

REGISTRATION REPORT

Part B

Section 8

Environmental Fate

Detailed summary of the risk assessment

Product code: ADM.00150.I.2.A

Product name: LEAXO

Chemical active substance:

Acetamiprid, 200 g/L

Central Zone

Zonal Rapporteur Member State: Poland

CORE ASSESSMENT

(authorization according to Art. 33)

Applicant: Country organisation/representative as specified in
Part A

Submission date: 31/01/2024

MS Finalisation date: June 2024 (initial Core Assessment)

October 2024 (final Core Assessment), update May 2025

Version history

When	What
March 2023	Original submission
January 2024	<p>Revision 1, based on a request by zRMS Poland</p> <ul style="list-style-type: none"> - Additional PEC_{gw} calculations for GAP refinements (considering only Tier 1 results), for other application timings and with surrogate crops for missing FOCUS scenarios. - Additional $PEC_{sw/sed}$ calculations for other application timing and with surrogate crops for missing FOCUS scenario. <p>All changes are highlighted in yellow.</p>
June 2024	<p>Initial zRMS assessment</p> <p>The report in the dRR format has been prepared by the Applicant, therefore all comments, additional evaluations and conclusions of the zRMS are presented in grey commenting boxes. Minor changes are introduced directly in the text and highlighted in grey. Not agreed or not relevant information are struck through and shaded for transparency.</p> <p>Following the evaluation and before sending the document for commenting, all coloured highlighting was removed, from the parts updated by the Applicant, for better legibility</p>
October 2024	<p>Final report (Core Assessment updated following the commenting period).</p> <p>Additional information/assessments included by the zRMS in the report in response to comments received from the cMS and the Applicant are highlighted in yellow. Information no longer relevant is struck through and shaded.</p>
May 2025	<p>After commenting period the zRMS noted that information provided in area of soil exposure related to uses of the product in sugar beets may be confusing for the reviewers and respective corrections were thus made for clarity. Provided corrections have no impact on the obtained PEC_{soil} values and are highlighted in yellow.</p>

Table of Contents

8	Fate and behaviour in the environment (KCP 9)	4
8.1	Critical GAP and overall conclusions.....	4
8.2	Metabolites considered in the assessment	23
8.3	Rate of degradation in soil (KCP 9.1.1)	24
8.3.1	Aerobic degradation in soil (KCP 9.1.1.1)	25
8.3.1.1	Acetamiprid and its metabolites	25
8.3.2	Anaerobic degradation in soil (KCP 9.1.1.1)	31
8.4	Field studies (KCP 9.1.1.2)	31
8.4.1	Soil dissipation testing on a range of representative soils (KCP 9.1.1.2.1).....	31
8.4.1.1	Acetamiprid and its metabolites	31
8.4.2	Soil accumulation testing (KCP 9.1.1.2.2)	33
8.5	Mobility in soil (KCP 9.1.2).....	33
8.5.1	Acetamiprid and its metabolites	33
8.5.2	Column leaching (KCP 9.1.2.1)	35
8.5.3	Lysimeter studies (KCP 9.1.2.2)	35
8.5.4	Field leaching studies (KCP 9.1.2.3)	35
8.6	Degradation in the water/sediment systems (KCP 9.2, KCP 9.2.1, KCP 9.2.2, KCP 9.2.3).....	35
8.6.1	Acetamiprid and its metabolites	35
8.7	Predicted Environmental Concentrations in soil (PEC _{soil}) (KCP 9.1.3)	37
8.7.1	Justification for new endpoints.....	38
8.7.2	Active substance and relevant metabolites	38
8.7.2.1	Acetamiprid and its metabolites	40
8.7.2.2	PEC _{soil} of ADM.00150.I.2.A / LEAXO.....	72
8.8	Predicted Environmental Concentrations in groundwater (PEC _{gw}) (KCP 9.2.4).....	74
8.8.1	Justification for new endpoints.....	74
8.8.2	Active substance and relevant metabolites (KCP 9.2.4.1).....	74
8.8.2.1	Acetamiprid and its metabolites	83
8.9	Predicted Environmental Concentrations in surface water (PEC _{sw}) (KCP 9.2.5).....	99
8.9.1	Justification for new endpoints.....	99
8.9.2	Active substance, relevant metabolites and the formulation (KCP 9.2.5)	99
8.9.2.1	Acetamiprid and its metabolites	106
8.9.2.2	PEC _{sw/sed} of ADM.00150.I.2.A / LEAXO	189
8.10	Fate and behaviour in air (KCP 9.3, KCP 9.3.1)	195
Appendix 1	Lists of data considered in support of the evaluation.....	196
Appendix 2	Detailed evaluation of the new Annex II studies.....	202
Appendix 3	Additional information provided by the applicant (e.g. detailed modelling data)	202

