2.49	
75 %	2.49		2.49	2.49	2.48	2.48	2.49	2.48	2.48	
90 %	2.48		2.48	2.48	2.48	2.48	2.48	2.48	2.48	
None	D4 Stream	3.95	2.97	2.97	2.97	2.97	2.97	2.97	2.97	
50 %		2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	
75 %		2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	
90 %		2.97	2.97	2.97	2.97	2.97	2.97	2.97	2.97	
None	D6 Ditch	2.21	1.71	0.905	0.618	0.470	0.905	0.618	0.470	
50 %		2.60	0.853	0.453	0.309	0.235	0.453	0.309	0.235	
75 %		1.30	0.427	0.226	0.155	0.118	0.226	0.155	0.118	
90 %		0.521	0.172	0.091	0.062	0.058	0.091	0.062	0.058	
None	D6 Ditch 2nd	49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	
50 %		49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	
75 %		49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	
90 %		49.9	49.9	49.9	49.9	49.9	49.9	49.9	49.9	
None	R1 Pond	0.245	0.218	0.154	0.122	0.103	0.154	0.122	0.102	
50 %		0.122	0.109	0.100	0.098	0.097	0.077	0.061	0.051	
75 %		0.098	0.097	0.096	0.095	0.094	0.041	0.040	0.025	
90 %		0.094	0.094	0.093	0.093	0.092	0.039	0.038	0.020	

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	R1 Stream	4.79	4.79	4.79	4.79	4.79	2.14	2.14	1.11	
50 %		4.79	4.79	4.79	4.79	4.79	2.14	2.14	1.11	
75 %		4.79	4.79	4.79	4.79	4.79	2.14	2.14	1.11	
90 %		4.79	4.79	4.79	4.79	4.79	2.04	2.14	1.11	
None	R2 Stream	11.0	11.0	11.0	11.0	11.0	4.92	4.92	2.55	
50 %		11.0	11.0	11.0	11.0	11.0	4.92	4.92	2.55	
75 %		11.0	11.0	11.0	11.0	11.0	4.92	4.92	2.55	
90 %		11.0	11.0	11.0	11.0	11.0	4.92	4.92	2.55	
None	R3 Stream	22.5	22.5	22.5	22.5	22.5	10.2	10.2	5.37	
50 %		22.5	22.5	22.5	22.5	22.5	10.2	10.2	5.37	
75 %		22.5	22.5	22.5	22.5	22.5	10.2	10.2	5.37	
90 %		22.5	22.5	22.5	22.5	22.5	10.2	10.2	5.37	

* Maximum values coming from multiple applications are marked in italics

Potatoes 1X - Early - 1 kg a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 249: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	2.24	1.72	0.91	0.622	0.473	0.911	0.622	0.473	
50 %		2.62	0.859	0.455	0.311	0.237	0.455	0.311	0.237	
75 %		1.5	0.429	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.524	0.17	0.091	0.062	0.047	0.091	0.062	0.047	
None	D4 Pond	0.214	0.092	0.138	0.111	0.093	0.138	0.111	0.093	
50 %		0.108	0.097	0.079	0.079	0.079	0.079	0.079	0.079	
75 %		0.079	0.079	0.079	0.079	0.079	0.079	0.079	0.079	
90 %		0.078	0.078	0.078	0.078	0.078	0.078	0.078	0.078	
None	D5 Stream	1.70	1.73	0.917	0.627	0.478	0.917	0.627	0.478	
50 %		2.05	0.864	0.460	0.315	0.240	0.460	0.315	0.240	
75 %		1.03	0.434	0.231	0.159	0.122	0.231	0.159	0.122	
90 %		0.412	0.175	0.094	0.089	0.089	0.094	0.089	0.089	
None	D6 Ditch	5.18	1.70	0.902	0.617	0.470	0.902	0.617	0.470	
50 %		2.59	0.851	0.452	0.309	0.235	0.452	0.309	0.235	

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %	D6 Ditch 2nd	1.30	0.426	0.227	0.155	0.118	0.227	0.155	0.118	
90 %		0.520	0.171	0.092	0.063	0.048	0.092	0.063	0.048	
None		5.14	1.69	0.894	0.611	0.478	0.894	0.611	0.478	
50 %		2.57	0.843	0.478	0.478	0.478	0.478	0.478	0.478	
75 %	R1 Pond	1.29	0.478	0.478	0.478	0.478	0.478	0.478	0.478	
90 %		0.514	0.478	0.478	0.478	0.478	0.478	0.478	0.478	
None		1.10	1.08	1.04	1.02	1.01	0.977	0.457	0.255	
50 %		1.02	1.01	0.993	0.984	0.977	0.428	0.419	0.223	
75 %	R1 Stream	0.983	0.979	0.969	0.964	0.961	0.464	0.399	0.206	
90 %		0.960	0.958	0.955	0.953	0.950	0.390	0.388	0.197	
None		14.6	14.6	14.6	14.6	14.6	6.65	6.65	3.48	
50 %		14.6	14.6	14.6	14.6	14.6	6.65	6.65	3.48	
75 %	R2 Stream	14.6	14.6	14.6	14.6	14.6	6.65	6.65	3.48	
90 %		14.6	14.6	14.6	14.6	14.6	6.65	6.65	3.48	
None		5.46	5.46	5.46	5.46	5.46	2.44	2.44	1.27	
50 %		5.46	5.46	5.46	5.46	5.46	2.44	2.44	1.27	
75 %	R3 Stream	5.46	5.46	5.46	5.46	5.46	2.44	2.44	1.27	
90 %		5.46	5.46	5.46	5.46	5.46	2.44	2.44	1.27	
None		05.12	4.48	4.48	4.48	4.48	2.02	2.02	1.06	
50 %		4.48	4.48	4.48	4.48	4.48	2.02	2.02	1.06	
75 %	R3 Stream	4.48	4.48	4.48	4.48	4.48	2.02	2.02	1.06	
90 %		4.48	4.48	4.48	4.48	4.48	2.02	2.02	1.06	

Potatoes 1X - Late - 0kg a.s./ha (DGR IV / PMO VIII)

Table 9.2.5 - 250: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	5.24	1.72	0.911	0.623	0.474	0.911	0.623	0.474	
50 %		2.62	0.859	0.456	0.311	0.237	0.456	0.311	0.237	
75 %		1.31	0.430	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.524	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
None	D4 Pond	0.823	0.821	0.817	0.815	0.814	0.817	0.815	0.814	



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PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %	D4 Stream	0.815	0.814	0.812	0.811	0.810	0.812	0.811	0.810	
75 %		0.811	0.810	0.809	0.809	0.808	0.809	0.809	0.808	
90 %		0.808	0.808	0.808	0.807	0.807	0.808	0.807	0.807	
None		3.95	1.67	0.945	0.945	0.945	0.945	0.945	0.945	
50 %	D6 Ditch	1.98	0.945	0.945	0.945	0.945	0.945	0.945	0.945	
75 %		0.997	0.945	0.945	0.945	0.945	0.945	0.945	0.945	
90 %		0.945	0.945	0.945	0.945	0.945	0.945	0.945	0.945	
None		5.21	1.71	0.905	0.618	0.470	0.905	0.618	0.470	
50 %	D6 Ditch 2nd	2.60	0.853	0.452	0.309	0.235	0.453	0.309	0.235	
75 %		1.30	0.427	0.226	0.155	0.118	0.226	0.155	0.118	
90 %		0.521	0.171	0.091	0.062	0.047	0.091	0.062	0.047	
None		16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	
50 %	R1 Pond	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	
75 %		16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	
90 %		16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3	
None		0.212	0.189	0.136	0.108	0.091	0.136	0.108	0.091	
50 %	R1 Stream	0.106	0.095	0.068	0.054	0.045	0.068	0.054	0.045	
75 %		0.053	0.047	0.034	0.027	0.023	0.034	0.027	0.023	
90 %		0.023	0.023	0.023	0.023	0.023	0.014	0.011	0.009	
None		3.60	1.52	1.09	1.09	1.09	0.804	0.549	0.418	
50 %	R2 Stream	1.80	1.09	1.09	1.09	1.09	0.488	0.488	0.254	
75 %		1.09	1.09	1.09	1.09	1.09	0.488	0.488	0.254	
90 %		1.09	1.09	1.09	1.09	1.09	0.488	0.488	0.254	
None		5.91	5.91	5.91	5.91	5.91	2.64	2.64	1.37	
50 %	R3 Stream	5.91	5.91	5.91	5.91	5.91	2.64	2.64	1.37	
75 %		5.91	5.91	5.91	5.91	5.91	2.64	2.64	1.37	
90 %		5.91	5.91	5.91	5.91	5.91	2.64	2.64	1.37	
None		13.7	13.7	13.7	13.7	13.7	6.23	6.23	3.27	
50 %	R3 Stream	13.7	13.7	13.7	13.7	13.7	6.23	6.23	3.27	
75 %		13.7	13.7	13.7	13.7	13.7	6.23	6.23	3.27	
90 %		13.7	13.7	13.7	13.7	13.7	6.23	6.23	3.27	
None		13.7	13.7	13.7	13.7	13.7	6.23	6.23	3.27	

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Potatoes 4X - Early – 4 × 1.0 kg a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 251: FOCUS Step 4 PECsed results for propamocarb-hydrochloride, GAP group name potatoes 4X, assessment name Early (DGR I / PMT I)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	2.24	0.777	0.425	0.296	0.228	0.225	0.296	0.228	
50 %		1.17	0.404	0.221	0.152	0.119	0.221	0.154	0.119	
75 %		0.607	0.210	0.115	0.080	0.062	0.155	0.080	0.062	
90 %		0.256	0.089	0.048	0.034	0.026	0.048	0.034	0.026	
None	D4 Pond	2.86	2.82	2.72	2.66	2.63	2.72	2.66	2.63	
50 %		2.66	2.64	2.59	2.56	2.55	2.59	2.56	2.55	
75 %		2.56	2.55	2.53	2.51	2.50	2.53	2.50	2.50	
90 %		2.50	2.50	2.49	2.49	2.48	2.48	2.48	2.48	
None	D4 Stream	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	
50 %		1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	
75 %		1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	
90 %		1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	
None	D6 Ditch	1.46	0.523	0.286	0.203	0.160	0.286	0.203	0.160	
50 %		0.765	0.273	0.155	0.12	0.100	0.155	0.112	0.100	
75 %		0.403	0.148	0.100	0.096	0.094	0.100	0.096	0.094	
90 %		0.178	0.097	0.093	0.09	0.091	0.093	0.091	0.091	
None	D6 Ditch 2nd	4.97	4.78	4.74	4.72	4.71	4.74	4.72	4.71	
50 %		4.83	4.73	4.71	4.70	4.70	4.71	4.70	4.70	
75 %		4.71	4.71	4.70	4.69	4.69	4.70	4.69	4.69	
90 %		4.69	4.69	4.69	4.69	4.68	4.69	4.69	4.68	
None	R1 Pond	3.64	3.55	3.34	3.23	3.17	1.75	1.63	1.01	
50 %		3.23	3.19	3.09	3.03	3.00	1.47	1.41	0.814	
75 %		3.03	3.01	2.96	2.93	2.92	1.33	1.30	0.717	
90 %		2.91	2.90	2.88	2.87	2.87	1.25	1.24	0.662	
None	R1 Stream	10.6	10.6	10.6	10.6	10.6	4.58	4.57	2.43	
50 %		10.6	10.6	10.6	10.6	10.6	4.57	4.56	2.42	
75 %		10.6	10.6	10.6	10.6	10.6	4.56	4.56	2.42	
90 %		10.6	10.6	10.6	10.6	10.6	4.56	4.56	2.42	
None	R2 Stream	8.01	7.98	7.96	7.96	7.96	2.98	2.98	1.56	
50 %		7.98	7.96	7.96	7.95	7.95	2.97	2.97	1.56	
75 %		7.96	7.96	7.95	7.95	7.95	2.97	2.97	1.56	
90 %		7.95	7.95	7.95	7.95	7.95	2.96	2.96	1.55	
None	R3 Stream	15.0	14.7	14.7	14.6	14.6	6.34	6.31	3.37	
50 %		14.8	14.7	14.6	14.6	14.6	6.29	6.28	3.35	

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
75 %		14.7	14.6	14.6	14.6	14.6	6.27	6.26	3.33
90 %		14.6	14.6	14.6	14.6	14.6	6.26	6.26	3.33

* Maximum values coming from multiple applications are marked in italics

Potatoes 4X - Late – 4 × 1.0 kg a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 252: FOCUS Step 4 PEC_{sed} results for propamocarb-hydrochloride, GAP group name potatoes 4X, assessment name Late (DGR I / PMT II)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	2.44	0.48	0.464	0.323	0.249	0.464	0.323	0.249
50 %		0.27	0.441	0.32	0.168	0.130	0.42	0.168	0.130
75 %		0.663	0.20	0.126	0.087	0.067	0.126	0.087	0.067
90 %		0.27	0.097	0.053	0.037	0.028	0.053	0.037	0.028
None	D4 Pond	18.1	18.0	17.8	17.7	17.6	17.8	17.7	17.6
50 %		17.7	17.7	17.6	17.5	17.5	17.6	17.5	17.5
75 %		17.5	17.5	17.5	17.4	17.4	17.5	17.4	17.4
90 %		17.4	17.4	17.4	17.4	17.4	17.4	17.4	17.4
None	D4 Stream	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
50 %		10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
75 %		10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
90 %		10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
None	D6 Ditch	1.40	1.08	1.02	1.00	0.992	1.02	1.00	0.992
50 %		1.13	1.02	0.991	0.981	0.975	0.991	0.981	0.975
75 %		1.03	0.989	0.975	0.969	0.967	0.975	0.969	0.967
90 %		0.996	0.970	0.965	0.963	0.961	0.965	0.963	0.961
None	D6 Ditch 2nd	57.1	56.6	56.5	56.4	56.4	56.5	56.4	56.4
50 %		56.7	56.4	56.4	56.4	56.4	56.4	56.4	56.4
75 %		56.5	56.4	56.4	56.3	56.3	56.4	56.3	56.3
90 %		56.4	56.3	56.3	56.3	56.3	56.3	56.3	56.3
None	R1 Pond	1.79	1.72	1.56	1.48	1.42	0.934	0.846	0.564
50 %		1.47	1.44	1.36	1.31	1.29	0.719	0.674	0.415
75 %		1.31	1.29	1.25	1.23	1.22	0.610	0.588	0.340
90 %		1.21	1.21	1.19	1.18	1.17	0.544	0.535	0.294

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	R1 Stream	3.21	3.16	3.14	3.13	3.12	1.43	1.43	0.758	
50 %		3.16	3.13	3.12	3.12	3.12	1.42	1.42	0.751	
75 %		3.14	3.12	3.12	3.11	3.11	1.42	1.41	0.748	
90 %		3.12	3.12	3.11	3.11	3.11	1.41	1.41	0.746	
None	R2 Stream	11.7	11.7	11.6	11.6	11.5	3.92	3.91	1.97	
50 %		11.7	11.6	11.6	11.5	11.5	3.91	3.91	1.96	
75 %		11.6	11.6	11.6	11.6	11.6	3.91	3.90	1.96	
90 %		11.6	11.6	11.6	11.6	11.6	3.90	3.90	1.96	
None	R3 Stream	19.4	19.2	19.1	19.1	19.0	7.23	7.23	3.77	
50 %		19.2	19.1	19.0	19.0	19.0	7.21	7.20	3.74	
75 %		19.1	19.0	19.0	19.0	19.0	7.19	7.19	3.73	
90 %		19.0	19.0	19.0	19.0	19.0	7.18	7.18	3.72	

* Maximum values coming from multiple applications are marked in italics

Potatoes 3X - Early – 3 × 1.0 kg a.s./ha, 7d mt. (DGR II / PMT III)

Table 9.2.5- 253: FOCUS Step 4 PEC_{sed} results for propamocarb-hydrochloride, GAP group name potatoes 3X, assessment name Early (DGR II / PMT III)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	2.07	0.70	0.385	0.267	0.205	0.385	0.267	0.205	
50 %		1.08	0.368	0.200	0.139	0.107	0.200	0.139	0.107	
75 %		0.360	0.191	0.104	0.072	0.055	0.104	0.072	0.055	
90 %		0.236	0.080	0.044	0.030	0.023	0.044	0.030	0.023	
None	D4 Pond	1.73	1.73	1.65	1.61	1.59	1.65	1.61	1.59	
50 %		1.61	1.59	1.55	1.53	1.52	1.55	1.53	1.52	
75 %		1.53	1.52	1.50	1.49	1.48	1.50	1.49	1.48	
90 %		1.48	1.48	1.47	1.47	1.46	1.47	1.47	1.46	
None	D4 Stream	0.890	0.884	0.882	0.882	0.881	0.882	0.882	0.881	
50 %		0.885	0.882	0.881	0.881	0.881	0.881	0.881	0.881	
75 %		0.883	0.881	0.881	0.880	0.880	0.881	0.880	0.880	
90 %		0.881	0.881	0.880	0.880	0.880	0.880	0.880	0.880	
None	D6 Ditch	1.41	0.489	0.271	0.192	0.150	0.271	0.192	0.150	
50 %		0.738	0.260	0.147	0.106	0.085	0.147	0.106	0.085	

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %		0.388	0.141	0.083	0.066	0.065	0.083	0.066	0.063	
90 %		0.171	0.068	0.064	0.062	0.062	0.064	0.062	0.062	
None	D6 Ditch 2nd	2.41	2.29	2.27	2.26	2.25	2.27	2.26	2.25	
50 %		2.33	2.27	2.22	2.25	2.24	2.25	2.25	2.23	
75 %		2.28	2.25	2.24	2.24	2.24	2.24	2.24	2.24	
90 %		2.25	2.24	2.24	2.24	2.24	2.24	2.24	2.24	
None	R1 Pond	3.44	3.37	3.10	2.97	2.90	3.03	1.53	0.925	
50 %		3.10	3.06	2.97	2.93	2.90	1.39	1.53	0.767	
75 %		2.93	2.91	2.83	2.84	2.83	1.28	1.25	0.687	
90 %		2.82	2.82	2.80	2.79	2.77	1.21	1.20	0.639	
None	R1 Stream	10.7	10.8	10.6	10.6	10.6	4.58	4.5	2.43	
50 %		10.6	10.6	10.6	10.6	10.6	4.56	4.56	2.42	
75 %		10.6	10.6	10.6	10.6	10.6	4.56	4.56	2.42	
90 %		10.6	10.6	10.6	10.6	10.6	4.56	4.56	2.42	
None	R2 Stream	7.13	7.08	7.05	7.05	7.05	2.98	2.98	1.57	
50 %		7.08	7.06	7.05	7.04	7.04	2.97	2.97	1.56	
75 %		7.06	7.05	7.04	7.04	7.04	2.97	2.97	1.56	
90 %		7.05	7.04	7.04	7.04	7.04	2.96	2.96	1.55	
None	R3 Stream	7.27	7.08	7.05	7.05	7.05	3.29	3.27	1.76	
50 %		7.13	7.08	7.05	7.04	7.04	3.26	3.25	1.75	
75 %		7.09	7.05	7.04	7.03	7.03	3.25	3.24	1.74	
90 %		7.05	7.03	7.03	7.03	7.03	3.24	3.23	1.74	

* Maximum values coming from multiple applications are marked in italics

Potatoes 3X - Late - 3 x 10 kg a.s./ha Od into (DGR II / PMT IV)

Table 9.25- 254: FOCUS Step 4 PEC_{sed} results for propamocarb-hydrochloride, GAP group name potatoes 3X, assessment name Late (DGR II / PMT IV)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	2.24	0.767	0.417	0.289	0.223	0.417	0.289	0.223	
50 %		1.17	0.399	0.217	0.150	0.116	0.217	0.150	0.116	
75 %		0.606	0.208	0.113	0.078	0.060	0.113	0.078	0.060	
90 %		0.255	0.087	0.047	0.033	0.025	0.047	0.033	0.025	



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PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
None	D4 Pond	13.2	13.2	13.0	12.9	12.9	13.0	12.9	12.9	12.9
50 %		12.9	12.9	12.8	12.8	12.8	12.8	12.8	12.8	12.8
75 %		12.8	12.8	12.7	12.7	12.7	12.7	12.7	12.7	12.7
90 %		12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
None	D4 Stream	7.31	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
50 %		7.31	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
75 %		7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
90 %		7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30	7.30
None	D6 Ditch	1.40	0.480	0.432	0.417	0.409	0.462	0.417	0.409	0.409
50 %		0.720	0.430	0.408	0.400	0.396	0.408	0.400	0.396	0.396
75 %		0.454	0.407	0.396	0.390	0.389	0.396	0.391	0.389	0.389
90 %		0.413	0.393	0.388	0.386	0.385	0.388	0.386	0.385	0.385
None	D6 Ditch 2nd	49.2	48.3	48.4	48.3	48.3	48.4	48.3	48.3	48.3
50 %		48.7	48.4	48.3	48.3	48.3	48.3	48.3	48.3	48.3
75 %		48.5	48.3	48.3	48.3	48.3	48.3	48.3	48.3	48.3
90 %		48.3	48.3	48.2	48.2	48.2	48.2	48.2	48.2	48.2
None	R1 Pond	1.00	0.950	0.827	0.763	0.723	0.551	0.484	0.346	0.346
50 %		0.761	0.734	0.672	0.640	0.620	0.389	0.356	0.232	0.232
75 %		0.639	0.626	0.594	0.570	0.568	0.308	0.291	0.176	0.176
90 %		0.563	0.560	0.547	0.540	0.536	0.258	0.251	0.142	0.142
None	R1 Stream	1.35	1.31	1.29	1.29	1.29	0.596	0.590	0.314	0.314
50 %		1.32	1.30	1.29	1.29	1.28	0.587	0.584	0.310	0.310
75 %		1.29	1.29	1.28	1.28	1.28	0.583	0.581	0.308	0.308
90 %		1.29	1.28	1.28	1.28	1.28	0.580	0.579	0.306	0.306
None	R2 Stream	6.76	6.72	6.71	6.71	6.71	2.32	2.32	1.17	1.17
50 %		6.73	6.71	6.71	6.70	6.70	2.31	2.31	1.17	1.17
75 %		6.71	6.70	6.70	6.70	6.70	2.31	2.31	1.17	1.17
90 %		6.71	6.70	6.70	6.70	6.70	2.31	2.31	1.17	1.17
None	R3 Stream	16.1	15.9	15.8	15.8	15.8	6.15	6.12	3.20	3.20
50 %		15.9	15.8	15.8	15.8	15.8	6.11	6.10	3.18	3.18
75 %		15.8	15.8	15.8	15.8	15.8	6.09	6.08	3.17	3.17
90 %		15.8	15.8	15.8	15.7	15.7	6.08	6.08	3.17	3.17

* Maximum values coming from multiple applications are marked in italics

Potatoes 2X - Early – 2 × 1.0 kg a.s./ha, 7d int. (DGR III / PMT V)

Table 9.2.5- 255: FOCUS Step 4 PECsed results for propamocarb-hydrochloride, GAP group name potatoes 2X, assessment name Early (DGR III / PMT V)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	2.12	0.713	0.234	0.264	0.202	0.384	0.264	0.202	
50 %		1.10	0.370	0.199	0.137	0.05	0.199	0.137	0.105	
75 %		0.572	0.192	0.103	0.071	0.054	0.165	0.071	0.054	
90 %		0.240	0.081	0.043	0.030	0.005	0.043	0.030	0.023	
None	D4 Pond	1.09	0.965	0.998	0.965	0.943	0.998	0.965	0.943	
50 %		0.965	0.951	0.918	0.901	0.890	0.978	0.901	0.890	
75 %		0.901	0.894	0.877	0.868	0.863	0.877	0.868	0.863	
90 %		0.862	0.859	0.852	0.849	0.846	0.852	0.849	0.846	
None	D4 Stream	0.506	0.501	0.500	0.499	0.499	0.500	0.499	0.499	
50 %		0.502	0.500	0.499	0.499	0.498	0.499	0.499	0.498	
75 %		0.500	0.499	0.498	0.498	0.498	0.498	0.498	0.498	
90 %		0.499	0.498	0.498	0.498	0.498	0.498	0.498	0.498	
None	D6 Ditch	1.17	0.408	0.228	0.162	0.027	0.228	0.162	0.127	
50 %		0.606	0.216	0.127	0.090	0.072	0.123	0.090	0.072	
75 %		0.317	0.111	0.070	0.053	0.044	0.070	0.053	0.044	
90 %		0.139	0.056	0.044	0.000	0.043	0.044	0.043	0.043	
None	D6 Ditch 2nd	1.02	1.04	1.02	1.02	1.01	1.02	1.02	1.01	
50 %		1.07	1.02	1.01	1.01	1.01	1.01	1.01	1.01	
75 %		1.03	1.01	1.01	1.01	1.00	1.01	1.01	1.00	
90 %		1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	
None	R1 Pond	2.29	2.03	1.10	2.04	1.99	1.09	1.02	0.624	
50 %		2.03	1.901	1.94	1.91	1.89	0.920	0.885	0.508	
75 %		1.91	1.90	1.86	1.85	1.84	0.835	0.817	0.450	
90 %		1.83	1.83	1.81	1.81	1.80	0.784	0.777	0.415	
None	R1 Stream	6.96	6.91	6.89	6.88	6.88	2.86	2.85	1.51	
50 %		6.91	6.89	6.88	6.87	6.87	2.85	2.85	1.50	
75 %		6.89	6.88	6.87	6.87	6.87	2.84	2.84	1.50	
90 %		6.88	6.87	6.87	6.87	6.87	2.84	2.84	1.49	
None	R2 Stream	4.41	4.37	4.36	4.36	4.36	1.85	1.85	0.973	
50 %		4.38	4.36	4.36	4.35	4.35	1.85	1.84	0.969	
75 %		4.36	4.36	4.35	4.35	4.35	1.84	1.84	0.968	
90 %		4.36	4.35	4.35	4.35	4.35	1.84	1.84	0.967	
None	R3 Stream	7.32	7.15	7.09	7.07	7.06	3.30	3.28	1.77	
50 %		7.17	7.09	7.06	7.05	7.04	3.27	3.25	1.75	

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
75 %		<i>7.10</i>	<i>7.06</i>	<i>7.04</i>	<i>7.04</i>	<i>7.03</i>	3.25	3.24	1.73
90 %		<i>7.05</i>	<i>7.04</i>	<i>7.03</i>	<i>7.03</i>	<i>7.03</i>	3.24	3.24	1.74

* Maximum values coming from multiple applications are marked in italics

Potatoes 2X - Late – 2 × 1.0 kg a.s./ha, 7d int. (DGR III / PMT VI)