8 Fate and behaviour in the environment (KCP 9)

8.1 Critical GAP and overall conclusions

Table 8.1-1: Critical use pattern of the formulated product

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
Zonal uses (field or outdoor uses, certain types of protected crops)														
I	Central	Corn	F	See below	foliar spraying, overall	Jun-Aug/ BBCH 51-75	a) 1 b) 1	-	a) 0.3 b) 0.3	a) 60 b) 60	300-500	56	Umbrella GAP	A
1	Hungary	Corn	F	<i>Diabrotica virgifera virgifera Ostrinia nubilalis</i>	foliar spraying, overall	Jun-Aug/ BBCH 51-75	a) 1 b) 1	-	a) 0.3 b) 0.3	a) 60 b) 60	300-500	56	in label: 0.2-0.3 L/ha	A
2	Slovakia	Corn	F	<i>Diabrotica virgifera virgifera Ostrinia nubilalis</i>	foliar spraying, overall	Jun-Aug/ BBCH 51-75	a) 1 b) 1	-	a) 0.3 b) 0.3	a) 60 b) 60	300-500	56	in label: 0.2-0.3 L/ha	A
3	Slovenia	Corn	F	<i>Diabrotica virgifera virgifera Ostrinia nubilalis</i>	foliar spraying, overall	Jun-Aug/ BBCH 51-75	a) 1 b) 1	-	a) 0.3 b) 0.3	a) 60 b) 60	300-500	56	in label: 0.2-0.3 L/ha	A
IIa	Central	Apple	F	<i>Cydia pomonella and other pests</i>	foliar spraying, overall	June-Aug/ BBCH 71-PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80-60 b) 80 60	500-1000	14	Umbrella GAP	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
I Ib	Central	Apple	F	<i>Aphids species and others pests</i>	foliar spraying, overall	May-Oct/ BBCH 62-PHI	a) 1-2 b) 1-2	a) 8 b) 8	a) 0.125 b) 0.25	a) 25 b) 50	500-1000	14	Umbrella GAP; To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
4	Czech Republic	Apple	F	<i>Cydia pomonella, Quadraspidiotus perniciosus</i>	foliar spraying, overall	June-Aug/ BBCH 71-PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80-60 b) 80 60	500-1000	14	0.25 L/10000 m² LWA 0.1875 L/10000 m² LWA	A
5	Czech Republic	Apple	F	<i>Aphis</i> spp.	foliar spraying, overall	Jun-Sep/ BBCH 62-PHI	a) 1-2 b) 1-2	a) 8 b) 8	a) 0.125 b) 0.25	a) 25 b) 50	500-1000	14	0.078 L/10000 m² LWA To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
6	Germany	Apple	F	<i>Cydia pomonella, Quadraspidiotus perniciosus</i>	foliar spraying, overall	June-Aug/ BBCH 71-PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80-60 b) 80 60	500-1000	14	0.25 L/10000 m² LWA 0.1875 L/10000 m² LWA	A
7	Germany	Apple	F	<i>Aphis</i> spp.	foliar spraying, overall	Jun-Sep/ BBCH 62-PHI	a) 1-2 b) 1-2	a) 8 b) 8	a) 0.125 b) 0.25	a) 25 b) 50	500-1000	14	0.078 L/10000 m² LWA To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
8	Nether- lands	Apple	F	<i>Aphis</i> spp.	foliar spraying, overall	Jun-Aug/ BBCH 71-PHI	a) 1-2 b) 1-2	a) 8 b) 8	a) 0.125 b) 0.25	a) 25 b) 50	500-1000	14	0.078 L/10000 m² LWA	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
9	Hungary	Apple	F	<i>Cydia pomonella</i> , <i>Quadraspidiotus perniciosus</i> , <i>Eriosoma lanigerum</i> ,	foliar spraying, overall	June-Oct/ BBCH 71-PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80-60 b) 80 60	600-1000	14	in-label: 0.2-0.4 L/ha in-label: 0.125—0.25 L/10000-m² LWA in label: 0.15-0.3 L/ha in label: 0.09375-0.225 L / 10000 m² LWA	A
10	Hungary	Apple	F	<i>Aphis</i> spp.	foliar spraying, overall	May-Oct/ BBCH 62-PHI	a) 1-2 b) 1-2	a) 8 b) 8	a) 0.125 b) 0.25	a) 25 b) 50	600-1000	14	In label: 0.09-0.125 L/ha 0.056 – 0.078 L/10000 m² LWA; To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
11	Poland	Apple	F	<i>Cydia pomonella</i>	foliar spraying, overall	June-Aug/ BBCH 71-PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	500-900	14	0.25 L/10000-m² LWA 0.1875 L/10000 m² LWA	A
12	Poland	Apple	F	<i>Aphis</i> spp.	foliar spraying, overall	May-Oct/ BBCH 62-PHI	a) 1-2 b) 1-2	a) 8 b) 8	a) 0.125 b) 0.25	a) 25 b) 50	500-900	14	0.078 L/10000 m² LWA To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
13	Slovakia	Apple	F	<i>Cydia pomonella</i> <i>Quadraspidiotus perniciosus</i> , <i>Eriosoma lanigerum</i>	foliar spraying, overall	June-Aug/ BBCH 71-PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80-60 b) 80 60	500-1000	14	in-label: 0.2-0.4 L/ha in-label: 0.125—0.25 L/10000-m² LWA in label: 0.15-0.3 L/ha in label: 0.09375-0.225 L / 10000 m² LWA	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
14	Slovakia	Apple	F	<i>Aphis</i> spp.	foliar spraying, overall	May-Sep/ BBCH 62-PHI	a) 1-2 b) 1-2	a) 8 b) 8	a) 0.125 b) 0.25	a) 25 b) 50	500-1000	14	in label: 0.09-0.125 L/ha 0.056 – 0.078 L/10000 m ² LWA To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
15	Slovenia	Apple	F	<i>Cydia pomonella</i> <i>Quadraspidiotus</i> <i>perniciosus</i> , <i>Eriosoma</i> <i>lanigerum</i>	foliar spraying, overall	June-Aug/ BBCH 71-PHI	a) 1 b) 1	-	a) 0.4 0.3 b) 0.4 0.3	a) 80 60 b) 80 60	500-1000	14	in label: 0.2-0.4 L/ha in label: 0.125 – 0.25 L/10000 m² LWA in label: 0.15-0.3 L/ha in label: 0.09375-0.225 L / 10000 m ² LWA	A
16	Slovenia	Apple	F	<i>Aphids</i> spp.	foliar spraying, overall	May-Oct/ BBCH 62-PHI	a) 1-2 b) 1-2	a) 8 b) 8	a) 0.125 b) 0.25	a) 25 b) 50	500-1000	14	in label: 0.09-0.125 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours! 0.056 – 0.078 L/10000 m ² LWA	A
III	Central	Potato	F	See below	foliar spraying, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	100-500	7	Umbrella GAP To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
17	Czech Republic	Potato	F	<i>Leptinotarsa de- cemlineata</i> <i>Myzus persicae</i> <i>Macrosiphum eu- phorbia</i>	foliar spraying, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-500	7	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
18	Nether- lands	Potato	F	<i>Leptinotarsa de- cemlineata</i> <i>Myzus persicae</i> <i>Macrosiphum eu- phorbia</i>	foliar spraying, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-400	7	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
19	Poland	Potato	F	<i>Leptinotarsa de- cemlineata</i> <i>Myzus persicae</i> <i>Macrosiphum eu- phorbia</i>	foliar spraying, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-400	7	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
20	Slovenia	Potato	F	<i>Leptinotarsa de- cemlineata</i> <i>Myzus persicae</i>	foliar spraying, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-400	7	in label: 0.12-0.18 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
21	Slovakia	Potato	F	<i>Leptinotarsa de- cemlineata</i>	foliar spraying, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-400	7	in label: 0.12-0.18 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
22	Germany	Potato	F	<i>Leptinotarsa de- cemlineata</i> <i>Myzus persicae</i> <i>Macrosiphum eu- phorbia</i>	foliar spraying, overall	May-Sep/ BBCH 12-79	a) 1 b) 1	-	a) 0.18 b) 0.18	a) 36 b) 36	200-500	7	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
IVa	Central	Spring wheat Spring barley Spring oats Spring Durum wheat Spring triticale	F	See below	foliar spraying, overall	Mar-Jul/ BBCH 40-69 (spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.175 b) 0.35	a) 35 b) 70	100 200- 400	follow crop BBCH	Umbrella GAP	A
IVb	Central	Spring wheat Spring barley Spring oats Spring Durum wheat Spring triticale	F	See below	foliar spraying, overall	Mar-Jul/ BBCH 12-69 (spring)	a) 1 b) 1-2	a) - b) 30	a) 0.175 b) 0.35	a) 35 b) 70	100 200- 400	follow crop BBCH	Umbrella GAP 1 application at BBCH 12- 29 followed by 1 applica- tion at BBCH 40-69.	C
23	Czech Republic	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids	foliar spraying, overall	May-Jun/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH		A
24	Czech Republic	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids Virus Control	foliar spraying, overall	May-Jun/ BBCH 12-29 BBCH 20 - 29 (Spring)	a) 1 b) 1-2 b) 1	a) - b) 30	a) 0.175 b) 0.35 0.175	a) 35 b) 70 35	200-400	follow crop BBCH	1 application at BBCH 12-29 followed by 1 application at BBCH 40-69.	A
25	Nether- lands	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids	foliar spraying, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH		A
26	Nether- lands	Spring barley Spring oat Spring wheat	F	Aphids Virus Control	foliar spraying, overall	Mar-Apr/ BBCH 12 - 29 (Spring)	a) 1 b) 1-2	a) - b) 30	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH	1 application at BBCH 12-29 followed by 1 application at BBCH 40-69.	C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
		Spring triticale												
27	Germany	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids	foliar spraying, overall	Mar-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH		A
28	Germany	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids Virus Control	foliar spraying, overall	May-Jun/ BBCH 12 – 29 BBCH 20 - 29 (Spring)	a) 1 b) 1-2 b) 1	a) - b) 30	a) 0.175 b) 0.35 0.175	a) 35 b) 70 35	200-400	follow crop BBCH	1 application at BBCH 12-29 followed by 1 application at BBCH 40-69.	A
29	Slovenia	Spring barley Spring oat Spring wheat Spring Durum wheat Spring triticale	F	Aphids	foliar spraying, overall	May-Jun/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH		A
30	Poland	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids	foliar spraying, overall	Mar-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.175 b) 0.35	a) 35 b) 70	200-400	follow crop BBCH		A
31	Poland	Spring barley Spring oat Spring wheat Spring triticale	F	Aphids Virus Control	foliar spraying, overall	May-Jun/ BBCH 12 – 29 BBCH 20 - 29 (Spring)	a) 1 b) 1-2 b) 1	a) - b) 30	a) 0.175 b) 0.35 0.175	a) 35 b) 70 35	200-400	follow crop BBCH	1 application at BBCH 12-29 followed by 1 application at BBCH 40-69.	A
Va	Central	Winter wheat, Winter barley, Winter rye, Winter triticale, Spelt	F	Aphids	foliar spraying, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.18 b) 0.36	a) 36 b) 72	100 200- 400	follow crop BBCH	Umbrella GAP	A
Vb	Central	Winter wheat, Winter barley, Winter rye,	F	Aphids Virus Control	foliar spraying, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	100 200- 400	follow crop BBCH	Umbrella GAP	C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
		Winter triticale, Spelt												
32	Czech Republic	Winter wheat Winter barley Winter triticale Winter rye Spelt	F	Aphids	foliar spraying, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.18 b) 0.36	a) 36 b) 72	200-400	follow crop BBCH		A
33	Czech Republic	Winter wheat Winter barley Winter triticale Winter rye Spelt	F	Aphids Virus Control	foliar spraying, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	200-400	follow crop BBCH		C
34	Nether- lands	Winter wheat Winter oat Winter barley Winter triticale Winter rye Spelt	F	Aphids	foliar spraying, overall	May-Jul/ BBCH 40 – 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.18 b) 0.36	a) 36 b) 72	200-400	follow crop BBCH		A
35	Nether- lands	Winter wheat Winter oat Winter barley Winter triticale Winter rye Spelt	F	Aphids Virus Control	foliar spraying, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	200-400	follow crop BBCH		C
36	Germany	Winter wheat Winter barley Winter triticale Winter rye Spelt	F	Aphids	foliar spraying, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.18 b) 0.36	a) 36 b) 72	200-400	follow crop BBCH		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
37	Germany	Winter wheat Winter barley Winter triticale Winter rye Spelt	F	Aphids Virus Control	foliar spraying, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	200-400	follow crop BBCH		C
38	PL	Winter wheat Winter barley Winter triticale Winter rye	F	Aphids Virus Control	foliar spraying, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 b) 0.15	a) 30 b) 30	200-400	follow crop BBCH		A
39	PL	Winter wheat Winter barley Winter triticale Winter rye	F	Aphids	foliar spraying, overall	May-Jul/ BBCH 40 - 69 (Spring)	a) 1-2 b) 1-2	a) 10 b) 10	a) 0.18 b) 0.36	a) 36 b) 72	200-400	follow crop BBCH		A
40	Slovenia	Winter wheat Winter barley Winter triticale Winter rye	F	Aphids Virus Control	foliar spraying, overall	Aug-Nov/ BBCH 12 - 29 (Autumn)	a) 1 b) 1	-	a) 0.15 0.145 b) 0.15 0.145	a) 30 29 b) 30 29	200-400	follow crop BBCH		A
VIa	Central	Winter OSR	F	See below	foliar spraying, overall	Mar-Jun/ BBCH 31-71 (spring)	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	100-400	28	Umbrella GAP To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
VIb	Central	Winter OSR	F	See below	foliar spraying, overall	Aug-Nov/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.3 0.240 b) 0.3 0.240	a) 60 48 b) 60 48	100-200	28	Umbrella GAP	A
41	Czech Republic	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
42	Czech Republic	Winter OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
43	Czech Republic	Winter OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
44	Czech Republic	Winter OSR	F	<i>Psylliodes chrys- ocephala</i> <i>Phyllotreta</i> Spp. (Flea beetle)	foliar spraying, overall	Sep-Oct/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.3 0.240 b) 0.3 0.240	a) 60 48 b) 60 48	200-400	28		A
45	Czech Republic	Winter OSR	F	Aphid vectors of Turnip yellow vi- rus - <i>Myzus persi- cae</i>	foliar spraying, overall	Aug-Nov/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.2 b) 0.2	a) 40 b) 40	200-400	28		A
46	Hungary	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadriens</i>	foliar spraying, overall	Mar-May/ BBCH 31-69	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.15-0.3 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
47	Hungary	Winter OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spraying, overall	Mar-May/ BBCH 31-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: <i>C. obstrictus</i> 0.15-0.3 L/ha <i>D. brassicae</i> 0.18-0.3 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
48	Hungary	Winter OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Mar-May/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.18-0.3 L/ha	A
49	Poland	Winter OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	May-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
50	Poland	Winter OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
51	Poland	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
52	Poland	Winter OSR	F	<i>Psylliodes chrys- ocephala</i>	foliar spraying, overall	Sep-Oct/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.3 0.240 b) 0.3 0.240	a) 60 48 b) 60 48	200-400	28		A
53	Slovakia	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31- 69	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.15-0.3 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
54	Slovakia	Winter OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Mar-Jun/ BBCH 50- 59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.18-0.3 L/ha	A
55	Slovakia	Winter OSR	F	<i>Dasyneura brassicae, Ceutorhynchus obstrictus (syn. assimilis)</i>	foliar spraying, overall	May-Jun/ BBCH 61- 71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: <i>C. obstrictus</i> 0.15-0.3 L/ha <i>D. brassicae</i> 0.18-0.3 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
56	Germany	Winter OSR	F	<i>Ceutorhynchus napi, C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
57	Germany	Winter OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
58	Germany	Winter OSR	F	<i>Dasyneura brassicae, Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
59	Germany	Winter OSR	F	<i>Psylliodes chrys- ocephala Phyl- lotreta</i> Spp. (Flea beetle)	foliar spraying, overall	Aug-Nov/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.3 0.240 b) 0.3 0.240	a) 60 48 b) 60 48	200-400	28		A
60	Germany	Winter OSR	F	Aphid vectors of Turnip yellow vi- rus - <i>Myzus persi- cae</i>	foliar spraying, overall	Aug-Nov/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.2 b) 0.2	a) 40 b) 40	200-400	28		A
61	Germany	Winter OSR	F	<i>Ceutorhynchus picitarsis</i> (Rape	foliar spraying, overall	Oct-Nov/ BBCH 13-17	a) 1 b) 1	-	a) 0.3 0.240 b) 0.3 0.240	a) 60 48 b) 60 48	200-400	28		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
				winter stem wee- vil)										
62	Slovenia	Winter OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
63	Slovenia	Winter OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
64	Slovenia	Winter OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours! in label: C. obstrictus 0.15- 0.3 L/ha D. brassicae 0.18- 0.3 L/ha	A
65	Slovenia	Winter OSR	F	<i>Psylliodes chrys- ocephala</i>	foliar spraying, overall	Sep-Oct/ BBCH 11-19 (autumn)	a) 1 b) 1	-	a) 0.3 0.240 b) 0.3 0.240	a) 60 48 b) 60 48	200-400	28		A
VIIa	Central	Spring OSR	F	See below	foliar spraying, overall	Apr-Aug/ BBCH 31-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	100-400	28	Umbrella GAP. To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
66	Germany	Spring OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
67	Germany	Spring OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
68	Germany	Spring OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
69	Poland	Spring OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
70	Poland	Spring OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
71	Slovakia	Spring OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.15-0.3 L/ha	A
72	Slovakia	Spring OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.18-0.3 L/ha	A
73	Slovakia	Spring OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus (syn assimilis)</i>	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: <i>C. obstrictus</i> 0.15-0.3 L/ha <i>D. brassicae</i> 0.18-0.3 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
74	Hungary	Spring OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.15-0.3 L/ha	A
75	Hungary	Spring OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.18-0.3 L/ha	A
76	Hungary	Spring OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus</i> (syn <i>assimilis</i>)	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	In label: 0.15-0.3 L/ha D. brassicae 0.18-0.3 L/ha To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
77	Czech Republic	Spring OSR	F	<i>Ceutorhynchus napi</i> , <i>C. quadridens</i>	foliar spraying, overall	Mar-Jun/ BBCH 31-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
78	Czech Republic	Spring OSR	F	<i>Meligethes ae- neus</i>	foliar spraying, overall	Apr-Jun/ BBCH 50-59	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28		A
79	Czech Republic	Spring OSR	F	<i>Dasyneura brassicae</i> , <i>Ceutorhynchus obstrictus</i> (syn <i>assimilis</i>)	foliar spraying, overall	May-Jun/ BBCH 61-71	a) 1-2 b) 1-2	a) 7 b) 7	a) 0.3 b) 0.6	a) 60 b) 120	200-400	28	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
VIII a	Central	Sugar beet	F	See below	foliar spraying, overall	Apr-Aug/ BBCH 12-39	a) 2 b) 2	a) 7 b) 7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35	Umbrella GAP	C
80	Poland	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum eu- phorbiae</i>	foliar spraying, overall	Apr-Aug/ BBCH 12-39	a) 2 b) 2 a) 1 b) 1	a) 7 b) 7 - -	a) 0.25 b) 0.5 0.25	a) 50 b) 100 50	200-400	35	Biennial application	R Biennial appli- cation

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
81a	Germany	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum eu- phorbiae</i>	foliar spraying, overall	Apr-Aug/ BBCH 12-39	a) 2 b) 2	a) 7 b) 7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35	Triennial application	C
81b	Germany	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum eu- phorbiae</i>	foliar spraying, overall	Apr-Aug/ BBCH 12-39	a) 1 b) 1	-	a) 0.25 b) 0.25	a) 50 b) 50	200-400	35	Biennial application	R Biennial appli- cation
82	Nether- lands	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum eu- phorbiae</i>	foliar spraying, overall	Apr-Aug/ BBCH 12-39	a) 2 b) 2	a) 7 b) 7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35	Triennial application	C
83a	Czech Republic	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum eu- phorbiae</i>	foliar spraying, overall	Apr-Aug/ BBCH 12-39	a) 2 b) 2	a) 7 b) 7	a) 0.25 b) 0.5	a) 50 b) 100	200-400	35	Triennial application	C
83b	Czech Republic	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum eu- phorbiae</i>	foliar spraying, overall	Apr-Aug/ BBCH 12-39	a) 1 b) 1	-	a) 0.25 b) 0.25	a) 50 b) 50	200-400	35	Biennial application	R Biennial appli- cation
84	Slovenia	Sugar beet	F	<i>Myzus persicae</i> <i>Aphis fabae</i> <i>Macrosiphum eu- phorbiae</i>	foliar spraying, overall	Apr-Aug/ BBCH 12-39	a) 2 b) 2 a) 1 b) 1	a) 7 b) 7 -	a) 0.25 b) 0.5 0.25	a) 50 b) 100 50	200-400	35	Biennial application	R Biennial appli- cation
IXa	Central	Flower bulbs and flower tu- bers	F	<i>Aphids</i>	foliar spraying, overall	Mar-Jul/ BBCH 12-91	a) 1 b) 1	-	a) 0.23 b) 0.23	a) 46 b) 46	200-400	n.a.	Umbrella GAP To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	C
IXb	Central	Flower bulbs and flower tu- bers	F	<i>Aphids</i>	foliar spraying, overall	Mar-Jul/ BBCH 20-91	a) 2 b) 2	a) 7 b) 7	a) 0.17 b) 0.34	a) 34 b) 68	200-400	n.a.	Umbrella GAP To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey	C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
													bee flight during late evening hours!	
85	Nether- lands	Flower bulbs and flower tu- bers	F	<i>Aphids</i>	foliar spraying, overall	Mar-Jul/ BBCH 12-91	a) 1 b) 1	-	a) 0.23 b) 0.23	a) 46 b) 46	200-400	n.a.	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	C
86	Nether- lands	Flower bulbs and flower tu- bers	F	<i>Aphids</i>	foliar spraying, overall	Mar-Jul/ BBCH 20-91	a) 2 b) 2	a) 7 b) 7	a) 0.17 b) 0.34	a) 34 b) 68	200-400	n.a.	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	C
87	Slovenia	Flower bulbs and flower tu- bers	F	<i>Aphids</i>	foliar spraying, overall	Mar-Jul/ BBCH 12-91	a) 2 b) 2 a) 1 b) 1	a) 7 b) 7 -	a) 0.17 b) 0.34 0.17	a) 34 b) 68 -34	200-400	n.a.	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
Xa	Central	Floriculture, Tree nursery & Perennial nursery crops	F	<i>Aphids</i>	foliar spraying, overall	Mar-Aug/ BBCH 12-91	a) 1 b) 1	-	a) 0.23 b) 0.23	a) 46 b) 46	200-1000	n.a.	Umbrella GAP To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
Xb	Central	Floriculture, Tree nursery & Perennial nursery crops	F	<i>Aphids</i>	foliar spraying, overall	Mar-Aug/ BBCH 12-91	a) 2 b) 2	a) 7 b) 7	a) 0.17 b) 0.34	a) 34 b) 68	200-1000	n.a.	Umbrella GAP To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Use- No. *	Member state(s)	Crop and/or situ- ation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: de- velopmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	Conclusion Groundwater
					Method / Kind	Timing / Growth stage of crop & season	Max. num- ber a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	g a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max			
88	Nether- lands	Floriculture crops Tree nursery crops Perennial nursery crops	F	<i>Aphids</i>	foliar spraying, overall	Mar-Aug/ BBCH 12-91	a) 1 b) 1	-	a) 0.23 b) 0.23	a) 46 b) 46	200-1000	n.a.	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A
89	Nether- lands	Floriculture crops Tree nursery crops Perennial nursery crops	F	<i>Aphids</i>	foliar spraying, overall	Mar-Aug/ BBCH 12-91	a) 2 b) 2	a) 7 b) 7	a) 0.17 b) 0.34	a) 34 b) 68	200-1000	n.a.	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	C
90	Slovenia	Floriculture crops Tree nursery crops Perennial nursery crops	F	<i>Aphids</i>	foliar spraying, overall	Mar-Aug/ BBCH 12-91	a) 2 b) 2 a) 1 b) 1	a) 7 b) 7 -	a) 0.17 b) 0.34 0.17	a) 34 b) 68 -34	200-1000	n.a.	To protect bees and pollinat- ing insects, application dur- ing flowering against pests is possible only out of honey bee flight during late evening hours!	A

* Use number(s) in accordance with the list of all intended GAPs in Part B, Section 0 should be given in column 1

** F: professional field use, Fn: non-professional field use, Fpn: professional and non-professional field use, G: professional greenhouse use, Gn: non-professional greenhouse use, Gpn: professional and non-professional greenhouse use, I: indoor application

Explanation for column 15 “Conclusion”

A	Safe use
R	Further refinement and/or risk mitigation measures required
C	To be confirmed by cMS
N	No safe use

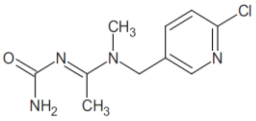
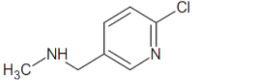
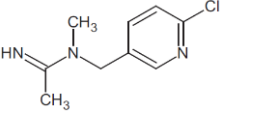
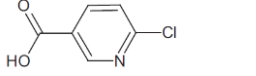
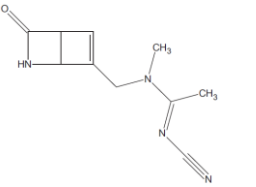
Table 8.1-2: Assessed (critical) uses during approval of acetamiprid concerning the Section Environmental Fate

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use- No.	Member state(s)	Crop and/or situa- tion (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: develop- mental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between ap- plications (days)	L product/ha a) max. rate per appl. b) max. total rate per crop/season	kg a.s./ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min/max		
1	EU	Tomato	G	Aphids	Foliar	BBCH 61 – 89 (Jan- uary - De- cember)	a) 2 b) 2	a) 7 b) 7	a) 0.5 b) 1.0	a) 0.100 b) 0.200	300 - 1500	3	Use in greenhouse is in permanent structure
2	EU	Pome fruit	F	Aphids	Foliar	BBCH 77 – 87 (June – Sep- tember)	a) 2 b) 2	a) 14 b) 14	a) 0.375 b) 0.750	a) 0.075 b) 0.150	300 - 1000	14	
3	EU	Potato	F	Colorado potato beetle / aphids	Foliar	BBCH 45 – 93 (May – Oc- tober)	a) 3 b) 3	a) 7 b) 7	a) 0.250 b) 0.750	a) 0.05 b) 0.150	400 - 600	7	

** F: professional field use, Fn: non-professional field use, Fpn: professional and non-professional field use, G: professional greenhouse use, Gn: non-professional greenhouse use, Gpn: professional and non-professional greenhouse use, I: indoor application

8.2 Metabolites considered in the assessment

Table 8.2-1: Metabolites of acetamiprid potentially relevant for exposure assessment

Metabolite	Molar mass	Chemical structure	Maximum observed occurrence in compartments	Exposure assessment required due to
IM-1-2	240.69		Maximum in soil: 55% Maximum in water/sediment: 13.4%	PEC _{GW} : not covered by EU assessment PEC _{Soil} : not covered by EU assessment PEC _{SW/SED} : not covered by EU assessment
IM-1-4	156.61		Maximum in soil: 72% Maximum in water/sediment: 43%, 81.5% *	PEC _{GW} : not covered by EU assessment PEC _{Soil} : not covered by EU assessment PEC _{SW/SED} : not covered by EU assessment
IM-1-5	197.66		Maximum in soil: 20% (calcareous soils only)	PEC _{GW} : not covered by EU assessment PEC _{Soil} : not covered by EU assessment PEC _{SW/SED} : not covered by EU assessment (formation in soil only)
IC-0 6-Chloronicotinic Acid (IV-0)	157.55		Maximum in soil: 11.3% Maximum in water/sediment: 29.5%	PEC _{GW} : not covered by EU assessment PEC _{Soil} : not covered by EU assessment PEC _{SW/SED} : not covered by EU assessment
IB-1-1	204.23		Maximum in water/sediment: 35% **	PEC _{SW/SED} : not covered by EU assessment (formation in water only)

* Observed in aerobic mineralisation study and used for the risk assessment

** Formed only via aqueous photochemical degradation

zRMS comments:

Information regarding acetamiprid metabolites is in line with EU agreed endpoints reported in EFSA Journal 2016;14(11):4610.

8.3 Rate of degradation in soil (KCP 9.1.1)

Studies on degradation in soil with the formulation were not performed since it is possible to extrapolate from data obtained with the active substance.

The rate of degradation of acetamiprid in soil was evaluated during the EU review (**EFSA Journal 2016;14(11):4610**). Four major metabolites (> 10% applied radioactivity (AR)) – IM-1-2, IM-1-4, IC-0, and IM-1-5 (calcareous soils only) – were identified. The metabolites IM-1-2, IC-0 and IM-1-5 were only formed in relevant amounts through the aerobic degradation pathway. They were found at levels of 55% AR (IM-1-2), 11.3% AR (IC-0) and 20% AR (IM-1-5). The metabolite IM-1-4 formed in soil via aerobic degradation (72% AR), anaerobic degradation (46.7% AR) and through photolysis. In the photolysis study, formation on irradiated samples was 46.5% AR and on dark control samples 65.3% AR, hence photolysis is not the major route of degradation.