Table 9.2.5- 256: FOCUS Step 4 PEC_{sed} results for propamocarb-hydrochloride, GAP group name potatoes 2X, assessment name Late (DGR III / PMT VI)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	2.28	0.69	0.414	0.286	0.219	0.414	0.286	0.219
50 %		2.79	0.400	0.255	0.148	0.114	0.15	0.148	0.114
75 %		0.617	0.208	0.112	0.077	0.059	0.112	0.077	0.059
90 %		0.260	0.087	0.047	0.032	0.025	0.047	0.032	0.025
None	D4 Pond	8.45	8.45	8.29	8.23	8.29	8.29	8.23	8.20
50 %		8.23	8.21	8.15	8.1	8.10	8.15	8.12	8.10
75 %		8.11	8.11	8.08	8.07	8.06	8.08	8.07	8.06
90 %		8.06	8.05	8.04	8.03	8.03	8.04	8.03	8.03
None	D4 Stream	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66
50 %		4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66
75 %		4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66
90 %		4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66
None	D6 Ditch	0.49	0.497	0.266	0.183	0.140	0.266	0.183	0.140
50 %		0.769	0.237	0.137	0.110	0.107	0.137	0.110	0.107
75 %		0.337	0.133	0.107	0.104	0.102	0.107	0.104	0.102
90 %		0.166	0.105	0.101	0.100	0.099	0.101	0.100	0.099
None	D6 Ditch 2nd	24.1	23.5	23.4	23.3	23.3	23.4	23.3	23.3
50 %		23.4	23.4	23.3	23.3	23.3	23.3	23.3	23.3
75 %		23.4	23.3	23.3	23.2	23.2	23.3	23.2	23.2
90 %		23.3	23.2	23.2	23.2	23.2	23.2	23.2	23.2
None	R1 Pond	0.875	0.831	0.729	0.677	0.643	0.473	0.418	0.291
50 %		0.677	0.655	0.603	0.577	0.560	0.342	0.314	0.201
75 %		0.577	0.566	0.540	0.527	0.518	0.275	0.261	0.156
90 %		0.517	0.512	0.501	0.496	0.493	0.235	0.229	0.128

Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	R1 Stream	<i>1.18</i>	<i>1.14</i>	<i>1.13</i>	<i>1.13</i>	<i>1.12</i>	<i>0.519</i>	<i>0.514</i>	<i>0.274</i>	
50 %		<i>1.15</i>	<i>1.13</i>	<i>1.12</i>	<i>1.12</i>	<i>1.12</i>	<i>0.511</i>	<i>0.509</i>	<i>0.270</i>	
75 %		<i>1.13</i>	<i>1.12</i>	<i>1.12</i>	<i>1.12</i>	<i>1.12</i>	<i>0.507</i>	<i>0.506</i>	<i>0.268</i>	
90 %		<i>1.12</i>	<i>1.12</i>	<i>1.12</i>	<i>1.12</i>	<i>1.12</i>	<i>0.505</i>	<i>0.504</i>	<i>0.266</i>	
None	R2 Stream	<i>4.69</i>	<i>4.64</i>	<i>4.62</i>	<i>4.62</i>	<i>4.61</i>	<i>1.93</i>	<i>1.92</i>	<i>1.01</i>	
50 %		<i>4.64</i>	<i>4.62</i>	<i>4.61</i>	<i>4.61</i>	<i>4.61</i>	<i>1.92</i>	<i>1.92</i>	<i>1.00</i>	
75 %		<i>4.62</i>	<i>4.61</i>	<i>4.61</i>	<i>4.61</i>	<i>4.61</i>	<i>1.92</i>	<i>1.92</i>	<i>1.00</i>	
90 %		<i>4.61</i>	<i>4.61</i>	<i>4.60</i>	<i>4.60</i>	<i>4.60</i>	<i>1.91</i>	<i>1.91</i>	<i>1.00</i>	
None	R3 Stream	<i>13.2</i>	<i>13.0</i>	<i>12.9</i>	<i>12.9</i>	<i>12.9</i>	<i>5.11</i>	<i>5.11</i>	<i>2.69</i>	
50 %		<i>13.0</i>	<i>12.9</i>	<i>12.9</i>	<i>12.9</i>	<i>12.9</i>	<i>5.10</i>	<i>5.09</i>	<i>2.67</i>	
75 %		<i>12.9</i>	<i>12.9</i>	<i>12.8</i>	<i>12.8</i>	<i>12.8</i>	<i>5.08</i>	<i>5.08</i>	<i>2.66</i>	
90 %		<i>12.9</i>	<i>12.8</i>	<i>12.8</i>	<i>12.8</i>	<i>12.8</i>	<i>5.07</i>	<i>5.07</i>	<i>2.65</i>	

* Maximum values coming from multiple applications are marked in italics

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Potatoes 1X - Early - 1 kg a.s./ha (DGR IV / PMT VII)

Table 9.2.5- 257: FOCUS Step 4 PECsed results for propamocarb-hydrochloride, GAP group name potatoes 1X, assessment name Early (DGR IV / PMT VII)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
None	D3 Ditch	1.92	0.667	0.362	0.254	0.196	0.265	0.254	0.196	0.196
50 %		0.995	0.345	0.189	0.132	0.101	0.189	0.132	0.101	0.101
75 %		0.516	0.179	0.098	0.068	0.052	0.098	0.068	0.052	0.052
90 %		0.216	0.075	0.040	0.028	0.022	0.041	0.028	0.022	0.022
None	D4 Pond	0.516	0.499	0.459	0.437	0.424	0.459	0.437	0.424	0.424
50 %		0.435	0.427	0.406	0.395	0.388	0.406	0.395	0.388	0.388
75 %		0.394	0.390	0.379	0.374	0.370	0.379	0.374	0.370	0.370
90 %		0.369	0.367	0.363	0.361	0.359	0.363	0.361	0.359	0.359
None	D4 Stream	0.212	0.210	0.209	0.208	0.208	0.208	0.208	0.208	0.208
50 %		0.210	0.209	0.208	0.208	0.208	0.208	0.208	0.208	0.208
75 %		0.209	0.208	0.208	0.208	0.208	0.208	0.208	0.208	0.208
90 %		0.208	0.208	0.208	0.208	0.208	0.208	0.208	0.208	0.208
None	D6 Ditch	0.17	0.408	0.28	0.162	0.127	0.228	0.162	0.127	0.127
50 %		0.606	0.216	0.123	0.090	0.072	0.123	0.090	0.072	0.072
75 %		0.17	0.117	0.079	0.053	0.044	0.070	0.053	0.044	0.044
90 %		0.139	0.056	0.037	0.033	0.033	0.037	0.033	0.033	0.033
None	D6 Ditch 2nd	0.804	0.357	0.346	0.342	0.340	0.346	0.342	0.340	0.340
50 %		0.446	0.346	0.340	0.338	0.337	0.340	0.338	0.337	0.337
75 %		0.351	0.340	0.337	0.336	0.335	0.337	0.336	0.335	0.335
90 %		0.341	0.336	0.335	0.335	0.334	0.335	0.335	0.334	0.334
None	R1 Pond	2.04	2.01	1.92	1.88	1.85	0.947	0.900	0.535	0.535
50 %		1.87	1.85	1.81	1.79	1.77	0.832	0.808	0.454	0.454
75 %		1.79	1.78	1.76	1.74	1.74	0.773	0.761	0.413	0.413
90 %		1.74	1.72	1.72	1.72	1.72	0.738	0.733	0.389	0.389
None	R1 Stream	6.96	6.91	6.89	6.88	6.88	2.86	2.85	1.51	1.51
50 %		6.91	6.89	6.88	6.87	6.87	2.85	2.85	1.50	1.50
75 %		6.89	6.88	6.87	6.87	6.87	2.84	2.84	1.50	1.50
90 %		6.88	6.87	6.87	6.87	6.87	2.84	2.84	1.49	1.49
None	R2 Stream	1.87	1.85	1.85	1.85	1.84	0.772	0.770	0.404	0.404
50 %		1.86	1.85	1.84	1.84	1.84	0.769	0.767	0.402	0.402
75 %		1.85	1.84	1.84	1.84	1.84	0.767	0.766	0.401	0.401
90 %		1.84	1.84	1.84	1.84	1.84	0.766	0.765	0.400	0.400
None	R3 Stream	1.48	1.40	1.38	1.37	1.36	0.658	0.648	0.352	0.352
50 %		1.41	1.38	1.36	1.36	1.35	0.642	0.637	0.343	0.343

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
75 %		1.38	1.36	1.35	1.35	1.35	0.633	0.631	0.339
90 %		1.36	1.35	1.35	1.35	1.35	0.628	0.627	0.336

Potatoes 1X - Late - 1 kg a.s./ha (DGR IV / PMT VIII)

Table 9.2.5- 258: FOCUS Step 4 PEC_{sed} results for propamocarb-hydrochloride, GAP group name potatoes 1X, assessment name Late (DGR IV / PMT VIII)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	0.97	0.685	0.376	0.262	0.202	0.376	0.262	0.202
50 %		1.02	0.355	0.194	0.135	0.104	0.194	0.135	0.104
75 %		0.530	0.184	0.101	0.070	0.054	0.091	0.070	0.054
90 %		0.222	0.077	0.042	0.029	0.023	0.042	0.029	0.023
None	D4 Pond	3.12	2.09	3.02	2.09	2.97	3.02	2.99	2.97
50 %		2.98	2.97	2.94	2.92	2.91	2.94	2.92	2.91
75 %		2.92	2.89	2.89	2.89	2.88	2.89	2.89	2.88
90 %		2.88	2.88	2.87	2.86	2.86	2.87	2.86	2.86
None	D4 Stream	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
50 %		1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
75 %		1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
90 %		1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
None	D6 Ditch	1.40	0.480	0.262	0.182	0.140	0.262	0.182	0.140
50 %		0.320	0.247	0.135	0.093	0.072	0.135	0.093	0.072
75 %		0.371	0.127	0.069	0.048	0.037	0.069	0.048	0.037
90 %		0.150	0.053	0.029	0.028	0.028	0.029	0.028	0.028
None	D6 Ditch 2nd	8.35	8.31	8.26	8.23	8.22	8.26	8.23	8.22
50 %		8.37	8.25	8.22	8.21	8.21	8.22	8.21	8.21
75 %		8.28	8.22	8.21	8.20	8.20	8.21	8.20	8.20
90 %		8.23	8.20	8.20	8.19	8.19	8.20	8.19	8.19
None	R1 Pond	0.399	0.359	0.280	0.250	0.231	0.263	0.213	0.180
50 %		0.247	0.235	0.206	0.191	0.181	0.137	0.120	0.094
75 %		0.189	0.183	0.168	0.161	0.156	0.097	0.089	0.058
90 %		0.154	0.152	0.146	0.143	0.141	0.073	0.070	0.041
None	R1 Stream	0.380	0.278	0.272	0.270	0.269	0.127	0.125	0.067

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %		0.281	0.272	0.269	0.268	0.267	0.123	0.122	0.063	
75 %		0.273	0.269	0.267	0.266	0.266	0.122	0.121	0.064	
90 %		0.268	0.267	0.266	0.266	0.265	0.120	0.120	0.064	
None	R2 Stream	2.02	2.00	2.00	2.00	1.99	0.836	0.834	0.433	
50 %		2.01	2.00	1.99	1.99	1.99	0.832	0.831	0.436	
75 %		2.00	1.99	1.99	1.99	1.99	0.830	0.830	0.434	
90 %		1.99	1.99	1.99	1.99	1.99	0.829	0.829	0.434	
None	R3 Stream	7.03	6.85	6.83	6.81	6.80	2.76	2.75	1.45	
50 %		6.90	6.83	6.80	6.79	6.78	2.72	2.72	1.43	
75 %		6.84	6.80	6.78	6.78	6.77	2.71	2.71	1.42	
90 %		6.79	6.78	6.77	6.77	6.77	2.70	2.70	1.42	

III. Conclusion

Predicted environmental concentrations of the fungicide propamocarb-hydrochloride in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in potatoes in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered.

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2001, 2015) and is considered valid to assess predicted environmental concentrations in surface water (PEC_{sw}) and sediment (PEC_{sed}) for propamocarb-hydrochloride in potatoes.

Data Point:	KCP 02.5/08
Report Author:	
Report Year:	2020
Report Title:	Propamocarb-hydrochloride (PH): PEC _{sw, sed} FOCUS EUR - Use in leafy vegetables in Europe
Report No.:	EnS-20-0401
Document No.:	M-687162-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

Predicted environmental concentrations of the fungicide propamocarb-hydrochloride in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The uses of propamocarb-hydrochloride in lettuce were assessed according to the Good Agricultural Practice (GAP) in Europe.

I. Materials and Methods

Intended GAPs for the use of propamocarb-hydrochloride in Europe were analysed and consolidated according to regulatory and modelling requirements. As a result, one or more uses may be covered by a single modelling GAP row (DGR). The translation of the regulatory GAP for modelling purposes is shown in Table 9.2.5-259.

Table 9.2.5-259: GAP translation for modelling purposes

GAP group ID	GAP group name (DGR) and use IDs	Covered crop(s)	Growth stage	Max. apps	Interval (days)	Rate (kg a.s./ha)
DGR I	lettuce	lettuce	BBCH 13-49	1		1 × 1
DGR II	lettuce	lettuce	BBCH 40-49	2		2 × 1

The implementation of the modelling GAP (Table 9.2.5-259) at Steps 1-2 level is shown in Table 9.2.5-260. One or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Table 9.2.5-260: FOCUS Steps 1-2 Specific data for the GAPs assessed

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)	Season	Crop cover
DGR I PMT I	lettuce	early	vegetables, leafy (arable crops)	spring (Mar. - May)	min crop cover
DGR I PMT II	lettuce	late	vegetables, leafy (arable crops)	summer (Jun. - Sep.)	full canopy
DGR II PMT III	lettuce	double	vegetables, leafy (arable crops)	summer (Jun. - Sep.)	full canopy

This section provides the implementation of the modelling GAP (Table 9.2.5-259) at Step 3 level. Also, here one or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Please note that PMTs at Steps 1-2 and Step 3 do not necessarily fully correspond to each other due to inherent differences in the models.

The application dates for this assessment were set with the help of the tool AppDate (Klein 2018), which proposes dates for specific crop stages (given as BBCH code) based on the crop development as defined in the FOCUS model scenarios for groundwater and surface water.

The summary of all Step 3 PMTs is provided in Table 9.2.5-261. The detailed information on individual uses is given in the tables that follow Table 9.2.5-262 to Table 9.2.5-267.

Table 9.2.5- 261: Overview of FOCUS Step 3 assessments

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)
DGR I PMT I	Lettuce	Early	Vegetables, leafy (arable crops)
DGR I PMT II	Lettuce	Late	Vegetables, leafy (arable crops)
DGR II PMT III	Lettuce	Double	Vegetables, leafy (arable crops)

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GAP group name lettuce, assessment name early

Table 9.2.5- 262: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D3 Ditch	08-May - 03-Jun
	D3 Ditch (2nd)	17-Aug - 16-Sep
	D4 Pond/Stream	01-Jun - 01-Jul
	D6 Ditch	30-Aug - 29-Sep
	R1 Pond/Stream	03-May - 02-Jun
	R1 Pond/Stream (2nd)	12-Aug - 11-Sep
	R2 Stream	24-Mar - 23-Apr
	R2 Stream (2nd)	10-Aug - 09-Sep
	R3 Stream	20-Mar - 19-Apr
	R3 Stream (2nd)	02-Jul - 01-Aug
	R4 Stream	20-Mar - 19-Apr
R4 Stream (2nd)	04-Jul - 03-Aug	

Table 9.2.5- 263: Full FOCUS Step 3 application data

Run IDs	DGR1/ PM11				
GAP group name (DGR)	Lettuce				
Assessment name (PMT)	Early				
FOCUS model crop (crop group)	Vegetables, leafy (arable crops)				
Use pattern	1 kg a.s./ha				
Appl. method (Run-off CAM, depth inc.)	Ground spray (2 x appln for linear, 4 cm)				
PAT start date (relative to crop event or absolute)	Absolute				
PAT window range	30 days for all scenarios (min = 30 days)				
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	08-May/07-Jun (128/153)	14-May	R1 Pond/Stream	03-May/02-Jun (123/153)	03-May
D3 Ditch (2nd)	17-Aug/16-Sep (229/259)	18-Aug	R1 Pond/Stream (2nd)	12-Aug/11-Sep (224/254)	20-Aug
D4 Pond/Stream	01-Jun/01-Jul (150/182)	01-Jun	R2 Stream	24-Mar/23-Apr (83/113)	22-Apr
D6 Ditch	30-Aug/29-Sep (242/272)	31-Aug	R2 Stream (2nd)	10-Aug/09-Sep (222/252)	10-Aug
			R3 Stream	20-Mar/19-Apr (79/109)	28-Mar
			R3 Stream (2nd)	02-Jul/01-Aug (183/213)	06-Jul
			R4 Stream	20-Mar/19-Apr (79/109)	03-Apr
			R4 Stream (2nd)	04-Jul/03-Aug (185/215)	12-Jul

GAP group name lettuce, assessment name late

Table 9.2.5- 264: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D3 Ditch	09-Jun - 16-Jul
	D3 Ditch (2nd)	09-Sep - 18-Oct
	D4 Pond/Stream	13-Aug - 19-Sep
	D6 Ditch	18-Oct - 24-Nov
	R1 Pond/Stream	04-Jun - 11-Jul
	R1 Pond/Stream (2nd)	04-Sep - 11-Oct
	R2 Stream	20-May - 26-Jun
	R2 Stream (2nd)	01-Oct - 07-Nov
	R3 Stream	22-Apr - 29-May
	R3 Stream (2nd)	06-Aug - 12-Sep
	R4 Stream	22-Apr - 29-May
	R4 Stream (2nd)	06-Aug - 12-Sep

Table 9.2.5- 265: Full FOCUS Step 3 application data

Run IDs		DGR IPMT			
GAP group name (DGR)		Lettuce			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Vegetables, leafy (arable crops)			
Use pattern		1 kg a.s./ha			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar lines, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		37 days for all scenarios (min = 30 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	09-Jun/16-Jul (160/197)	14-Jun	R1 Pond/Stream	04-Jun/11-Jul (155/192)	29-Jun
D3 Ditch (2nd)	09-Sep/16-Oct (252/289)	17-Sep	R1 Pond/Stream (2nd)	04-Sep/11-Oct (247/284)	19-Sep
D4 Pond/Stream	13-Aug/19-Sep (225/262)	27-Aug	R2 Stream	20-May/26-Jun (140/177)	20-May
D6 Ditch	18-Oct/24-Nov (291/328)	18-Oct	R2 Stream (2nd)	01-Oct/07-Nov (274/311)	01-Oct
			R3 Stream	22-Apr/29-May (112/149)	22-Apr
			R3 Stream (2nd)	06-Aug/12-Sep (218/255)	28-Aug
			R4 Stream	22-Apr/29-May (112/149)	23-Apr
			R4 Stream (2nd)	06-Aug/12-Sep (218/255)	12-Aug



GAP group name lettuce, assessment name double

Table 9.2.5- 266: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Double	D3 Ditch	09-Jun - 16-Jul
	D3 Ditch (2nd)	09-Sep - 16-Oct
	D4 Pond/Stream	13-Aug - 19-Sep
	D6 Ditch	18-Oct - 24-Nov
	R1 Pond/Stream	04-Jun - 11-Jul
	R1 Pond/Stream (2nd)	04-Sep - 11-Oct
	R2 Stream	20-May - 26-Jun
	R2 Stream (2nd)	01-Oct - 07-Nov
	R3 Stream	22-Apr - 29-May
	R3 Stream (2nd)	06-Aug - 12-Sep
	R4 Stream	22-Apr - 29-May
R4 Stream (2nd)	06-Aug - 12-Sep	

Table 9.2.5- 267: Full FOCUS Step 3 application data

Run IDs		DGR ID		PMT ID	
GAP group name (DGR)		Lettuce		Double	
Assessment name (PMT)		Double		Double	
FOCUS model crop (crop group)		Vegetables, leafy (arable crops)		Vegetables, leafy (arable crops)	
Use pattern		2×1 kg a.s./ha		2 int.	
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar lines)		4 cm	
PAT start date (relative to crop event or absolute)		Absolute		Absolute	
PAT window range		37 days for all scenarios (min = 37 days)		37 days for all scenarios (min = 37 days)	
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D3 Ditch	09-Jun/16-Jul (160/197)	14-Jun 25-Jun	R1 Pond/Stream	04-Jun/11-Jul (155/192)	29-Jun 11-Jul
D3 Ditch (2nd)	09-Sep/16-Oct (252/289)	17-Sep 24-Sep	R1 Pond/Stream (2nd)	04-Sep/11-Oct (247/284)	19-Sep 06-Oct
D4 Pond/Stream	13-Aug/19-Sep (225/262)	17-Aug 10-Sep	R2 Stream	20-May/26-Jun (140/177)	20-May 27-May
D6 Ditch	18-Oct/24-Nov (291/328)	28-Oct 25-Oct	R2 Stream (2nd)	01-Oct/07-Nov (274/311)	01-Oct 11-Oct
			R3 Stream	22-Apr/29-May (112/149)	22-Apr 18-May
			R3 Stream (2nd)	06-Aug/12-Sep (218/255)	07-Aug 19-Aug
			R4	22-Apr/29-May	23-Apr

			Stream	(112/149)	04-May
			R4 Stream (2nd)	06-Aug/12-Sep (218/255)	12-Aug 19-Aug

Steps 1-2 calculations were performed according to formulas implemented in FOCUS STEP 1+2 version 3.2.

Step 3 calculations were performed using the FOCUS SWASH 5.3 suite, including
 FOCUS PRZM 4.3.1
 FOCUS MACRO 5.5.4
 FOCUS TOXSWA 5.5.3

Refinement at Step 4 level was performed with the SWAN tool, version 5.0.1.

Standard procedures and settings were used for Steps 1-3 assessments. At Step 4 the following mitigation settings were used Table 9.2.5- 268 and Table 9.2.5- 269.

Table 9.2.5- 268: Mitigation approaches used

Buffer length	Mitigation type	Drift reduction nozzles
0 m	Spray drift	0 %, 50 %, 75 %, 90 %
5 m	Spray drift	
10 m	Spray drift & RunOff	
15 m	Spray drift & RunOff	
20 m	Spray drift & RunOff	

Table 9.2.5- 269: Runoff mitigation parameters used for the assessment

Fractional reduction in:	10 m, 15 m	20 m
Runoff: Volume	0.60	0.80
Flux	0.60	0.80
Erosion: Mass	0.85	0.95
Flux	0.85	0.95

Substance related parameters which have been used as input in the calculations are based on parameters whose derivation is taken from the EFSA LoEP [EFSA Scientific Report 87, 12 May 2006]. Calculations at FOCUS SW Steps 1-2 level are summarised in Table 9.2.5- 270 and at Step 3/4 level in Table 9.2.5- 271.

Table 9.2.5- 270: Substance parameters used at FOCUS Steps 1-2 level

Parameter	Unit	Propamocarb-hydrochloride PCH
Molar mass	(g/mol)	224.7
Water solubility	(mg/L)	100500
Koc	(mL/g)	263.6
Degradation		
Soil	(days)	13.91
Total system	(days)	18.3
Water	(days)	18.3
Sediment	(days)	1000
Max occurrence		
Water / sediment	(%)	100
Soil	(%)	100

Table 9.2.5- 271: Substance parameters used for propamocarb-hydrochloride at Step 3/4 level

Parameter	Unit	Parent
Substance SWASH code		Propamocarb-hydrochloride PCH
General		
Molar mass	(g/mol)	224.7
Water solubility (temp.)	(mg/L)	100500 (20 °C)
Vapour pressure (temp.)	(Pa)	8.1E-05 (25 °C)
Crop processes		
Coefficient for uptake by plant (TSCF)	(-)	0
Wash-off factor	(l/m)	50
Sorption		
Koc	(mL/g)	263.6
K _{OM}	(mL/g)	152.9
Freundlich exponent (1/n)	(-)	0.867
Transformation		
DT50 in soil	(days)	13.91
temperature	(°C)	20
moisture content (PF)	(g/cm)	2
formation fraction in soil	(-)	-
DT50 in water	(days)	18.3
temperature	(°C)	20
formation fraction in water	(-)	-
DT50 in sediment	(days)	1000
temperature	(°C)	20
formation fraction in sediment	(-)	-
DT50 on canopy	(days)	10
Exponent for the effect of moisture		
PRZM and TOXSWA (Walker exp.)	(-)	0.7
MACRO (calibrated value)	(-)	0.49
Effect of temperature		
TOXSWA (molar activation energy)	(kJ/mol)	65.4
MACRO (effect of temperature)	(1/K)	0.0948
PRZM (Q ₁₀)	(-)	2.58

II. Results and Discussion

The PEC values were calculated for propamocarb-hydrochloride according to the equations implemented in the “STEPS 1-2 in FOCUS” calculator Table 9.2.5- 272 to Table 9.2.5- 274.

Lettuce - early – 1 × 1000g a.s./ha (DGR I / PMT I)

Table 9.2.5- 272: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name lettuce, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	256	RunOff	223	650
Step 2					
Northern Europe	Mar. - May(Spring)	36.8	RunOff	21.7	95.7 *
Southern Europe	Mar. - May(Spring)	67.2 *	RunOff	60.6	178 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce - late – 1 × 1000g a.s./ha (DGR I / PMT II)

Table 9.2.5- 273: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name lettuce, assessment name late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	256	RunOff	223	650
Step 2					
Northern Europe	Jun. - Sep.(Summer)	18.7 *	RunOff	16.4	47.8 *
Southern Europe	Jun. - Sep.(Summer)	24.7 *	RunOff	21.8	63.8 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce - double – 2 × 1000g a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 274: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name lettuce, assessment name double (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	512	RunOff	446	1300
Step 2					
Northern Europe	Jun. - Sep.(Summer)	31.1	RunOff	27.3	79.8
Southern Europe	Jun. - Sep.(Summer)	41.4	RunOff	36.6	107

* Single applications are marked.

** TWA interval as required by ecotox

Step 3 calculations were conducted for propamocarb-hydrochloride employing the models of the FOCUS SW suite. Reported values represent loadings via all relevant entry routes. are shown in Table 9.2.5- 275 to Table 9.2.5- 277.

Lettuce - early - 1 kg a.s./ha (DGR I / PMT I)

Table 9.2.5- 275: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name lettuce, assessment name early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	6.34	Spray drift	1.04	2.43 *
D3	Ditch 2nd	6.35 *	Spray drift	1.11	2.54 *
D4	Pond	0.220	Spray drift	0.192	0.459 *
D4	Stream	4.99 *	Spray drift	0.043	0.250 *
D6	Ditch	6.23 *	Spray drift	0.104	1.11 *
R1	Pond	0.564	RunOff	0.509	1.54 *
R1	Pond 2nd	0.448	RunOff	0.398	1.19 *
R1	Stream	8.84	RunOff	0.912	2.73 *
R1	Stream 2nd	4.55 *	RunOff	0.653	2.33 *
R2	Stream	5.53	Spray drift	0.225	1.68 *
R2	Stream 2nd	5.62	Spray drift	0.091	0.471 *
R3	Stream	9.07	RunOff	1.30	4.06 *
R3	Stream 2nd	15.2	RunOff	2.50	7.37 *
R4	Stream	23.4	RunOff	2.63	8.89 *
R4	Stream 2nd	20.0 *	RunOff	3.00	7.61 *

* Single applications are made.

** TWA interval as required by ecotox

Lettuce - late - 1 kg a.s./ha (DGR I / PMT II)

Table 9.2.5- 276: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name lettuce, assessment name late (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	6.34 *	Spray drift	1.05	2.45 *
D3	Ditch 2nd	6.31 *	Spray drift	0.644	1.85 *
D4	Pond	0.810 *	Drainage	0.802	3.10 *
D4	Stream	4.53 *	Spray drift	0.657	1.69 *

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
D6	Ditch	42.1 *	Drainage	15.6	19.2 *
R1	Pond	2.41 *	RunOff	2.09	4.63 *
R1	Pond 2nd	0.328 *	RunOff	0.304	1.63 *
R1	Stream	12.5 *	RunOff	2.71	7.53 *
R1	Stream 2nd	5.61 *	RunOff	0.467	1.57 *
R2	Stream	5.62 *	Spray drift	0.448	3.31 *
R2	Stream 2nd	6.33 *	RunOff	1.43	6.69 *
R3	Stream	5.91 *	Spray drift	0.769	1.88 *
R3	Stream 2nd	15.4 *	RunOff	1.98	7.82 *
R4	Stream	21.5 *	RunOff	2.53	8.22 *
R4	Stream 2nd	19.4 *	RunOff	2.33	7.60 *

* Single applications are marked.