Aerobic and anaerobic degradation pathways are illustrated in Figure 8.3-1 and Figure 8.3-2.

Figure 8.3-1: Proposed pathway of acetamiprid degradation in soil under aerobic conditions

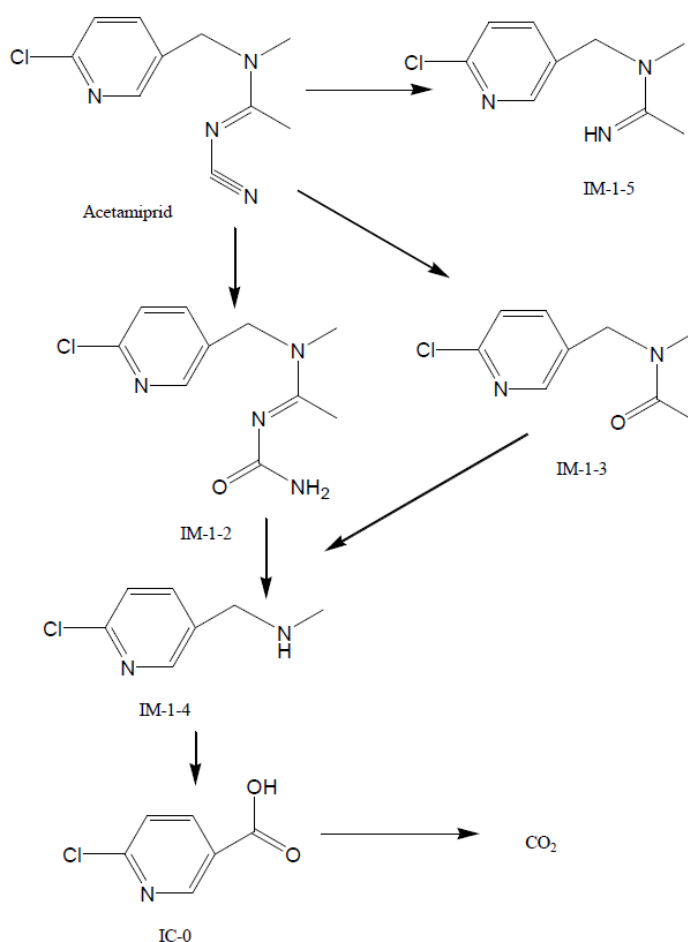
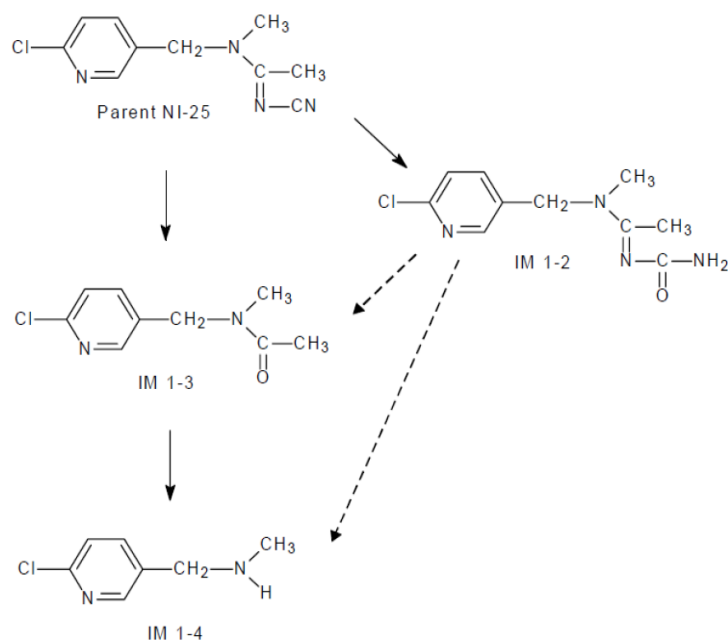


Figure 8.3-2: Proposed pathway of acetamiprid degradation in soil under anaerobic conditions



8.3.1 Aerobic degradation in soil (KCP 9.1.1.1)

8.3.1.1 Acetamiprid and its metabolites

Aerobic degradation of acetamiprid and its metabolites in soil was evaluated during the EU review (**EFSA Journal 2016;14(11):4610**). Additional data was not required.

Triggering endpoints

A summary of the triggering endpoints of laboratory aerobic degradation studies for acetamiprid and its metabolites is given in the tables below.

Table 8.3-1: Summary of aerobic degradation rates for acetamiprid – laboratory studies: Triggering endpoints

Acetamiprid, laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Parameters bi-phasic model	Chi ² (%)	Kinetic model	Evaluated on EU level
Loamy sand	7.6	20	50% of pF2.5	1.4	4.7		7.7	SFO	Yes / EFSA, 2016
Clay loam	7.4	20	45	5.4	54.5	k ₁ : 0.00806 k ₂ : 0.1628 g: 0.155	6.9	DFOP	Yes / EFSA, 2016
Clay loam	7.4	10	45	7.9	49.3	k ₁ : 0.1057 k ₂ : 0.0065 g: 0.8686	3.7	DFOP	Yes / EFSA, 2016
Sandy loam	5.6	20	45	2.5	14.3	α: 1.744 β: 5.212	4.6	FOMC	Yes / EFSA, 2016
Silty clay loam	7.9-8.5	20	45	0.8	2.8		9.5	SFO	Yes / EFSA, 2016
Sandy loam	8.0	20	45	1.1	5.2	α: 2.278 β: 3.000	8.4	FOMC	Yes / EFSA, 2016
Clay	7.7	20	45	1.1	3.8		9.3	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	1	3.3		8.4	SFO	Yes / EFSA, 2016
Max (n=8)				7.9	54.5				

^{a)} Measured in water

Table 8.3-2: Summary of aerobic degradation rates for IM-1-2 – laboratory studies: Triggering endpoints

IM-1-2, laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Parameters bi-phasic model	Chi ² (%)	Kinetic model	Evaluated on EU level
Sandy loam	8.0	20	45	1.9	6.3	-	9.6	SFO ^{b)}	Yes / EFSA, 2016
Clay	7.7	20	45	1.9	6.3	-	13.0	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	1.6	5.3	-	12.3	SFO	Yes / EFSA, 2016
Max (n=3)				1.9	6.3				

^{a)} Measured in water

^{b)} Parent fitted with FOMC model

Table 8.3-3: Summary of aerobic degradation rates for IM-1-4 – laboratory studies: Triggering endpoints

IM-1-4, laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Parameters bi-phasic model	Chi ² (%)	Kinetic model	Evaluated on EU level
Loamy sand	7.6	20	45	46.2	154	-	22.8	SFO	Yes / EFSA, 2016
Clay loam	7.4	20	45	142	473	-	8.7	SFO ^{b)}	Yes / EFSA, 2016
Clay loam	7.4	10	45	171	569	-	5.3	SFO ^{b)}	Yes / EFSA, 2016
Sandy loam	5.6	20	45	146	483	-	6.2	SFO ^{c)}	Yes / EFSA, 2016
Silty clay loam	7.9-8.5	20	45	3.7	12.3	-	9.1	SFO	Yes / EFSA, 2016
Sandy loam	8.0	20	45	4.2	14	-	22	SFO ^{c)}	Yes / EFSA, 2016
Clay	7.7	20	45	2.3	7.8	-	18.1	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	3	10	-	14.9	SFO	Yes / EFSA, 2016
Max (n=7*)				146	483				

^{a)} Measured in water

^{b)} Parent kinetics DFOP

^{c)} Parent kinetics FOMC

* Clay loam soil was measured at 20°C and 10°C

Table 8.3-4: Summary of aerobic degradation rates for IC-0 – laboratory studies: Triggering endpoints

IC-0, laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Parameters bi-phasic model	Chi ² (%)	Kinetic model	Evaluated on EU level
Silty clay loam	7.9-8.5	20	45	3.6	11.8	-	32.6	SFO	Yes / EFSA, 2016
Sandy loam	8.0	20	45	1.2	4.1	-	4.3	SFO ^{b)}	Yes / EFSA, 2016
Clay	7.7	20	45	2.7	8.9	-	11.6	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	1.8	6.0	-	10.0	SFO	Yes / EFSA, 2016
Sandy loam	6.7	20	45	3.1	10.1	-	10	SFO	Yes / EFSA, 2016
Silty clay loam	7.8	20	45	2.4	8.0	-	9.1	SFO	Yes / EFSA, 2016
Clay loam	7.2	20	45	5.6	18.5	-	9.8	SFO	Yes / EFSA, 2016
Max (n=7)				5.6	18.5				

^{a)} Measured in water

^{b)} Parent kinetics FOMC

Table 8.3-5: Summary of aerobic degradation rates for IM-1-5 – laboratory studies: Triggering endpoints

IM-1-5, laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Parameters bi-phasic model	Chi ² (%)	Kinetic model	Evaluated on EU level
Silty clay loam	7.9-8.5	20	45	319	1059		5.1	SFO	Yes / EFSA, 2016
Sandy loam	8.0	20	45	-	-		-	SFO	Yes / EFSA, 2016
Clay	7.7	10	45	-	-		-	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	486	1614		10.3	SFO	Yes / EFSA, 2016
Loam (France)	7.5		78.4% pF2 moisture	663	2203		4.7	SFO	Yes / EFSA, 2016
Loam (Hungary)	7.8		60.7% pF2 moisture	420	1395		3.5	SFO	Yes / EFSA, 2016
Sandy clay loam	7.6		66.4% pF2 moisture	378	1254		2.8	SFO	Yes / EFSA, 2016

^{a)} Measured in water

Modelling endpoints

A summary of the modelling endpoints of laboratory aerobic degradation studies for acetamiprid and its metabolites is given in the tables below.