** TWA interval as required by ecotox

Lettuce - double – 2 × 1 kg a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 277: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name lettuce, assessment name double (DGR II / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D3	Ditch	6.34 *	Spray drift	1.05	2.75
D3	Ditch 2nd	6.34 *	Spray drift	0.644	2.19
D4	Pond	2.53 *	Drainage	2.50	8.60
D4	Stream	4.53 *	Spray drift	2.37	4.82
D6	Ditch	125 *	Drainage	48.1	52.9
R1	Pond	4.44 *	RunOff	3.05	6.99
R1	Pond 2nd	1.08 *	RunOff	1.02	4.66
R1	Stream	21.0 *	RunOff	2.71	11.5
R1	Stream 2nd	16.8 *	RunOff	1.01	4.63
R2	Stream	8.48 *	Spray drift	1.26	8.05
R2	Stream 2nd	10.3 *	RunOff	1.49	8.99
R3	Stream	20.0 *	Spray drift	2.75	6.95
R3	Stream 2nd	20.7 *	RunOff	5.49	16.3
R4	Stream	30.7 *	RunOff	4.58	13.0
R4	Stream 2nd	29.8 *	RunOff	4.21	15.1

* Single applications are marked.

** TWA interval as required by ecotox

FOCUS Step 4 calculations considering various mitigation measures for runoff and spray drift were conducted based on the Step 3 results. This section provides the summary of results in tabular form. Where applicable, the maximum of single and multiple application uses are shown in Table 9.2.5-278 to Table 9.2.5-283.

Lettuce - early - 1 kg a.s./ha (DGR I / PMT I)

Table 9.2.5- 278: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride GAP group name lettuce, assessment name early (DGR I / PMT I)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	15 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	15 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	20 m
None	D3 Ditch	6.34	1.72	0.912	0.623	0.474	0.912	0.623	0.474	0.474
50 %		3.17	0.859	0.456	0.311	0.237	0.456	0.311	0.237	0.237
75 %		1.59	0.430	0.228	0.156	0.119	0.228	0.156	0.119	0.118
90 %		0.634	0.172	0.091	0.062	0.047	0.091	0.062	0.047	0.047
None	D3 Ditch 2nd	6.34	1.72	0.912	0.623	0.474	0.912	0.623	0.474	0.474
50 %		3.17	0.859	0.456	0.311	0.237	0.456	0.311	0.237	0.237
75 %		1.59	0.430	0.228	0.156	0.119	0.228	0.156	0.119	0.119
90 %		0.634	0.172	0.091	0.062	0.047	0.091	0.062	0.047	0.047
None	D4 Pond	0.220	0.191	0.137	0.110	0.092	0.137	0.110	0.092	0.092
50 %		0.111	0.096	0.069	0.056	0.047	0.069	0.056	0.047	0.047
75 %		0.056	0.049	0.036	0.036	0.036	0.036	0.036	0.036	0.036
90 %		0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
None	D4 Stream	4.99	1.82	0.967	0.661	0.503	0.967	0.661	0.503	0.503
50 %		2.49	0.911	0.484	0.331	0.252	0.484	0.331	0.252	0.252
75 %		1.25	0.456	0.243	0.166	0.127	0.243	0.166	0.127	0.127
90 %		0.500	0.183	0.098	0.067	0.051	0.098	0.067	0.051	0.051
None	D6 Ditch	6.23	1.69	0.912	0.912	0.912	0.912	0.912	0.912	0.912
50 %		3.12	0.912	0.912	0.912	0.912	0.912	0.912	0.912	0.912
75 %		1.56	0.912	0.912	0.912	0.912	0.912	0.912	0.912	0.912
90 %		0.912	0.912	0.912	0.912	0.912	0.912	0.912	0.912	0.912
None	R1 Pond	0.664	0.550	0.525	0.512	0.504	0.250	0.237	0.136	0.136
50 %		0.513	0.506	0.494	0.487	0.483	0.218	0.212	0.115	0.115
75 %		0.488	0.484	0.478	0.475	0.473	0.202	0.199	0.104	0.104
90 %		0.472	0.471	0.468	0.467	0.466	0.193	0.191	0.098	0.098
None	R1 Pond 2nd	0.448	0.437	0.417	0.406	0.399	0.199	0.188	0.108	0.108
50 %		0.406	0.401	0.391	0.385	0.382	0.173	0.167	0.091	0.091
75 %		0.386	0.383	0.378	0.375	0.374	0.160	0.157	0.082	0.082
90 %		0.373	0.372	0.370	0.369	0.368	0.152	0.151	0.077	0.077
None	R1 Stream	8.84	8.84	8.84	8.84	8.84	4.01	4.01	2.10	2.10



Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %		8.84	8.84	8.84	8.84	8.84	4.01	4.01	2.10	
75 %		8.84	8.84	8.84	8.84	8.84	4.01	4.01	2.10	
90 %		8.84	8.84	8.84	8.84	8.84	4.01	4.01	2.10	
None		8.84	8.84	8.84	8.84	8.84	4.01	4.01	2.10	
None	R1 Stream 2nd	5.75	5.75	5.75	5.75	5.75	2.61	2.61	1.37	
50 %		5.75	5.75	5.75	5.75	5.75	2.61	2.61	1.37	
75 %		5.75	5.75	5.75	5.75	5.75	2.61	2.61	1.37	
90 %		5.75	5.75	5.75	5.75	5.75	2.61	2.61	1.37	
None	R2 Stream	5.53	4.59	4.59	4.59	4.59	2.05	2.05	1.06	
50 %		4.59	4.59	4.59	4.59	4.59	2.05	2.05	1.06	
75 %		4.59	4.59	4.59	4.59	4.59	2.05	2.05	1.06	
90 %		4.59	4.59	4.59	4.59	4.59	2.05	2.05	1.06	
None	R2 Stream 2nd	5.62	2.05	1.09	0.744	0.566	1.09	0.744	0.566	
50 %		0.81	1.03	0.544	0.372	0.346	0.544	0.372	0.283	
75 %		1.41	0.513	0.346	0.346	0.346	0.272	0.186	0.141	
90 %		0.562	0.346	0.346	0.346	0.346	0.155	0.155	0.081	
None	R3 Stream	9.07	9.07	9.07	9.07	9.07	4.14	4.14	2.17	
50 %		9.07	9.07	9.07	9.07	9.07	4.14	4.14	2.17	
75 %		9.07	9.07	9.07	9.07	9.07	4.14	4.14	2.17	
90 %		9.07	9.07	9.07	9.07	9.07	4.14	4.14	2.17	
None	R3 Stream 2nd	15.3	15.3	15.3	15.3	15.3	6.97	6.97	3.65	
50 %		15.3	15.3	15.3	15.3	15.3	6.97	6.97	3.65	
75 %		15.3	15.3	15.3	15.3	15.3	6.97	6.97	3.65	
90 %		15.3	15.3	15.3	15.3	15.3	6.97	6.97	3.65	
None	R4 Stream	23.4	23.4	23.4	23.4	23.4	10.7	10.7	5.58	
50 %		23.4	23.4	23.4	23.4	23.4	10.7	10.7	5.58	
75 %		23.4	23.4	23.4	23.4	23.4	10.7	10.7	5.58	
90 %		23.4	23.4	23.4	23.4	23.4	10.7	10.7	5.58	
None	R4 Stream 2nd	20.0	20.0	20.0	20.0	20.0	9.10	9.10	4.77	
50 %		20.0	20.0	20.0	20.0	20.0	9.10	9.10	4.77	
75 %		20.0	20.0	20.0	20.0	20.0	9.10	9.10	4.77	
90 %		20.0	20.0	20.0	20.0	20.0	9.10	9.10	4.77	

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Lettuce - late - 1 kg a.s./ha (DGR I / PMT II)

Table 9.2.5- 279: FOCUS Step 4 PECsw results for propamocarb-hydrochloride, GAP group name lettuce, assessment name late (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	6.34	1.72	0.91	0.623	0.474	0.912	0.623	0.474	
50 %		3.17	0.860	0.456	0.311	0.237	0.456	0.311	0.237	
75 %		1.59	0.430	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.634	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
None	D3 Ditch 2nd	6.31	1.71	0.907	0.620	0.472	0.907	0.620	0.472	
50 %		3.16	0.855	0.454	0.310	0.236	0.454	0.310	0.236	
75 %		1.58	0.428	0.227	0.155	0.118	0.227	0.155	0.118	
90 %		0.634	0.171	0.091	0.062	0.047	0.091	0.062	0.047	
None	D4 Pond	0.810	0.808	0.804	0.802	0.801	0.804	0.802	0.801	
50 %		0.802	0.801	0.799	0.798	0.797	0.799	0.798	0.797	
75 %		0.798	0.797	0.796	0.796	0.795	0.796	0.796	0.795	
90 %		0.795	0.795	0.795	0.794	0.794	0.795	0.794	0.794	
None	D4 Stream	4.53	1.07	0.919	0.919	0.919	0.919	0.919	0.919	
50 %		2.27	0.919	0.919	0.919	0.919	0.919	0.919	0.919	
75 %		1.14	0.919	0.919	0.919	0.919	0.919	0.919	0.919	
90 %		0.919	0.919	0.919	0.919	0.919	0.919	0.919	0.919	
None	D6 Ditch	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	
50 %		42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	
75 %		42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	
90 %		42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	
None	R1 Pond	2.41	2.30	2.36	2.34	2.33	1.01	0.994	0.524	
50 %		2.34	2.34	2.32	2.31	2.30	0.968	0.959	0.494	
75 %		2.31	2.31	2.30	2.29	2.29	0.947	0.942	0.480	
90 %		2.29	2.29	2.28	2.28	2.28	0.934	0.932	0.471	
None	R1 Pond 2nd	0.328	0.321	0.308	0.302	0.298	0.144	0.137	0.091	
50 %		0.302	0.298	0.292	0.289	0.287	0.127	0.124	0.066	
75 %		0.289	0.287	0.284	0.283	0.282	0.121	0.120	0.063	
90 %		0.282	0.282	0.281	0.280	0.280	0.119	0.118	0.061	
None	R1 Stream	12.5	12.5	12.5	12.5	12.5	5.62	5.62	2.93	
50 %		12.5	12.5	12.5	12.5	12.5	5.62	5.62	2.93	
75 %		12.5	12.5	12.5	12.5	12.5	5.62	5.62	2.93	
90 %		12.5	12.5	12.5	12.5	12.5	5.62	5.62	2.93	
None	R1 Stream 2nd	5.61	5.61	5.61	5.61	5.61	2.35	2.35	1.20	
50 %		5.61	5.61	5.61	5.61	5.61	2.35	2.35	1.20	

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %	R2 Stream	5.61	5.61	5.61	5.61	5.61	2.35	2.35	1.20	
90 %		5.61	5.61	5.61	5.61	5.61	2.35	2.35	1.20	
None		5.62	2.90	2.90	2.90	2.90	1.32	1.32	0.691	
50 %		2.90	2.90	2.90	2.90	2.90	1.32	1.32	0.691	
75 %	R2 Stream 2nd	2.90	2.90	2.90	2.90	2.90	1.32	1.32	0.691	
90 %		2.90	2.90	2.90	2.90	2.90	1.32	1.32	0.691	
None		6.33	6.33	6.33	6.33	6.33	2.88	2.88	1.51	
50 %		6.33	6.33	6.33	6.33	6.33	2.88	2.88	1.51	
75 %	R3 Stream	6.33	6.33	6.33	6.33	6.33	2.88	2.88	1.51	
90 %		6.33	6.33	6.33	6.33	6.33	2.88	2.88	1.51	
None		5.91	5.63	5.63	5.63	5.63	2.46	2.46	1.27	
50 %		5.63	5.63	5.63	5.63	5.63	2.46	2.46	1.27	
75 %	R3 Stream 2nd	5.63	5.63	5.63	5.63	5.63	2.46	2.46	1.27	
90 %		5.63	5.63	5.63	5.63	5.63	2.46	2.46	1.27	
None		15.4	15.4	15.4	15.4	15.4	7.04	7.04	3.69	
50 %		15.4	15.4	15.4	15.4	15.4	7.04	7.04	3.69	
75 %	R4 Stream	15.4	15.4	15.4	15.4	15.4	7.04	7.04	3.69	
90 %		15.4	15.4	15.4	15.4	15.4	7.04	7.04	3.69	
None		21.5	21.5	21.5	21.5	21.5	9.78	9.78	5.13	
50 %		21.5	21.5	21.5	21.5	21.5	9.78	9.78	5.13	
75 %	R4 Stream 2nd	21.5	21.5	21.5	21.5	21.5	9.78	9.78	5.13	
90 %		21.5	21.5	21.5	21.5	21.5	9.78	9.78	5.13	
None		19.4	19.4	19.4	19.4	19.4	8.83	8.83	4.63	
50 %		19.4	19.4	19.4	19.4	19.4	8.83	8.83	4.63	
75 %	D3 Ditch	19.4	19.4	19.4	19.4	19.4	8.83	8.83	4.63	
90 %		19.4	19.4	19.4	19.4	19.4	8.83	8.83	4.63	

Lettuce - double – 2 × 1 kg a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 280: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name lettuce, assessment name double (DGR II / PMT III)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	6.34	1.72	0.912	0.623	0.474	0.912	0.623	0.474	



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PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
50 %		3.17	0.860	0.456	0.311	0.237	0.456	0.311	0.237	
75 %		1.59	0.430	0.228	0.156	0.118	0.228	0.156	0.118	
90 %		0.634	0.172	0.091	0.062	0.047	0.091	0.062	0.047	
None	D3 Ditch 2nd	6.31	1.71	0.907	0.620	0.472	0.907	0.620	0.472	
50 %		3.16	0.855	0.454	0.310	0.236	0.454	0.310	0.236	
75 %		1.58	0.428	0.227	0.155	0.118	0.227	0.155	0.118	
90 %		0.631	0.171	0.091	0.062	0.047	0.091	0.062	0.047	
None	D4 Pond	2.53	2.51	2.51	2.51	2.51	2.51	2.51	2.51	
50 %		2.51	2.51	2.50	2.50	2.50	2.50	2.50	2.50	
75 %		2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	
90 %		2.50	2.49	2.49	2.49	2.49	2.49	2.49	2.49	
None	D4 Stream	2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.96	
50 %		2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.96	
75 %		2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.96	
90 %		2.96	2.96	2.96	2.96	2.96	2.96	2.96	2.96	
None	D6 Ditch	125	125	125	125	125	125	125	125	
50 %		125	125	125	125	125	125	125	125	
75 %		125	125	125	125	125	125	125	125	
90 %		125	125	125	125	125	125	125	125	
None	R1 Pond	3.41	3.41	3.36	3.33	3.31	1.44	1.41	0.744	
50 %		3.34	3.32	3.29	3.28	3.27	1.38	1.36	0.701	
75 %		3.28	3.28	3.26	3.26	3.25	1.34	1.34	0.679	
90 %		3.25	3.25	3.24	3.24	3.24	1.32	1.32	0.666	
None	R1 Pond 2nd	1.08	1.03	1.04	1.03	1.02	0.458	0.444	0.240	
50 %		1.03	1.02	1.01	1.00	1.00	0.425	0.418	0.218	
75 %		1.00	1.00	0.996	0.994	0.992	0.409	0.407	0.207	
90 %		0.992	0.992	0.989	0.988	0.988	0.402	0.401	0.204	
None	R1 Stream	21.0	21.0	21.0	21.0	21.0	9.56	9.56	5.01	
50 %		21.0	21.0	21.0	21.0	21.0	9.56	9.56	5.01	
75 %		21.0	21.0	21.0	21.0	21.0	9.56	9.56	5.01	
90 %		21.0	21.0	21.0	21.0	21.0	9.56	9.56	5.01	
None	R2 Stream	16.8	16.8	16.8	16.8	16.8	7.65	7.65	4.01	
50 %		16.8	16.8	16.8	16.8	16.8	7.65	7.65	4.01	
75 %		16.8	16.8	16.8	16.8	16.8	7.65	7.65	4.01	
90 %		16.8	16.8	16.8	16.8	16.8	7.65	7.65	4.01	
None	R2 Stream	8.18	8.18	8.18	8.18	8.18	3.72	3.72	1.95	
50 %		8.18	8.18	8.18	8.18	8.18	3.72	3.72	1.95	

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
75 %	R2 Stream 2nd	8.18	8.18	8.18	8.18	8.18	3.72	3.72	1.95
90 %		8.18	8.18	8.18	8.18	8.18	3.72	3.72	1.95
None		10.3	10.3	10.3	10.3	10.3	4.68	4.68	2.45
50 %		10.3	10.3	10.3	10.3	10.3	4.68	4.68	2.45
75 %	R3 Stream	10.3	10.3	10.3	10.3	10.3	4.68	4.68	2.45
90 %		10.3	10.3	10.3	10.3	10.3	4.68	4.68	2.45
None		20.0	20.0	20.0	20.0	20.0	9.10	9.10	4.76
50 %		20.0	20.0	20.0	20.0	20.0	9.10	9.10	4.76
75 %	R3 Stream 2nd	20.0	20.0	20.0	20.0	20.0	9.10	9.10	4.76
90 %		20.0	20.0	20.0	20.0	20.0	9.10	9.10	4.76
None		20.7	20.7	20.7	20.7	20.7	9.42	9.42	4.94
50 %		20.7	20.7	20.7	20.7	20.7	9.42	9.42	4.94
75 %	R4 Stream	20.7	20.7	20.7	20.7	20.7	9.42	9.42	4.94
90 %		20.7	20.7	20.7	20.7	20.7	9.42	9.42	4.94
None		30.7	30.7	30.7	30.7	30.7	13.9	13.9	7.28
50 %		30.7	30.7	30.7	30.7	30.7	13.9	13.9	7.28
75 %	R4 Stream 2nd	30.7	30.7	30.7	30.7	30.7	13.9	13.9	7.28
90 %		30.7	30.7	30.7	30.7	30.7	13.9	13.9	7.28
None		29.8	29.8	29.8	29.8	29.8	13.6	13.6	7.10
50 %		29.8	29.8	29.8	29.8	29.8	13.6	13.6	7.10
75 %	R4 Stream 2nd	29.8	29.8	29.8	29.8	29.8	13.6	13.6	7.10
90 %		29.8	29.8	29.8	29.8	29.8	13.6	13.6	7.10

* Maximum values coming from multiple applications are marked in italics

Parent substance propamocarb-hydrochloride

Lettuce - early - 1 kg a.s/ha (DGR I / PMT I)

Table 9.5- 281: FOCUS Step 4 PEC_{sed} results for propamocarb-hydrochloride, GAP group name lettuce, assessment name early (DGR I / PMT I)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride							
		None	None	None	None	None	10 m	10 m	20 m
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m
None	D3 Ditch	2.43	0.708	0.388	0.270	0.209	0.388	0.270	0.209
50 %		1.26	0.367	0.201	0.140	0.108	0.201	0.140	0.108
75 %		0.656	0.190	0.104	0.072	0.056	0.104	0.072	0.056



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PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
90 %		0.275	0.080	0.044	0.030	0.023	0.044	0.030	0.023	
None	D3 Ditch 2nd	2.54	0.739	0.405	0.283	0.218	0.405	0.283	0.218	
50 %		1.32	0.383	0.210	0.146	0.113	0.210	0.146	0.113	
75 %		0.685	0.199	0.109	0.076	0.058	0.09	0.076	0.058	
90 %		0.287	0.083	0.046	0.032	0.024	0.046	0.032	0.024	
None	D4 Pond	0.459	0.403	0.300	0.260	0.246	0.300	0.260	0.246	
50 %		0.261	0.250	0.228	0.217	0.210	0.28	0.217	0.210	
75 %		0.217	0.211	0.201	0.195	0.191	0.201	0.195	0.191	
90 %		0.191	0.188	0.184	0.181	0.180	0.184	0.181	0.180	
None	D4 Stream	0.230	0.105	0.104	0.104	0.103	0.104	0.104	0.103	
50 %		0.125	0.104	0.103	0.103	0.103	0.103	0.103	0.103	
75 %		0.104	0.103	0.103	0.103	0.103	0.103	0.103	0.103	
90 %		0.103	0.103	0.103	0.103	0.103	0.103	0.103	0.103	
None	D6 Ditch	1.11	0.684	0.672	0.667	0.665	0.672	0.667	0.665	
50 %		0.705	0.671	0.665	0.662	0.661	0.665	0.662	0.661	
75 %		0.682	0.664	0.661	0.660	0.659	0.661	0.660	0.659	
90 %		0.660	0.660	0.659	0.658	0.658	0.659	0.658	0.658	
None	R1 Pond	1.54	1.49	1.39	1.34	1.31	0.749	0.697	0.437	
50 %		1.34	1.32	1.27	1.24	1.23	0.620	0.593	0.347	
75 %		1.25	1.23	1.21	1.20	1.19	0.555	0.541	0.302	
90 %		1.19	1.18	1.17	1.17	1.16	0.515	0.510	0.274	
None	R1 Pond 2nd	1.19	1.05	1.08	1.04	1.02	0.580	0.538	0.342	
50 %		1.04	1.02	0.988	0.970	0.958	0.480	0.461	0.268	
75 %		0.970	0.960	0.942	0.933	0.927	0.432	0.422	0.234	
90 %		0.925	0.921	0.914	0.910	0.908	0.402	0.398	0.214	
None	R1 Stream	2.3	2.69	2.69	2.68	2.68	1.24	1.23	0.659	
50 %		2.70	2.68	2.68	2.68	2.68	1.23	1.23	0.656	
75 %		2.69	2.68	2.68	2.68	2.68	1.23	1.23	0.655	
90 %		2.68	2.68	2.68	2.68	2.68	1.23	1.23	0.654	
None	R1 Stream 2nd	2.33	2.30	2.29	2.28	2.28	1.07	1.06	0.574	
50 %		2.30	2.28	2.28	2.28	2.28	1.06	1.06	0.571	
75 %		2.29	2.28	2.28	2.27	2.27	1.06	1.06	0.569	
90 %		2.28	2.27	2.27	2.27	2.27	1.06	1.06	0.568	
None	R2 Stream	1.68	1.65	1.65	1.65	1.65	0.681	0.679	0.356	
50 %		1.66	1.65	1.64	1.64	1.64	0.678	0.677	0.354	
75 %		1.65	1.64	1.64	1.64	1.64	0.676	0.675	0.353	
90 %		1.65	1.64	1.64	1.64	1.64	0.675	0.674	0.352	

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	R2 Stream 2nd	0.471	0.454	0.449	0.447	0.447	0.152	0.150	0.076	
50 %		0.458	0.449	0.446	0.445	0.445	0.149	0.148	0.075	
75 %		0.451	0.446	0.445	0.444	0.444	0.148	0.147	0.074	
90 %		0.447	0.445	0.444	0.444	0.444	0.147	0.147	0.073	
None	R3 Stream	4.06	3.98	3.96	3.95	3.94	1.85	1.84	0.997	
50 %		4.00	3.95	3.94	3.94	3.94	1.80	1.83	0.990	
75 %		3.96	3.94	3.94	3.93	3.93	1.83	1.82	0.986	
90 %		3.94	3.93	3.93	3.93	3.93	1.82	1.81	0.984	
None	R3 Stream 2nd	7.37	7.16	7.10	7.08	7.07	3.00	2.98	1.59	
50 %		7.21	7.10	7.07	7.06	7.05	2.97	2.96	1.57	
75 %		7.12	7.07	7.05	7.05	7.04	2.95	2.95	1.56	
90 %		7.07	7.05	7.04	7.04	7.04	2.94	2.94	1.56	
None	R4 Stream	8.89	8.83	8.82	8.81	8.81	4.06	4.06	2.18	
50 %		8.85	8.81	8.81	8.80	8.80	4.05	4.05	2.18	
75 %		8.82	8.80	8.80	8.80	8.80	4.05	4.05	2.17	
90 %		8.81	8.80	8.80	8.80	8.80	4.04	4.04	2.17	
None	R4 Stream 2nd	7.61	7.55	7.53	7.52	7.52	3.47	3.46	1.86	
50 %		7.56	7.53	7.52	7.51	7.51	3.46	3.46	1.86	
75 %		7.53	7.51	7.51	7.51	7.51	3.45	3.45	1.85	
90 %		7.52	7.51	7.51	7.51	7.51	3.45	3.45	1.85	

Lettuce - late - 1 kg a.s./ha (DGR I / PMT II)

Table 9.2.5- 282: FOCUS Step 4 PEC_{sed} results for propamocarb-hydrochloride, GAP group name lettuce, assessment name late (DGR I / PMT II)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	2.45	0.714	0.391	0.273	0.210	0.391	0.273	0.210	
50 %		0.27	0.370	0.203	0.141	0.109	0.203	0.141	0.109	
75 %		0.661	0.192	0.105	0.073	0.056	0.105	0.073	0.056	
90 %		0.277	0.080	0.044	0.031	0.024	0.044	0.031	0.024	
None	D3 Ditch 2nd	1.85	0.533	0.291	0.202	0.156	0.291	0.202	0.156	
50 %		0.957	0.275	0.150	0.104	0.080	0.150	0.104	0.080	
75 %		0.494	0.142	0.077	0.054	0.041	0.077	0.054	0.041	



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PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
90 %		0.206	0.059	0.032	0.022	0.017	0.032	0.022	0.017	
None	D4 Pond	3.10	3.07	3.00	2.97	2.95	3.00	2.97	2.95	
50 %		2.97	2.95	2.92	2.90	2.89	2.92	2.90	2.89	
75 %		2.90	2.89	2.87	2.87	2.86	2.87	2.87	2.86	
90 %		2.86	2.86	2.85	2.85	2.84	2.85	2.85	2.84	
None	D4 Stream	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	
50 %		1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	
75 %		1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	
90 %		1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	
None	D6 Ditch	19.2	19.1	19.1	19.1	19.1	19.1	19.1	19.1	
50 %		19.2	19.1	19.1	19.1	19.1	19.1	19.1	19.1	
75 %		19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	
90 %		19.1	19.1	19.1	19.1	19.1	19.1	19.1	19.1	
None	R1 Pond	4.63	4.58	4.51	4.47	4.45	2.06	2.02	1.12	
50 %		4.47	4.45	4.43	4.39	4.38	1.95	1.93	1.04	
75 %		4.39	4.39	4.37	4.36	4.35	1.90	1.89	1.01	
90 %		4.35	4.35	4.34	4.33	4.33	1.87	1.87	0.985	
None	R1 Pond 2nd	1.65	1.60	1.57	1.47	1.44	0.802	0.754	0.463	
50 %		1.47	1.44	1.40	1.38	1.37	0.684	0.661	0.381	
75 %		1.38	1.37	1.35	1.34	1.33	0.626	0.614	0.341	
90 %		1.33	1.32	1.31	1.31	1.31	0.591	0.586	0.316	
None	R1 Stream	7.53	7.48	7.47	7.46	7.46	2.90	2.90	1.51	
50 %		7.46	7.46	7.46	7.45	7.45	2.89	2.89	1.50	
75 %		7.47	7.46	7.45	7.45	7.45	2.89	2.89	1.50	
90 %		7.46	7.45	7.45	7.45	7.45	2.89	2.89	1.50	
None	R1 Stream 2nd	1.47	1.48	1.47	1.47	1.47	0.678	0.675	0.361	
50 %		1.49	1.47	1.47	1.47	1.46	0.673	0.671	0.358	
75 %		1.47	1.47	1.46	1.46	1.46	0.670	0.669	0.357	
90 %		1.47	1.46	1.46	1.46	1.46	0.668	0.668	0.356	
None	R2 Stream	3.31	3.28	3.27	3.27	3.27	0.976	0.972	0.471	
50 %		3.29	3.27	3.27	3.26	3.26	0.971	0.969	0.469	
75 %		3.27	3.27	3.26	3.26	3.26	0.968	0.967	0.467	
90 %		3.27	3.26	3.26	3.26	3.26	0.966	0.966	0.466	
None	R2 Stream 2nd	6.69	6.66	6.65	6.64	6.64	2.15	2.14	1.06	
50 %		6.66	6.64	6.64	6.64	6.64	2.14	2.14	1.06	
75 %		6.65	6.64	6.64	6.64	6.64	2.14	2.14	1.06	
90 %		6.64	6.64	6.64	6.63	6.63	2.13	2.13	1.06	