Table 8.3-6: Summary of aerobic degradation rates for acetamiprid – laboratory studies: Modelling endpoints

Acetamiprid, laboratory studies, dark aerobic conditions – Modelling endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	DT ₅₀ (d) 20°C pF2/10kPa ^{b)}	Chi ² (%)	Kinetic model	Evaluated on EU level
Loamy sand	7.6	20	50 (pF2.5)	1.4	4.7	1.2	7.7	SFO	Yes / EFSA, 2016
Clay loam	7.4	20	45	4.7	15.8	4.7	11.8	SFO	Yes / EFSA, 2016
Sandy loam	5.6	20	45	2.5	8.3	2.5	8.8	SFO	Yes / EFSA, 2016
Silty clay loam	7.9-8.5	20	45	0.8	2.8	0.8	9.5	SFO	Yes / EFSA, 2016
Sandy loam	8.0	20	45	1.1	3.7	1.1	9.9	SFO	Yes / EFSA, 2016
Clay	7.7	20	45	1.1	3.8	1.1	9.7	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	1	3.2	1	8.6	SFO	Yes / EFSA, 2016
Geometric mean (n=7)						1.45			
pH-dependency						No			

^{a)} Measured in water

^{b)} Normalised using a Q₁₀ of 2.58 and Walker equation coefficient of 0.7

Table 8.3-7: Summary of aerobic degradation rates for IM-1-2 - laboratory studies: Modelling end-points

IM-1-2, laboratory studies, dark aerobic conditions – Modelling endpoints										
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Formation fraction k _f /k _{dp} ^{c)}	DT ₅₀ (d) 20°C pF2/10kPa ^{b)}	Chi ² (%)	Kinetic model	Evaluated on EU level
Sandy loam	8.0	20	45	1.6	5.3	0.97	1.6	12.3	SFO	Yes / EFSA, 2016
Clay	7.7	20	45	1.9	6.3	0.68	1.9	13.0	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	1.6	5.3	0.66	1.6	12.3	SFO	Yes / EFSA, 2016
Geometric mean (n=3)							1.7			
Arithmetic mean (n=3)							0.77			
pH-dependency							No			

a) Measured in water

b) Normalised using a Q₁₀ of 2.58 and Walker equation coefficient of 0.7

c) Formation from acetamiprid

Table 8.3-8: Summary of aerobic degradation rates for IM-1-4 – laboratory studies: Modelling end-points

IM-1-4, laboratory studies, dark aerobic conditions – Modelling endpoints										
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Formation fraction k _f /k _{dp} ^{c)}	DT ₅₀ (d) 20°C pF2/10kPa ^{b)}	Chi ² (%)	Kinetic model	Evaluated on EU level
Loamy sand	7.6	20	50% of pF2.5	46.2	154	0.56	40.0	22.8	SFO	Yes / EFSA, 2016
Clay loam	7.4	20	45	169	560	0.61	169	10.5	SFO	Yes / EFSA, 2016
Sandy loam	5.6	20	45	166	552.8	0.75	166	6.7	SFO	Yes / EFSA, 2016
Silty clay loam	7.9-8.5	20	45	3.7	12.3	1	3.7	9.1	SFO	Yes / EFSA, 2016
Sandy loam	8.0	20	45	4.8	16.1	0.44	4.8	22.3	SFO	Yes / EFSA, 2016
Clay	7.7	20	45	2.3	7.8	0.97	2.3	18.1	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	3	10	0.71	3.0	14.9	SFO	Yes / EFSA, 2016
Geometric mean (n=7)							14.6			
Arithmetic mean (n=7)							0.72			
pH-dependency							No			

a) Measured in water

b) Normalised using a Q₁₀ of 2.58 and Walker equation coefficient of 0.7

c) Formation from IM-1-2

Table 8.3-9: Summary of aerobic degradation rates for IC-0 – laboratory studies: Modelling end-points

IC-0, laboratory studies, dark aerobic conditions – Modelling endpoints										
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Formation fraction k _f /k _{dp} ^{c)}	DT ₅₀ (d) 20°C pF2/10kPa ^{b)}	Chi ² (%)	Kinetic model	Evaluated on EU level
Silty clay loam	7.9-8.5	20	45	3.6	11.8	0.3	3.6	32.6	SFO	Yes / EFSA, 2016
Sandy loam	8.0	20	45	1.4	4.6	1	1.4	5.1	SFO	Yes / EFSA, 2016
Clay	7.7	20	45	2.7	8.9	0.39	2.7	11.6	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	1.8	6.0	1	1.8	11.9	SFO	Yes / EFSA, 2016
Sandy loam	6.7	20	45	3.1	10.1	-	3.1	10	SFO	Yes / EFSA, 2016
Silty clay loam	7.8	20	45	2.4	8.0	-	2.4	9.1	SFO	Yes / EFSA, 2016
Clay loam	7.2	20	45	5.6	18.5	-	5.6	9.8	SFO	Yes / EFSA, 2016
Geometric mean (n=7)							2.7			
Arithmetic mean (n=7)						0.67				
pH-dependency						No				

a) Measured in water

b) Normalised using a Q₁₀ of 2.58 and Walker equation coefficient of 0.7

c) Formation from IM-1-4

Table 8.3-10: Summary of aerobic degradation rates for IM-1-5 – laboratory studies: Modelling end-points

IM-1-5, laboratory studies, dark aerobic conditions – Modelling endpoints										
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	Formation fraction k _f /k _{dp} ^{e)}	DT ₅₀ (d) 20°C pF2/10kPa ^{b)}	Chi ² (%)	Kinetic model	Evaluated on EU level
Silty clay loam	7.9-8.5	20	45	319	1059	0.21	319	5.1	SFO	Yes / EFSA, 2016
Sandy loam	8.0	20	45	-	-	0.16 ^{c)}	1000 ^{d)}	-	SFO	Yes / EFSA, 2016
Clay	7.7	20	45	-	-	0.12 ^{c)}	1000 ^{d)}	-	SFO	Yes / EFSA, 2016
Clay loam	7.9	20	45	486	1614	0.12	486	10.3	SFO	Yes / EFSA, 2016
Loam (France)	7.5	20	78.4% of pF2 moisture	663	2203	-	559	4.7	SFO	Yes / EFSA, 2016
Loam (Hun- gary)	7.8	20	60.7% of pF2 moisture	420	1395	-	296	3.5	SFO	Yes / EFSA, 2016
Sandy clay loam	7.6	20	66.4% of pF2 moisture	378	1254	-	284	2.8	SFO	Yes / EFSA, 2016
Max (n=7)							1000 ^{d)}			
Geometric mean (n=7)							495			
Arithmetic mean (n=4)						0.15				
pH-dependency						No				

a) Measured in water

b) Normalised using a Q₁₀ of 2.58 and Walker equation coefficient of 0.7

c) Formation fraction based on maximum fraction of occurrence (persistent metabolite)

d) Default DT₅₀ value used as no decline of IM-1-5 was observed for this soil

e) Formation from acetamiprid

zRMS comments:

Soil degradation data presented in tables above are in line with EU agreed endpoints presented in EFSA Journal 2016;14(11):4610.
Information on DT₅₀ values considered for purposes of estimation of exposure in particular environmental compartments is thus given in the respective points of this document.

8.3.2 Anaerobic degradation in soil (KCP 9.1.1.1)

Anaerobic degradation of acetamiprid was evaluated during the EU review (EFSA, 2016). In anaerobic degradation studies, only the metabolite IM-1-4 was identified with a maximum occurrence of 46.7% AR. Additional data was not required.

A summary of the degradation rates of acetamiprid under anaerobic conditions is given in the table below.

Table 8.3-11: Summary of anaerobic degradation rates for acetamiprid – laboratory studies

Acetamiprid, Laboratory studies, dark anaerobic conditions									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT ₅₀ (d)	DT ₉₀ (d)	DT ₅₀ (d) 20°C	Chi ² (%)	Kinetic model	Evaluated on EU level
Loam	7.4	20	100	69.0	410.6	n.a.	4.7	FOMC α: 1.591 β: 126.319	Yes / EFSA, 2016

^{a)} Measured in water

zRMS comments:

Information on anaerobic soil degradation of acetamiprid is in line with EU agreed data reported in EFSA Journal 2016;14(11):4610.

8.4 Field studies (KCP 9.1.1.2)

8.4.1 Soil dissipation testing on a range of representative soils (KCP 9.1.1.2.1)

Studies on field dissipation rates, which are commonly performed with a formulation, are considered to be data provided in support of the active substance.

8.4.1.1 Acetamiprid and its metabolites

Soil dissipation studies of acetamiprid and its metabolites were evaluated during the EU review (EFSA Journal 2016;14(11):4610). No additional studies have been performed.

The degradation rates of acetamiprid and the maximum occurrence of its metabolites in field dissipation studies are summarised in the tables below.

Table 8.4-1: Summary of aerobic degradation rates for acetamiprid – field studies

Acetamiprid, Field studies, aerobic conditions									
Soil type	Location	pH	Depth (cm)	DT ₅₀ (d) actual	DT ₉₀ (d) actual	Kinetic parameters	Chi ² (x ²)	Method of calculation	Evaluated on EU level
Clay loam	Italy	8.9 ^{a)}	0-30	0.4	19.8	k ₁ : 4.122808 k ₂ : 0.071185 g: 0.589717	14.1	DFOP	Yes / EFSA, 2016
Sandy loam	United Kingdom	5.9 ^{a)}	0-30	3.7	22.7	α: 1.544681 β: 6.600352	19.5	FOMC	Yes / EFSA, 2016
Silty clay loam	France	8.7 ^{a)}	0-30	9.6	31.3		16.4	SFO	Yes / EFSA, 2016
Sandy loam	Spain	7 ^{a)}	0-30	0.7	11.2	α: 0.67159 β: 0.374289	11.4	FOMC	Yes / EFSA, 2016
Loam	Spain	7.45 ^{b)}	0-50	12.96	43.06		28.1	SFO	Yes / EFSA, 2016
Loam	Southern France	7.36 ^{b)}	0-50	2.26	7.52		13.0	SFO	Yes / EFSA, 2016
Loam	Northern France	7.49 ^{b)}	0-50	2.24	7.43		12.1	SFO	Yes / EFSA, 2016
Loam	Hungary	8.06 ^{b)}	0-50	2.14	15.32	α and β: values not reported	25.9	FOMC	Yes / EFSA, 2016
Max (n=8)				12.96	43.06				
pH-dependency: No									

^{a)} Measured in 1 M KCl

^{b)} Measured in 0.01 M CaCl₂

Table 8.4-2: Summary of the maximum occurrence for relevant metabolites – field studies

Metabolite max. formation proportion of max. measured parent, Field studies, aerobic conditions							
Soil type	Location	pH	Depth (cm)	IM-1-4	IM-1-2	IM-1-5	Evaluated on EU level
Clay loam	Italy	8.9 ^{a)}	0-10 0-30	50% after 28 days	39% after 4 days	Not analysed	Yes / EFSA, 2016
Sandy loam	United Kingdom	5.9 ^{a)}	0-10 0-30	50% after 30 days	< 3.9% after 2-7 days	Not analysed	Yes / EFSA, 2016
Silty clay loam	France	8.7 ^{a)}	0-10 0-30	73% after 28 days	18% after 2 days	Not analysed	Yes / EFSA, 2016
Sandy loam	Spain	7 ^{a)}	0-10 0-30	55% after 31 days	9% after 2 days	Not analysed	Yes / EFSA, 2016
Loam	Spain	7.45 ^{b)}	0-10 0-30	Not analysed	Not analysed	60% after 28 days	Yes / EFSA, 2016
Loam	Southern France	7.36 ^{b)}	0-10 0-30	Not analysed	Not analysed	25% after 29 days	Yes / EFSA, 2016
Loam	Northern France	7.49 ^{b)}	0-10 0-30	Not analysed	Not analysed	45% after 7 days	Yes / EFSA, 2016
Loam	Hungary	8.06 ^{b)}	0-10 0-30	Not analysed	Not analysed	24% after 169 days	Yes / EFSA, 2016

^{a)} Measured in 1 M KCl

^{b)} Measured in 0.01 M CaCl₂

zRMS comments:

Soil field degradation data for acetamiprid and its metabolites are in general in line with EU agreed values reported in EFSA Journal 2016;14(11):4610 with some minor corrections regarding the soil depth given in Table 8.4-2, which in line with the LoEP should be 0-10 cm.

For relevant endpoints considered in exposure assessment, please refer to points 8.7 (soil), 8.8 (groundwater) and 8.9 (surface water) of this document.

8.4.2 Soil accumulation testing (KCP 9.1.1.2.2)

No soil accumulation studies were performed. Plateau concentrations of persistent metabolites are obtained by modelling (see B.8.7.2).

zRMS comments:

No EU agreed data from soil accumulation studies with acetamiprid are available in EFSA Journal 2016;14(11):4610. Potential for soil accumulation is thus addressed in calculation of soil exposure in point 8.7 of this report.

8.5 Mobility in soil (KCP 9.1.2)

Studies on mobility in soil with the formulation were not performed since it is possible to extrapolate from data obtained with the active substance.

8.5.1 Acetamiprid and its metabolites

The mobility of acetamiprid and its metabolites in soil was evaluated during the EU review (EFSA Journal 2016;14(11):4610). Additional data was not required.

Summaries of all adsorption/desorption data for acetamiprid and its metabolites are given in the tables below.

Table 8.5-1: Summary of soil adsorption/desorption data for acetamiprid

Acetamiprid						
Soil type	OC (%)	pH ^{a)}	K _F (mL/g)	K _{Foc} (mL/g)	1/n (-)	Evaluated on EU level
I Sand	0.43	5.7	0.60	138.39	0.842	Yes / EFSA, 2016
II Loamy sand	1.04	7.6	1.35	129.98	0.825	Yes / EFSA, 2016
III Sandy loam	1.57	7.1	1.12	71.09	0.893	Yes / EFSA, 2016
IV Silt loam	1.39	7.7	1.69	121.81	0.835	Yes / EFSA, 2016
V Silt loam	4.39	7.1	3.13	71.38	0.907	Yes / EFSA, 2016
Arithmetic mean (n=5)				106.5	0.860	
Geometric mean (n=5)				102.1	-	
pH-dependency				No		

^{a)} Measured in unknown medium

Table 8.5-2: Summary of soil adsorption/desorption data for IM-1-2

IM-1-2						
Soil type	OC (%)	pH ^{a)}	K _F (mL/g)	K _{Foc} (mL/g)	1/n (-)	Evaluated on EU level
Clay loam 02/06	2.3	7.6	0.45	19	0.886	Yes / EFSA, 2016
Sandy loam 02/16	1.3	7.5	0.27	21	0.856	Yes / EFSA, 2016
Clay loam 01/24	3.8	6.1	3.60	95	0.927	Yes / EFSA, 2016
Sandy loam 02/18	0.2	7.4	0.16	80	0.944	Yes / EFSA, 2016
Arithmetic mean (n=4)				54	0.903	
Geometric mean (n=4)				42	-	
pH-dependency				No		

^{a)} Measured in CaCl₂ medium

Table 8.5-3: Summary of soil adsorption/desorption data for IM-1-4

IM-1-4						
Soil type	OC (%)	pH ^{a)}	K _F (mL/g)	K _{Foc} (mL/g)	1/n (-)	Evaluated on EU level
I Sand *	0.43	5.7	2.1	488	0.597	Yes / EFSA, 2016
II Loamy sand	1	7.6	2.24	223	0.714	Yes / EFSA, 2016
III Sandy loam	1.57	7.1	2.16	138	0.712	Yes / EFSA, 2016
IV Silt loam	1.39	7.7	2.67	192	0.816	Yes / EFSA, 2016
V Silt loam	4.39	7.1	5.79	132	0.813	Yes / EFSA, 2016
Arithmetic mean (n=5)				171	0.746	
Geometric mean (n=5)				167	-	
pH-dependency				No		

^{a)} Measured in unknown medium

* Sand soil was already excluded during the previous evaluation due to low 1/n value

Table 8.5-4: Summary of soil adsorption/desorption data for IC-0

IC-0						
Soil type	OC (%)	pH ^{a)}	K _F (mL/g)	K _{Foc} (mL/g)	1/n (-)	Evaluated on EU level
I Sand	0.43	5.7	0.643	258	0.967	Yes / EFSA, 2016
II Loamy sand	2.54	7.6	1.027	70	1.007	Yes / EFSA, 2016
III Sandy loam	0.76	7.1	0.569	129	0.971	Yes / EFSA, 2016
IV Silt loam	2.05	7.7	0.833	70	0.894	Yes / EFSA, 2016
V Silt loam	1.41	7.1	0.69	84	0.926	Yes / EFSA, 2016
Pond sediment *	4.32		2.121	85	0.867	Yes / EFSA, 2016
Arithmetic mean (n=5)				122	0.953	
Geometric mean (n=5)				106	-	
pH-dependency				No		

^{a)} Measured in unknown medium

* Sediment already excluded during the previous evaluation

Table 8.5-5: Summary of soil adsorption/desorption data for IM-1-5

IM-1-5						
Soil type	OC (%)	pH ^{a)}	K _F (mL/g)	K _{Foc} (mL/g)	1/n (-)	Evaluated on EU level
Spain (Canals)	3.3	7.6	5.70	173	0.8788	Yes / EFSA, 2016
S France (Meauzac)	1.14	7.6	4.89	429	0.9030	Yes / EFSA, 2016
Hungary	2.03	7.8	7.58	374	0.8454	Yes / EFSA, 2016
N France (Meistratzheim)	2.04	8.3	6.60	324	0.9176	Yes / EFSA, 2016
Arithmetic mean (n=4)				325	0.886	
Geometric mean (n=4)				308	-	
pH-dependency				No		

^{a)} Measured in unknown medium

* Sediment already excluded during the previous evaluation

zRMS comments:

Soil mobility data for acetamiprid and its metabolites are in line with EU agreed endpoints as reported in EFSA Journal 2016;14(11):4610.

It is noted that for acetamiprid and its metabolites the geometric mean K_{foc} values were calculated by the Applicant, although in the EFSA conclusion only arithmetic mean values are reported and further used for groundwater and surface water modelling. The geometric mean values calculated by the Applicant were based on the individual K_{foc}

from the LoEP and are confirmed to be correct. For relevant endpoints considered in exposure assessment, please refer to points 8.8 (groundwater) and 8.9 (surface water) of this document.

8.5.2 Column leaching (KCP 9.1.2.1)

Column leaching studies are not required as reliable adsorption coefficients are available for the active substance acetamiprid and its metabolites. However, two studies were submitted for the last EU renewal; the outcome of these studies as given by EFSA Journal 2016;14(11):4610 is provided in the following table.

Table 8.5-6: Results of column leaching studies

Study 1	Leachate: 0.3-1.3% total residues/radioactivity in leachate 0.06% active substance, 0.84% IM-1-4 88.9-93.7% total residues/radioactivity retained in the four upper soil layers
Study 2	Elution (mm): 1038 mm Time period (d): 20 d Leachate: 4.14-22.22% total residues/radioactivity in leachate, all associated with metabolite IC-0 4.5-5.3% total residues/radioactivity retained in top 6 cm

zRMS comments:

Information regarding column leaching studies with acetamiprid has been taken from EFSA Journal 2016;14(11):4610 and is confirmed to be correct.

8.5.3 Lysimeter studies (KCP 9.1.2.2)

No lysimeter studies with acetamiprid and its metabolites were performed as they are not required.

zRMS comments:

The lysimeter studies were not required during the EU review. The leaching potential of acetamiprid and its metabolites following application of ADM.00150.I.2.A is addressed in groundwater modelling presented in point 8.8 of this document.

8.5.4 Field leaching studies (KCP 9.1.2.3)

No field leaching studies with acetamiprid and its metabolites were performed as they are not required.

zRMS comments:

The field leaching studies were not required during the EU review. The leaching potential of acetamiprid and its metabolites following application of ADM.00150.I.2.A is addressed in groundwater modelling presented in point 8.8 of this document.

8.6 Degradation in the water/sediment systems (KCP 9.2, KCP 9.2.1, KCP 9.2.2, KCP 9.2.3)

Studies on degradation in water/sediment systems with the formulation were not performed since it is possible to extrapolate from data obtained with the active substance.

8.6.1 Acetamiprid and its metabolites

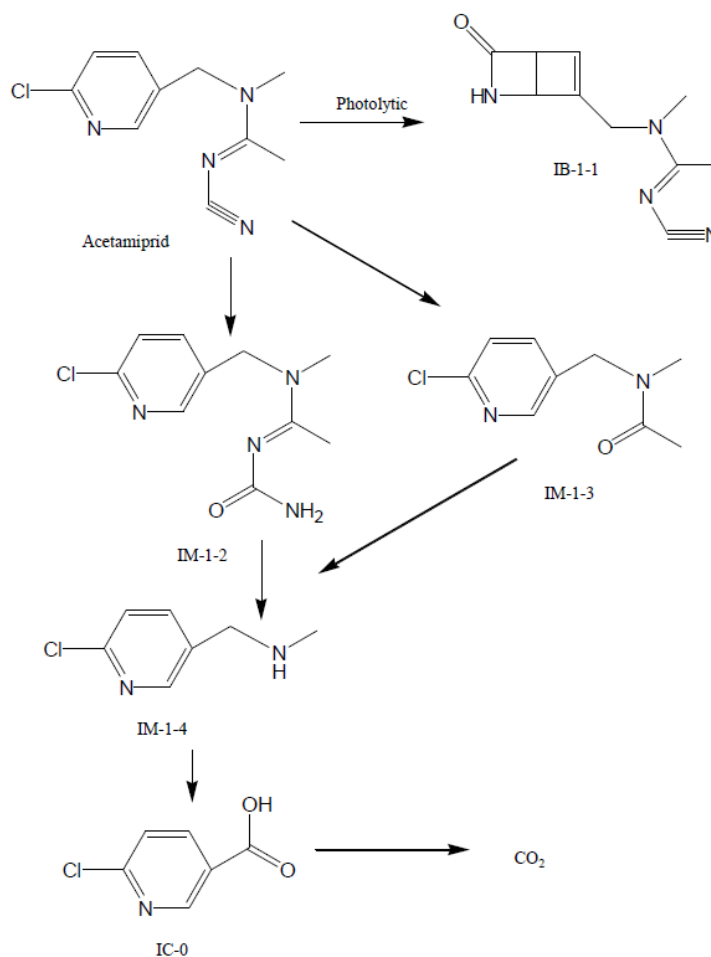
Studies on the degradation of acetamiprid in water/sediment systems have been evaluated during the EU review (EFSA Journal 2016;14(11):4610). Fate and behaviour of acetamiprid in the aquatic environment was investigated in two aerobic water/sediment systems. Thereby, three major metabolites (> 10% applied

radioactivity (AR)) were identified in the water phase: IM-1-2 (max. 10.96% AR), IM-1-4 (max. 12.33% AR) and IC-0 (max. 26.15% AR). Metabolite IM-1-4 was also a major metabolite in the sediment phase (max. 30.71% AR).

One study investigating aerobic mineralisation in surface water was conducted and also evaluated during the EU review (EFSA Journal 2016;14(11):4610). Thereby, the major metabolite IM-1-4 was identified with a maximum occurrence of 81.5% AR. Further, the metabolite IB-1-1 was identified in aqueous photochemical degradation studies also evaluated during the EU review (EFSA Journal 2016;14(11):4610). Its maximum occurrence was 35% AR after 30 days.

The proposed degradation pathway of acetamiprid in water is illustrated in Figure 8.6-1.

Figure 8.6-1: Proposed pathway of acetamiprid degradation in water



A summary of all data on the degradation rates of acetamiprid in water/sediment and aerobic mineralisation studies, as well as a summary of the maximum occurrence of relevant metabolites is given in the following tables.