Document MCP – Section 9: Fate and behaviour in the environment
Fluopicolide + Propamocarb-hydrochloride SC 687.5

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	R3 Stream	1.88	1.79	1.76	1.75	1.75	0.833	0.823	0.449	
50 %		1.81	1.76	1.75	1.74	1.74	0.817	0.812	0.438	
75 %		1.77	1.75	1.74	1.74	1.74	0.809	0.807	0.434	
90 %		1.75	1.74	1.73	1.73	1.73	0.804	0.803	0.431	
None	R3 Stream 2nd	7.82	7.65	7.61	7.59	7.58	2.90	2.88	1.50	
50 %		7.69	7.60	7.58	7.59	7.56	2.88	2.86	1.49	
75 %		7.62	7.58	7.58	7.56	7.56	2.86	2.85	1.48	
90 %		7.58	7.56	7.55	7.55	7.55	2.85	2.85	1.47	
None	R4 Stream	8.29	8.21	8.19	8.19	8.18	3.76	3.75	2.02	
50 %		8.23	8.19	8.18	8.18	8.18	3.75	3.74	2.01	
75 %		8.20	8.18	8.18	8.17	8.17	3.74	3.74	2.01	
90 %		8.18	8.18	8.17	8.17	8.17	3.74	3.74	2.01	
None	R4 Stream 2nd	7.60	7.52	7.50	7.49	7.49	3.43	3.42	1.84	
50 %		7.54	7.50	7.49	7.48	7.48	3.42	3.42	1.83	
75 %		7.51	7.49	7.48	7.48	7.48	3.41	3.41	1.83	
90 %		7.49	7.48	7.48	7.48	7.48	3.41	3.41	1.83	

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Lettuce - double – 2 × 1 kg a.s./ha, 7d int. (DGR II / PMT III)

Table 9.2.5- 283: FOCUS Step 4 PECsed results for propamocarb-hydrochloride, GAP group name lettuce, assessment name double (DGR II / PMT III)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
None	D3 Ditch	2.75	0.770	0.45	0.286	0.219	0.415	0.286	0.219	
50 %		1.43	0.400	0.215	0.143	0.114	0.215	0.143	0.114	
75 %		0.744	0.208	0.112	0.077	0.059	0.112	0.077	0.059	
90 %		0.313	0.087	0.047	0.032	0.025	0.047	0.032	0.025	
None	D3 Ditch 2nd	2.19	0.609	0.327	0.225	0.172	0.327	0.225	0.172	
50 %		1.14	0.316	0.169	0.116	0.089	0.169	0.116	0.089	
75 %		0.588	0.165	0.088	0.060	0.046	0.088	0.060	0.046	
90 %		0.240	0.068	0.037	0.025	0.019	0.037	0.025	0.019	
None	D4 Pond	8.60	8.53	8.28	8.36	8.32	8.32	8.36	8.32	
50 %		8.37	8.24	8.28	8.25	8.13	8.28	8.25	8.23	
75 %		8.26	8.24	8.21	8.20	8.19	8.20	8.20	8.19	
90 %		8.19	8.18	8.16	8.16	8.16	8.17	8.16	8.16	
None	D4 Stream	4.82	4.81	4.81	4.81	4.81	4.81	4.81	4.81	
50 %		4.82	4.81	4.81	4.81	4.81	4.81	4.81	4.81	
75 %		4.82	4.81	4.81	4.81	4.81	4.81	4.81	4.81	
90 %		4.81	4.81	4.81	4.80	4.81	4.81	4.81	4.81	
None	D6 Ditch	52.5	52.5	52.5	52.4	52.4	52.5	52.4	52.4	
50 %		52.6	52.5	52.4	52.4	52.4	52.4	52.4	52.4	
75 %		52.5	52.4	52.4	52.4	52.4	52.4	52.4	52.4	
90 %		52.4	52.4	52.4	52.4	52.4	52.4	52.4	52.4	
None	R1 Pond	6.99	6.80	6.74	6.70	3.09	3.02	1.67		
50 %		6.75	6.65	6.62	6.60	2.93	2.89	1.56		
75 %		6.62	6.56	6.55	6.55	2.85	2.83	1.50		
90 %		6.55	6.53	6.52	6.52	2.80	2.79	1.47		
None	R1 Pond 2nd	4.66	4.58	4.43	4.36	4.31	2.17	2.09	1.21	
50 %		4.37	4.33	4.25	4.22	4.19	1.98	1.94	1.08	
75 %		4.22	4.20	4.16	4.14	4.13	1.89	1.87	1.01	
90 %		4.12	4.12	4.11	4.10	4.10	1.83	1.82	0.972	
None	R1 Stream	11.5	11.4	11.4	11.4	11.4	4.13	4.12	2.11	
50 %		11.4	11.4	11.4	11.4	11.4	4.12	4.11	2.10	
75 %		11.4	11.4	11.4	11.4	11.4	4.11	4.11	2.10	
90 %		11.4	11.4	11.4	11.4	11.4	4.11	4.11	2.10	
None	R1 Stream 2nd	4.63	4.56	4.55	4.54	4.54	2.09	2.08	1.11	
50 %		4.58	4.55	4.54	4.54	4.53	2.08	2.08	1.11	

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride								
		None	None	None	None	None	10 m	10 m	20 m	
Nozzle reduction	Vegetated strip (m)	None	None	None	None	None	10 m	10 m	20 m	
	No spray buffer (m)	0 m	5 m	10 m	15 m	20 m	10 m	15 m	20 m	
75 %	R2 Stream	4.55	4.54	4.53	4.53	4.53	2.07	2.07	1.10	
90 %		4.54	4.53	4.53	4.53	4.53	2.07	2.07	1.10	
None		8.05	7.99	7.97	7.97	7.97	2.49	2.49	1.22	
50 %		8.00	7.97	7.96	7.96	7.96	2.48	2.48	1.22	
75 %	R2 Stream 2nd	7.98	7.96	7.96	7.96	7.96	2.48	2.48	1.22	
90 %		7.97	7.96	7.96	7.96	7.96	2.47	2.47	1.21	
None		8.99	8.94	8.92	8.92	8.92	2.80	2.80	1.37	
50 %		8.95	8.92	8.92	8.92	8.91	2.80	2.79	1.37	
75 %	R3 Stream	8.93	8.92	8.91	8.91	8.91	2.79	2.79	1.37	
90 %		8.92	8.91	8.91	8.91	8.91	2.79	2.79	1.37	
None		6.95	6.73	6.66	6.64	6.63	3.09	3.09	1.66	
50 %		6.78	6.66	6.63	6.62	6.61	3.06	3.05	1.64	
75 %	R3 Stream 2nd	6.69	6.62	6.61	6.61	6.60	3.04	3.03	1.63	
90 %		6.63	6.61	6.60	6.60	6.60	3.03	3.03	1.63	
None		16.3	16.1	16.0	16.0	16.0	6.05	6.02	3.14	
50 %		16.1	16.0	16.0	16.0	16.0	6.01	6.00	3.12	
75 %	R4 Stream	16.0	16.0	16.0	16.0	16.0	6.00	5.99	3.11	
90 %		16.0	16.0	16.0	16.0	16.0	5.99	5.99	3.10	
None		13.0	12.9	12.9	12.9	12.9	5.86	5.85	3.14	
50 %		13.0	12.9	12.9	12.9	12.9	5.85	5.84	3.13	
75 %	R4 Stream 2nd	12.9	12.9	12.9	12.9	12.9	5.84	5.84	3.13	
90 %		12.9	12.9	12.9	12.9	12.9	5.84	5.84	3.13	
None		14.9	14.9	14.9	14.9	14.9	6.69	6.68	3.59	
50 %		14.9	14.9	14.9	14.9	14.9	6.68	6.67	3.58	
75 %	R4 Stream	14.9	14.9	14.9	14.9	14.9	6.67	6.67	3.58	
90 %		14.9	14.9	14.9	14.9	14.9	6.66	6.66	3.57	

* Maximum values coming from multiple applications are marked in italics

III. Conclusion

Predicted environmental concentrations of the fungicide propamocarb-hydrochloride in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in lettuce in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered.

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2001,2015) and is considered valid to assess predicted environmental concentrations in surface water (PEC_{sw}) and sediment (PEC_{sed}) for propamocarb-hydrochloride in lettuce.

Data Point:	KCP 9.2.5/09
Report Author:	[REDACTED]
Report Year:	2020
Report Title:	Propamocarb-hydrochloride (CH): PEC _{sw} and FOCUS EUR - Use in cucumbers in greenhouses in Europe
Report No:	EnSa-20-0481
Document No:	M-687164-01-1
Guideline(s) followed in study:	not applicable
Deviations from current test guideline:	None
Previous evaluation:	No, not previously submitted
GLP/Officially recognised testing facilities:	No, not conducted under GLP/Officially recognised testing facilities
Acceptability/Reliability:	Yes

Executive Summary

Predicted environmental concentrations of the fungicide propamocarb-hydrochloride in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered in these calculations.

The use of propamocarb-hydrochloride in green house cucumbers were assessed according to the Good Agricultural Practice (GAP) in Europe.

4 Materials and Methods

Intended GAPs for the use of propamocarb-hydrochloride in green house cucumbers in Europe were analysed and consolidated according to regulatory and modelling requirements. As a result, one or more uses may be covered by a single modelling GAP row (DGR). The translation of the regulatory GAP for modelling purposes is shown in Table 9.2.5-284.

Table 9.2.5-284: GAP translation for modelling purposes

GAP group ID	GAP group name (DGR) and use IDs	Covered crop(s)	Growth stage	Max. apps	Interval (days)	Rate (kg a.s./ha)
DGR I	Cucumber	Cucumber	BBCH 21 - 89	3	7	3 × 1

The implementation of the modelling GAP (Table 9.2.5-284) at Steps 1-2 level is shown in Table 9.2.5-285. One or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Table 9.2.5- 285: FOCUS Steps 1-2 specific data for the GAPs assessed

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)	Season	Crop cover
DGR I PMT I	cucumber	early	vegetables, fruiting (arable crops)	spring (Mar. - May)	full canopy
DGR I PMT II	cucumber	mid	vegetables, fruiting (arable crops)	summer (Jun. - Sep.)	full canopy
DGR I PMT III	cucumber	late	vegetables, fruiting (arable crops)	autumn (Oct. - Feb.)	full canopy

This section provides the implementation of the modelling GAP (Table 9.2.5-284) at Step 3 level. Also here one or more calculations (modelling tasks, PMT) are necessary to fully cover the use assessed. The number and name of the respective DGR is provided for easier reference.

Please note that PMTs at Steps 1-2 and Step 3 do not necessarily fully correspond to each other due to inherent differences in the models.

The application dates for this assessment were set with the help of the tool AppDate (Klein 2018), which proposes dates for specific crop stages (given as BBCD code) based on the crop development as defined in the FOCUS model scenarios for groundwater and surface water.

The summary of all Step 3 PMTs is provided in Table 9.2.5- 286. The detailed information on individual uses is given in tables Table 9.2.5- 287 to Table 9.2.5-292.