Table 8.6-1: Summary of degradation in water/sediment of acetamiprid

Acetamiprid distribution (max. water 101.42% after 0 days, max. sediment 39.05% after 14 days)											
Wa- ter/sedi- ment sys- tem	pH water phase	pH sedi- ment	t (°C)	DT ₅₀ whole sys- tem (d)	Chi ² (x ²)	DT ₅₀ water (d)	Chi ² (x ²)	DT ₅₀ sed. (d)	Chi ² (x ²)	Method of calculation	Evaluated on EU level
Man- ningtree	6.37/5.9	n.r.	20	23.1	7.6	4.9	8.3	n.c.		SFO/DFOP	Yes / EFSA, 2016
Ongar	7.58/7.3	n.r.	20	31.6	6.7	6.1	5.9	n.c.		SFO/DFOP	Yes / EFSA, 2016
Geometric mean at 20°C ^{a)} (n=2)				27							

^{a)} Normalised using a Q₁₀ of 2.58

Table 8.6-2: Summary of aerobic mineralisation of acetamiprid in surface water

Acetamiprid, aerobic mineralisation in surface water									
System identifier	pH water phase	pH sedi- ment	t (°C)	Chi ² (x ²)	DT ₅₀ /DT ₉₀ water (d) (pelagic test)		Chi ² (x ²)	Method of calculation	Evaluated on EU level
					At study temp.	DT ₅₀ at 12°C ^{a)}			
Kolben- woog low dose system (2 µg/L)	5.41		20		2.4/36.9	5.1	4.2	DFOP	Yes / EFSA, 2016
Kolben- woog high dose system (10 µg/L)	5.41		20		6.8/87.8	14.5	7.1	FOMC	Yes / EFSA, 2016

^{a)} Normalised using a Q₁₀ of 2.58 to the temperature of the environmental media at the point of sampling

Table 8.6-3: Summary of observed metabolites

IM-1-2 Water/sediment system	Max. in total system 13.4% after 7 days (max. in water 10.96% after 7 days; max. in sediment 3.93% after 14 days). No acceptable fit possible	Yes / EFSA, 2016
IM-1-4 Water/sediment system	Max. in total system 43% after 30 days (max in water 12.33% after 30 days; max. in sediment 30.71% after 30 days). Max. 81.5% in aerobic mineralisation study. No acceptable fit possible	Yes / EFSA, 2016
IC-0 Water/sediment system	Max. in total system 29.5% after 62 days (max. in water 26.15% after 62 days; max. in sediment 5.61% after 100 days). No acceptable fit possible	Yes / EFSA, 2016

zRMS comments:

Degradation data for acetamiprid and its metabolites in water/sediment systems provided in tables above are in line with EU agreed endpoints reported in EFSA Journal 2016;14(11):4610 and are relevant for the surface water exposure assessment.

8.7 Environmental Concentrations in soil (PEC_{soil}) (KCP 9.1.3)

8.7.1 Justification for new endpoints

For the assessment of the PEC in soil (PEC_{soil}) of acetamiprid and its relevant metabolites, no new endpoints were defined. PEC_{soil} have been calculated using the maximum field dissipation DT₅₀ value of 12.96 days for acetamiprid and maximum laboratory DT₅₀ values for the metabolites, as suggested in the EFSA conclusion on acetamiprid (EFSA Journal 2016;14(11):4610).

8.7.2 Active substance and relevant metabolites

Please note: Since the original submission, the GAP was changed due to issues with groundwater (see chapter 8.8), i.e. the application rate or number of applications was lowered, or the initial BBCH increased in some cases. In the context of a risk envelope, the original, conservative application patterns were kept for the PEC_{soil} calculations.

Table 8.7-1: Input parameters related to application for PEC_{soil} calculations

Use No.	1-3	4, 6, 9, 11, 13, 15	5, 7, 8, 10, 12, 14, 16	17-22	23, 25, 27, 29, 30	24, 28, 31	26 28, 31	32, 34, 36, 39	33, 35, 37, 38, 40	41-43, 46-51, 53-58, 62-64, 66-79
Umbrella use No. as used in the ETX # risk assessment	I	IIa	IIb	III	IVa	IVb	IVb	Va	Vb	VIa, VIIa
Crop in GAP	Corn	Apple	Apple	Potato	Spring wheat, spring barley, spring oats, spring durum wheat, spring triticale	Spring wheat, spring barley, spring oats, spring durum wheat, spring triticale	Spring wheat, spring barley, spring oats, spring triticale	Winter wheat, winter barley, winter rye, winter triticale, winter oat, spelt	Winter wheat, winter barley, winter rye, winter triticale, winter oat, spelt	Winter oilseed rape and spring oilseed rape
FOCUS crop (used for crop interception)	Maize	Pome fruit	Pome fruit	Potato	Spring cereals	Spring cereals	Spring cereals	Winter cereals	Winter cereals	Oilseed rape
BBCH	51-75	71-PHI*	62-PHI*	12-79	40-69	20-29 12-69	12-29 40-69 12-69	40-69 (spring)	12-29 (autumn)	31-71
Application rate (g a.s./ha)	60	80 ***a	25	36	35	35	35	36	30 ***b	60
Number of applications / interval (d)	1 / 0	1 / 0	2 / 8	1 / 0	2 / 10	1 / 0 2 / 30	2 / 30	2 / 10	1 / 0	2 / 7
Crop interception (%)	75	65	60	15	90	20 1st appl.: 0 2nd appl.: 90 ** 00 **	1 st appl.: 0 2 nd appl.: 90 **	90	0	80
Soil load rate (g a.s./ha)	15	28	10	30.6	3.5	28 1st appl.: 35 2nd appl.: 3.5 3.5	1 st appl.: 35 2 nd appl.: 3.5	3.6	30	12
Frequency of application	annual	annual	annual	annual	annual	annual biennial	annual	annual	annual	annual

Depth of soil layer (relevant for plateau concentration)	5/20 cm (tillage)	5/5 cm (without tillage)	5/5 cm (without tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)
<u>Agricultural use pattern of acetamiprid continued</u>										
Use No.	44, 45, 52, 59, 60, 61, 65	80-84	85	86	87	88	89	90	88	89, 90
Umbrella use No. as used in the ETX # risk assessment	VIb	VIIIa	IXa	IXb	IXb	Xa	Xb	IXb	Xa	Xb
Crop	Winter oilseed rape	Sugar beet	Flower bulbs and flower tubers	Flower bulbs and flower tubers	Flower bulbs and flower tubers	Floriculture crops, perennial nursery crops	Floriculture crops, perennial nursery crops	Floriculture crops, perennial nursery crops	Tree nursery crops	Tree nursery crops
FOCUS crop (used for crop interception)	Oilseed rape	Sugar beet	Onions	Onions	Onions	Cabbage	Cabbage	Cabbage	Pome fruit	Pome fruit
BBCH	11-19	12-39	12-91	20-91	12-91	12-91	12-91	12-91	12-91	12-91
Application rate (g a.s./ha)	60 *** ^{a)}	50	46	34	34	46	34	34	46	34
Number of applications / interval (d)	1 / 0	1 / 0 2 / 7	1 / 0	2 / 7	2 / 7	1 / 0	2 / 7	2 / 7	1 / 0	2 / 7
Crop interception (%)	40	20	10	25	10	25	25	25	60	60
Soil load rate (g a.s./ha)	36	40	41.4	25.5	30.6	34.5	25.5	25.5	18.4	13.6
Frequency of application	annual biennial	biennial triennial	annual	annual	annual biennial	annual	annual	annual biennial	annual	annual
Depth of soil layer (relevant for plateau concentration)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/20 cm (tillage)	5/5 cm (without tillage)	5/5 cm (without tillage)

ETX = Ecotoxicology

* PHI = Pre-Harvest Interval

** 1 application at BBCH 12-29 followed by 1 application at BBCH 40-69

*** Also covering lower application rates based on a risk envelope

a) 60 g a.s./ha according to GAP table for uses No. 4, 6, 9, 11, 13, 15

b) 29 g a.s./ha according to GAP table for use No.40

c) 48 g a.s./ha according to GAP table for uses No. 44, 52, 59, 61, 65 and 40 g a.s./ha for uses No. 45 and 60

Table 8.7-2: Input parameter for active substance and relevant metabolites for PEC_{soil} calculation

Compound	Molecular weight (g/mol)	Max. occurrence (%)	DT ₅₀ (days)	Value in accordance to EU endpoint /Reference
Acetamiprid	223	-	12.96 (SFO, non-normalised worst-case field DT ₅₀)	Yes / EFSA, 2016
IM-1-2	240.69	55	1.9 (SFO, non-normalised/normalised worst-case lab DT ₅₀)	Yes / EFSA, 2016
IM-1-4	156.61	72	146 (SFO, non-normalised worst-case lab DT ₅₀)	Yes / EFSA, 2016
IC-0	157.55	11.3	5.6 (SFO, non-normalised/normalised worst-case lab DT ₅₀)	Yes / EFSA, 2016
IM-1-5	197.66	20	1000 (SFO, default DT ₅₀)	Yes / EFSA, 2016

zRMS comments:

For evaluation of the application pattern and input parameters please refer to zRMS comments in point 8.7.2.1 below.

8.7.2.1 Acetamiprid and its metabolites

PEC_{soil} of acetamiprid

Table 8.7-3: PEC_{soil} for acetamiprid on Maize, 1x60 g a.s./ha, BBCH 51, annual

PEC _{soil} (mg/kg)		Maize	
		Single application	
		Actual	TWA
Initial		0.020	-
Short term	24h	0.019	0.019
	2d	0.018	0.019
	4d	0.016	0.018
Long term	7d	0.014	0.017
	14d	0.009	0.014
	21d	0.007	0.012
	28d	0.004	0.010
	50d	0.001	0.007
	100d	< 0.001	0.004
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 60 days and DT₉₀ < 200 days

Table 8.7-4: PEC_{soil} for Acetamiprid on Pome fruit, 1x80 g a.s./ha, BBCH 71, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.037	-
Short term	24h	0.035	0.036
	2d	0.034	0.035
	4d	0.030	0.034
Long term	7d	0.026	0.031
	14d	0.018	0.026
	21d	0.012	0.022
	28d	0.008	0.019
	50d	0.003	0.013
	100d	< 0.001	0.007
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-5: PEC_{soil} for acetamiprid on Pome fruit, 2x25 g a.s./ha, BBCH 62, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.022	-
Short term	24h	0.021	0.021
	2d	0.020	0.021
	4d	0.018	0.020
Long term	7d	0.015	0.018
	14d	0.010	0.016
	21d	0.007	0.014
	28d	0.005	0.013
	50d	0.002	0.009
	100d	< 0.001	0.005
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-6: PEC_{soil} for acetamiprid on Potato, 1x36 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Potato	
		Single application	
		Actual	TWA
Initial		0.041	-
Short term	24h	0.039	0.040
	2d	0.037	0.039
	4d	0.033	0.037
Long term	7d	0.028	0.034
	14d	0.019	0.029
	21d	0.013	0.025
	28d	0.009	0.021
	50d	0.003	0.014
	100d	< 0.001	0.008
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-7: PEC_{soil} for acetamiprid on Spring cereals, 2x35 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		0.007	-
Short term	24h	0.007	0.007
	2d	0.007	0.007
	4d	0.006	0.007
Long term	7d	0.005	0.006
	14d	0.003	0.005
	21d	0.002	0.005
	28d	0.002	0.004
	50d	0.001	0.003
	100d	< 0.001	0.002
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-8: PEC_{soil} for acetamiprid on Spring cereals, 2x35 g a.s./ha, 1st appl.: BBCH 12, 2nd appl.: BBCH 40, annual and biennial