Table 9.2.5- 286: Overview of FOCUS Step 3 assessments

Run IDs (DGR / PMT)	GAP group name (DGR)	Assessment name (PMT)	FOCUS crop (crop group)
DGR I PMT I	Cucumber	Early	Vegetables, fruiting (arable crops)
DGR I PMT II	Cucumber	Mid	Vegetables, fruiting (arable crops)
DGR I PMT III	Cucumber	Late	Vegetables, fruiting (arable crops)

GAP group name cucumber, assessment name early

Table 9.2.5- 287: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Early	D0 Ditch	01-Mar - 14-Apr
	R0 Stream	01-Mar - 14-Apr
	R3 Stream	01-Mar - 14-Apr
	R4 Stream	01-Mar - 14-Apr

Table 9.2.5- 288: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT I			
GAP group name (DGR)		Cucumber			
Assessment name (PMT)		Early			
FOCUS model crop (crop group)		Vegetables, fruiting (arable crops)			
Use pattern		3×1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		44 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D6 Ditch	01-Mar/14-Apr (60/104)	05-Mar	R2	01-Mar/14-Apr (60/104)	01-Mar
		14-Mar	Stream		21-Mar
		03-Apr	R3		30-Mar
D6 Ditch	01-Mar/14-Apr (60/104)	01-Mar	R4	01-Mar/14-Apr (60/104)	01-Mar
		10-Mar	Stream		10-Mar
		28-Mar	R4		28-Mar
D6 Ditch	01-Mar/14-Apr (60/104)	05-Mar	R4	01-Mar/14-Apr (60/104)	05-Mar
		12-Mar	Stream		12-Mar
		21-Mar	R4		21-Mar

GAP group name cucumber, assessment name mid

Table 9.2.5- 289: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Mid	D6 Ditch	01-Jul - 14-Aug
	R2 Stream	01-Jul - 14-Aug
	R3 Stream	01-Jul - 14-Aug
	R4 Stream	01-Jul - 14-Aug

Table 9.2.5- 290: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT II			
GAP group name (DGR)		Cucumber			
Assessment name (PMT)		Mid			
FOCUS model crop (crop group)		Vegetables, fruiting (arable crops)			
Use pattern		3×1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		44 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D6 Ditch	01-Jul/14-Aug (182/226)	06-Jul 17-Jul 27-Jul	R2 Stream	01-Jul/14-Aug (182/226)	31-Jul 07-Aug 15-Aug
			R3 Stream	01-Jul/14-Aug (182/226)	11-Jul 18-Jul 30-Jul
			R4 Stream	01-Jul/14-Aug (182/226)	01-Jul 25-Jul 01-Aug

GAP group name cucumber, assessment name late

Table 9.2.5- 291: Summarised FOCUS Step 3 application data (PAT settings)

Assessment name	Scenario	Application window used in modelling
Late	D6 Ditch	01-Nov - 15-Dec
	R2 Stream	01-Nov - 15-Dec
	R3 Stream	01-Nov - 15-Dec
	R4 Stream	01-Nov - 15-Dec

Table 9.2.5- 292: Full FOCUS Step 3 application data

Run IDs		DGR I / PMT III			
GAP group name (DGR)		Cucumber			
Assessment name (PMT)		Late			
FOCUS model crop (crop group)		Vegetables, fruiting (arable crops)			
Use pattern		3×1 kg a.s./ha, 7d int.			
Appl. method (Run-off CAM, depth inc.)		Ground spray (2 - appln foliar linear, 4 cm)			
PAT start date (relative to crop event or absolute)		Absolute			
PAT window range		44 days for all scenarios (min = 44 days)			
Drainage scenarios	PAT start/end date (Julian day)	Application date	Runoff scenarios	PAT start/end date (Julian day)	Application date
D6 Ditch	01-Nov/15-Dec (305/349)	01-Nov 06-Dec 13-Dec	R2 Stream	01-Nov/15-Dec (305/349)	08-Nov 15-Nov 22-Nov
			R3 Stream	01-Nov/15-Dec (305/349)	15-Nov 22-Nov 05-Dec
			R4 Stream	01-Nov/15-Dec (305/349)	03-Nov 10-Nov 10-Dec

Steps 1-2 calculations were performed according to formulas implemented in FOCUS STEPS 1+2 version 3.2.

Step 3 calculations were performed using the FOCUS SWASH 3.5 suite, including

- FOCUS PRZM 4.3.1
- FOCUS MACRO 5.5.4
- FOCUS TOXSWA 3.3.3

Refinement at Step 4 level was performed with the SWAN tool, version 5.0.1.

Standard procedures and settings were used for Steps 1-2 and 3 assessments. At Step 4 the following mitigation settings were used Table 9.2.5- 293

Table 9.2.5- 293: Mitigation approaches used

Buffer length	Mitigation type	Drift reduction nozzles
0 m	Spray drift	0 %, 90 %, 95 %, 99 %

Substance related parameters which have been used for propamocarb-hydrochloride whose derivation is taken from the EFSA LoEP [EFSA Scientific Report 87, 12 May 2006]. Calculations at FOCUS SW Steps 1-2 level are summarised in Table 9.2.5- 294 and at Step 3/4 level in Table 9.2.5- 295.

Table 9.2.5- 294: Substance parameters used at FOCUS Steps 1-2 level

Parameter	Unit	Propamocarb-hydrochloride PCH
Molar mass	(g/mol)	224.7
Water solubility	(mg/L)	100500
Koc	(mL/g)	263.6
Degradation		
Soil	(days)	13.91
Total system	(days)	18.3
Water	(days)	18.3
Sediment	(days)	1000
Max occurrence		
Water / sediment	(%)	100
Soil	(%)	100

Table 9.2.5- 295: Substance parameters used for propamocarb-hydrochloride at Step 3/4 level

Parameter	Unit	Parent
Substance SWASH code		Propamocarb-hydrochloride PCH
General		
Molar mass	(g/mol)	224.7
Water solubility (temp.)	(mg/L)	100500 (20 °C)
Vapour pressure (temp.)	(Pa)	8.1E-05 (25 °C)
Crop processes		
Coefficient for uptake by plant (QSCF)	(-)	0
Wash-off factor	(m)	50
Sorption		
K _{oc}	(mL/g)	263.6
K _{OM}	(m/g)	152.9
Freundlich exponent (n _n)	(-)	0.867
Transformation		
DT50 in soil	(days)	13.91
temperature	(°C)	20
moisture content (m _c)	(g (cm))	2
formation fraction in soil	(-)	-
DT50 in water	(days)	18.3
temperature	(°C)	20
formation fraction in water	(-)	-
DT50 in sediment	(days)	1000
temperature	(°C)	20
formation fraction in sediment	(-)	-
DT50 on canopy	(days)	10

II Results and Discussion

The P_{FO} values were calculated for propamocarb-hydrochloride according to the equations implemented in the “STEPS 1-2 in FOCUS” calculator Table 9.2.5- 296 to Table 9.2.5- 298.

Cucumber - Early – 3 × 1000g a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 296: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name cucumber, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	768	RunOff	668	1951
Step 2					
Northern Europe	Mar. - May(Spring)	38.5	RunOff	33.9	98.9
Southern Europe	Mar. - May(Spring)	65.2	RunOff	57.9	169

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - Mid – 3 × 1000g a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 297: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name cucumber, assessment name Mid (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	768	RunOff	668	1951
Step 2					
Northern Europe	Jul. - Sep.(Summer)	38.5	RunOff	33.9	98.9
Southern Europe	Jun. - Sep.(Summer)	57.8	RunOff	45.9	134

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - Late – 3 × 1000g a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 298: FOCUS Steps 1-2 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name cucumber, assessment name Late (DGR I / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	-	768	RunOff	668	1951
Step 2					
Northern Europe	Oct. - Feb.(Autumn)	78.6	RunOff	69.9	204
Southern Europe	Oct. - Feb.(Autumn)	65.2	RunOff	57.9	169

* Single applications are marked.

** TWA interval as required by ecotox

Step 3 calculations were conducted for propamocarb-hydrochloride employing the models of the FOCUS SW suite. Reported values represent loadings *via* all relevant entry routes are shown in Table 9.2.5- 299 to Table 9.2.5- 301.

Cucumber - Early – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 299: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name cucumber, assessment name Early (DGR I / PMT I)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D6	Ditch	6.33 *	Spray drift	0.959	2.60
R2	Stream	19.6	RunOff	4.35	13.6
R3	Stream	58.0	RunOff	6.33	21.9
R4	Stream	90.9	RunOff	5.89	16.5

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - Mid – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 300: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name cucumber, assessment name Mid (DGR I / PMT II)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D6	Ditch	0.29 *	Spray drift	0.502	1.59 *
R2	Stream	5.62	Spray drift	0.207	1.61
R3	Stream	23.2	RunOff	4.13	15.0
R4	Stream	47.0	RunOff	4.28	16.1

* Single applications are marked.

** TWA interval as required by ecotox

Cucumber - Late – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 301: FOCUS Step 3 PEC_{sw} and PEC_{sed} for propamocarb-hydrochloride, GAP group name cucumber, assessment name Late (DGR I / PMT III)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	7d-PEC _{sw,twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 3					
D6	Ditch	6.33	Drainage	34.7	57.5
R2	Stream	21.6	RunOff	6.10	35.0
R3	Stream	68.3	RunOff	13.3	72.0
R4	Stream	97.9	RunOff	5.77	20.0

* Single applications are marked.

** TWA interval as required by ecotox

FOCUS Step 4 calculations considering various mitigation measures for runoff and spray drift were conducted based on the Step 3 results. This section provides the summary of results in tabular form.

Where applicable, the maximum of single and multiple application uses are shown in Table 9.2.5- 302 to Table 9.2.5- 307.

Cucumber - Early – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 302: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name cucumber, assessment name Early (DGR I / PMT I)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	6.33						
90 %		0.636						
95 %		0.320						
99 %		0.067						
None	R2 Stream	<i>19.6</i>						
90 %		<i>19.6</i>						
95 %		<i>19.6</i>						
99 %		<i>19.6</i>						
None	R3 Stream	<i>58.0</i>						
90 %		<i>58.0</i>						
95 %		<i>58.0</i>						
99 %		<i>58.0</i>						
None	R4 Stream	<i>90.9</i>						
90 %		<i>90.9</i>						
95 %		<i>90.9</i>						
99 %		<i>90.9</i>						

* Maximum values coming from multiple applications are marked in italics

Cucumber - Mid – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 303: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name cucumber, assessment name Mid (DGR I / PMT II)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	6.29						
90 %		0.629						
95 %		0.314						
99 %		0.279						

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
None	R2 Stream	5.62					
90 %		<i>0.790</i>					
95 %		<i>0.790</i>					
99 %		<i>0.790</i>					
None	R3 Stream	23.2					
90 %		23.2					
95 %		23.2					
99 %		23.2					
None	R4 Stream	47.0					
90 %		47.0					
95 %		47.0					
99 %		47.0					

* Maximum values coming from multiple applications are marked in italics

Cucumber - Late – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 304: FOCUS Step 4 PEC_{sw} results for propamocarb-hydrochloride, GAP group name cucumber, assessment name Late (DGR I / PMT III)

PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
None	D6 Ditch	62.9					
90 %		62.9					
95 %		62.9					
99 %		62.9					
None	R2 Stream	21.6					
90 %		21.6					
95 %		21.6					
99 %		21.6					
None	R3 Stream	68.3					
90 %		68.3					
95 %		68.3					
99 %		68.3					
None	R4 Stream	97.9					
90 %		97.9					



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PEC _{sw} (µg/L)	Scenario	Step 4 propamocarb-hydrochloride					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
95 %		97.9					
99 %		97.9					

* Maximum values coming from multiple applications are marked in italics

Cucumber - Early – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT I)

Table 9.2.5- 305: FOCUS Step 4 PEC_{sed} results for propamocarb-hydrochloride, GAP group name cucumber, assessment name Early (DGR I / PMT I)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride					
Nozzle reduction	Vegetated strip (m)	None					
	No spray buffer (m)	0 m					
None	D6 Ditch	2.60					
90 %		<i>0.541</i>					
95 %		<i>0.203</i>					
99 %		<i>0.149</i>					
None	R2 Stream	25.6					
90 %		25.5					
95 %		25					
99 %		25.5					
None	R3 Stream	21.9					
90 %		21.7					
95 %		21.7					
99 %		21.7					
None	R4 Stream	16.6					
90 %		16.4					
95 %		16.4					
99 %		16.4					

* Maximum values coming from multiple applications are marked in italics

Cucumber - Mid – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT II)

Table 9.2.5- 306: FOCUS Step 4 PECsed results for propamocarb-hydrochloride, GAP group name cucumber, assessment name Mid (DGR I / PMT II)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	1.59						
90 %		<i>0.271</i>						
95 %		<i>0.259</i>						
99 %		<i>0.250</i>						
None	R2 Stream	<i>1.61</i>						
90 %		<i>1.56</i>						
95 %		<i>1.56</i>						
99 %		<i>1.56</i>						
None	R3 Stream	<i>14.0</i>						
90 %		<i>14.7</i>						
95 %		<i>14.7</i>						
99 %		<i>14.7</i>						
None	R4 Stream	<i>16.1</i>						
90 %		<i>15.9</i>						
95 %		<i>15.9</i>						
99 %		<i>15.9</i>						

* Maximum values coming from multiple applications are marked in italics

Cucumber - Late – 3 × 1 kg a.s./ha, 7d int. (DGR I / PMT III)

Table 9.2.5- 307: FOCUS Step 4 PECsed results for propamocarb-hydrochloride, GAP group name cucumber, assessment name Late (DGR I / PMT III)

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride						
Nozzle reduction	Vegetated strip (m)	None						
	No spray buffer (m)	0 m						
None	D6 Ditch	54.5						
90 %		<i>54.7</i>						
95 %		<i>54.6</i>						
99 %		<i>54.4</i>						
None	R2 Stream	<i>35.0</i>						
90 %		<i>34.9</i>						

PEC _{sed} (µg/kg)	Scenario	Step 4 propamocarb-hydrochloride							
Nozzle reduction	Vegetated strip (m)	None							
	No spray buffer (m)	0 m							
95 %	R3 Stream	<i>34.9</i>							
99 %		<i>34.9</i>							
None		<i>72.0</i>							
90 %		<i>71.9</i>							
95 %	R4 Stream	<i>71.8</i>							
99 %		<i>71.8</i>							
None		<i>20.0</i>							
90 %		<i>19.8</i>							
95 %		<i>19.8</i>							
99 %		<i>19.8</i>							

* Maximum values coming from multiple applications are marked in italics

III Conclusion

Predicted environmental concentrations of the fungicide propamocarb hydrochloride in surface water (PEC_{sw}) and sediment (PEC_{sed}) were calculated for the use in greenhouse cucumbers in Europe, employing the tiered FOCUS Surface Water (SW) approach (FOCUS 2001, 2015). All relevant entry routes of a compound into surface water (principally a combination of spray drift and runoff/erosion or drain flow) were considered.

Assessment and conclusion by applicant:

The risk assessment report was conducted according to FOCUS (2001, 2015) and is considered valid to assess predicted environmental concentration in surface water (PEC_{sw}) and sediment (PEC_{sed}) for propamocarb hydrochloride in greenhouse cucumbers.

CP 9.3 Fate and behaviour in air

For information on the fate and behaviour in air please refer to Document MCA, Section 7.3.

CP 9.3.1 Route and rate of degradation in air and transport via air

For information on route and rate of degradation in air and transport via air please refer to Document MCA, Sections 7.3.1 and 7.3.

CP 9.4 Estimation of concentrations for other routes of exposure

There are no other routes of exposure if the product is used according to good agricultural practice. Therefore, no further estimations are considered necessary.