PEC _{soil} (mg/kg)		Spring cereals	
		Single/Multiple applications	
		Actual	TWA
Initial		0.047 / 0.014	-
Short term	24h	0.044 / 0.013	0.045 / 0.014
	2d	0.042 / 0.013	0.044 / 0.013
	4d	0.038 / 0.011	0.042 / 0.013
Long term	7d	0.032 / 0.010	0.039 / 0.012
	14d	0.022 / 0.007	0.033 / 0.010
	21d	0.015 / 0.005	0.028 / 0.008
	28d	0.010 / 0.003	0.024 / 0.007
	50d	0.003 / 0.001	0.018 / 0.005
	100d	< 0.001 / <0.001	0.010 / 0.003
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-9: PEC_{soil} for acetamiprid on Winter cereals, 2x36 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Winter cereals	
		Multiple applications	
		Actual	TWA
Initial		0.008	-
Short term	24h	0.007	0.007
	2d	0.007	0.007
	4d	0.006	0.007
Long term	7d	0.005	0.006
	14d	0.004	0.005
	21d	0.002	0.005
	28d	0.002	0.005
	50d	0.001	0.003
	100d	< 0.001	0.002
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-10: PEC_{soil} for acetamiprid on Winter cereals, 1x30 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Winter cereals	
		Single application	
		Actual	TWA
Initial		0.040	-
Short term	24h	0.038	0.039
	2d	0.036	0.038
	4d	0.032	0.036
Long term	7d	0.028	0.033
	14d	0.019	0.028
	21d	0.013	0.024
	28d	0.009	0.021
	50d	0.003	0.014
	100d	< 0.001	0.007
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-11: PEC_{soil} for acetamiprid on Oilseed rape, 2x60 g a.s./ha, BBCH 31, annual

PEC _{soil} (mg/kg)		Oilseed rape	
		Multiple applications	
		Actual	TWA
Initial		0.027	-
Short term	24h	0.026	0.026
	2d	0.024	0.026
	4d	0.022	0.024
Long term	7d	0.019	0.023
	14d	0.013	0.019
	21d	0.009	0.017
	28d	0.006	0.016
	50d	0.002	0.011
	100d	< 0.001	0.006
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-12: PEC_{soil} for acetamiprid on Oilseed rape, 1x60 g a.s./ha, BBCH 11, annual ~~biennial~~

PEC _{soil} (mg/kg)		Oilseed rape	
		Single application	
		Actual	TWA
Initial		0.048	-
Short term	24h	0.046	0.047
	2d	0.043	0.046
	4d	0.039	0.043
Long term	7d	0.033	0.040
	14d	0.023	0.034
	21d	0.016	0.029
	28d	0.011	0.025
	50d	0.003	0.017
	100d	< 0.001	0.009
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-13: PEC_{soil} for acetamiprid on Sugar beet, 2x50 g a.s./ha, BBCH 12, biennial and triennial (note that annual application has been assumed in calculations as representing worst case and covering the intended use pattern)

PEC _{soil} (mg/kg)		Sugar beet	
		Multiple applications	
		Actual	TWA
Initial		0.090	-
Short term	24h	0.085	0.088
	2d	0.081	0.085
	4d	0.073	0.081
Long term	7d	0.062	0.075
	14d	0.043	0.064
	21d	0.029	0.058
	28d	0.020	0.052
	50d	0.006	0.037
	100d	< 0.001	0.020
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-14: PEC_{soil} for acetamiprid on Onions (flower bulbs and flower tubers), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Onions (Flower bulbs and flower tubers)	
		Single application	
		Actual	TWA
Initial		0.055	-
Short term	24h	0.052	0.054
	2d	0.050	0.052
	4d	0.045	0.050
Long term	7d	0.038	0.046
	14d	0.026	0.039
	21d	0.018	0.033
	28d	0.012	0.029
	50d	0.004	0.019
	100d	< 0.001	0.010
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-15: PEC_{soil} for acetamiprid on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 20, annual

PEC _{soil} (mg/kg)		Onions (Flower bulbs and flower tubers)	
		Multiple applications	
		Actual	TWA
Initial		0.057	-
Short term	24h	0.054	0.056
	2d	0.052	0.054
	4d	0.046	0.052
Long term	7d	0.039	0.048
	14d	0.027	0.041
	21d	0.019	0.037
	28d	0.013	0.033
	50d	0.004	0.024
	100d	< 0.001	0.013
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-16: PEC_{soil} for acetamiprid on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 12, annual ~~and biennial~~

PEC _{soil} (mg/kg)		Onions (Flower bulbs and flower tubers)	
		Multiple applications	
		Actual	TWA
Initial		0.069	-
Short term	24h	0.065	0.067
	2d	0.062	0.065
	4d	0.056	0.062
Long term	7d	0.047	0.058
	14d	0.033	0.049
	21d	0.022	0.044
	28d	0.015	0.040
	50d	0.005	0.028
	100d	< 0.001	0.015
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-17: PEC_{soil} for acetamiprid on Cabbage (floriculture crops, perennial nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Cabbage (Floriculture crops, perennial nursery crops)	
		Single application	
		Actual	TWA
Initial		0.046	-
Short term	24h	0.044	0.045
	2d	0.041	0.044
	4d	0.037	0.041
Long term	7d	0.032	0.038
	14d	0.022	0.032
	21d	0.015	0.028
	28d	0.010	0.024
	50d	0.003	0.016
	100d	< 0.001	0.009
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-18: PEC_{soil} for acetamiprid on Cabbage (floriculture crops, perennial nursery crops), 2x34 g a.s./ha, BBCH 12, annual ~~and biennial~~

PEC _{soil} (mg/kg)		Cabbage (Floriculture crops, perennial nursery crops)	
		Multiple applications	
		Actual	TWA
Initial		0.057	-
Short term	24h	0.054	0.056
	2d	0.052	0.054
	4d	0.046	0.052
Long term	7d	0.039	0.048
	14d	0.027	0.041
	21d	0.019	0.037
	28d	0.013	0.033
	50d	0.004	0.024
	100d	< 0.001	0.013
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-19: PEC_{soil} for acetamiprid on Pome fruit (tree nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit Pome fruit (Tree nursery crops)	
		Single application	
		Actual	TWA
Initial		0.025	-
Short term	24h	0.023	0.024
	2d	0.022	0.023
	4d	0.020	0.022
Long term	7d	0.017	0.020
	14d	0.012	0.017
	21d	0.008	0.015
	28d	0.005	0.013
	50d	0.002	0.009
	100d	< 0.001	0.005
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-20: PEC_{soil} for acetamiprid on Pome fruit (tree nursery crops), 2x34 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit Pome fruit (Tree nursery crops)	
		Multiple applications	
		Actual	TWA
Initial		0.031	-
Short term	24h	0.029	0.030
	2d	0.027	0.029
	4d	0.025	0.028
Long term	7d	0.021	0.026
	14d	0.014	0.022
	21d	0.010	0.020
	28d	0.007	0.018
	50d	0.002	0.013
	100d	< 0.001	0.007
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

PEC_{soil} of metabolites

Table 8.7-21: PEC_{soil} for IM-1-2 on Maize, 1x60 g a.s./ha, BBCH 51, annual

PEC _{soil} (mg/kg)		Maize	
		Single application	
		Actual	TWA
Initial		0.012	-
Short term	24h	0.008	0.010
	2d	0.006	0.008
	4d	0.003	0.006
Long term	7d	0.001	0.004
	14d	< 0.001	0.002
	21d	< 0.001	0.002
	28d	< 0.001	0.001
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-22: PEC_{soil} for IM-1-2 on Pome fruit, 1x80 g a.s./ha, BBCH 71, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.022	-
Short term	24h	0.015	0.019
	2d	0.011	0.016
	4d	0.005	0.012
Long term	7d	0.002	0.008
	14d	< 0.001	0.004
	21d	< 0.001	0.003
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-23: PEC_{soil} for IM-1-2 on Pome fruit, 2x25 g a.s./ha, BBCH 62, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.008	-
Short term	24h	0.006	0.007
	2d	0.004	0.006
	4d	0.002	0.005
Long term	7d	0.001	0.003
	14d	< 0.001	0.003
	21d	< 0.001	0.002
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-24: PEC_{soil} for IM-1-2 on Potato, 1x36 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Potato	
		Single application	
		Actual	TWA
Initial		0.024	-
Short term	24h	0.017	0.020
	2d	0.012	0.017
	4d	0.006	0.013
Long term	7d	0.002	0.009
	14d	< 0.001	0.005
	21d	< 0.001	0.003
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-25: PEC_{soil} for IM-1-2 on Spring cereals, 2x35 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		0.003	-
Short term	24h	0.002	0.002
	2d	0.001	0.002
	4d	0.001	0.002
Long term	7d	< 0.001	0.001
	14d	< 0.001	0.001
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-26: PEC_{soil} for IM-1-2 on Spring cereals, 2x35 g a.s./ha, 1st appl.: BBCH 12, 2nd appl.: BBCH 40, annual and biennial

PEC _{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		0.028	-
Short term	24h	0.019	0.023
	2d	0.013	0.020
	4d	0.006	0.015
Long term	7d	0.002	0.011
	14d	< 0.001	0.006
	21d	< 0.001	0.004
	28d	< 0.001	0.003
	50d	< 0.001	0.002
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-27: PEC_{soil} for IM-1-2 on Winter cereals, 2x36 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Winter cereals	
		Multiple applications	
		Actual	TWA
Initial		0.003	-
Short term	24h	0.002	0.002
	2d	0.001	0.002
	4d	0.001	0.002
Long term	7d	< 0.001	0.001
	14d	< 0.001	0.001
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-28: PEC_{soil} for IM-1-2 on Winter cereals, 1x30 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Winter cereals	
		Single application	
		Actual	TWA
Initial		0.024	-
Short term	24h	0.016	0.020
	2d	0.011	0.017
	4d	0.006	0.012
Long term	7d	0.002	0.009
	14d	< 0.001	0.005
	21d	< 0.001	0.003
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-29: PEC_{soil} for IM-1-2 on Oilseed rape, 2x60 g a.s./ha, BBCH 31, annual

PEC _{soil} (mg/kg)		Oilseed rape	
		Multiple applications	
		Actual	TWA
Initial		0.010	-
Short term	24h	0.007	0.009
	2d	0.005	0.007
	4d	0.002	0.006
Long term	7d	0.001	0.005
	14d	< 0.001	0.004
	21d	< 0.001	0.003
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-30: PEC_{soil} for IM-1-2 on Oilseed rape, 1x60 g a.s./ha, BBCH 11, annual biennial

PEC _{soil} (mg/kg)		Oilseed rape	
		Single application	
		Actual	TWA
Initial		0.028	-
Short term	24h	0.020	0.024
	2d	0.014	0.020
	4d	0.007	0.015
Long term	7d	0.002	0.010
	14d	< 0.001	0.006
	21d	< 0.001	0.004
	28d	< 0.001	0.003
	50d	< 0.001	0.002
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-31: PEC_{soil} for IM-1-2 on Sugar beet, 2x50 g a.s./ha, BBCH 12, biennial and triennial (note that annual application has been assumed in calculations as representing worst case and covering the intended use pattern)

PEC _{soil} (mg/kg)		Sugar beet	
		Multiple applications	
		Actual	TWA
Initial		0.034	-
Short term	24h	0.024	0.029
	2d	0.016	0.025
	4d	0.008	0.019
Long term	7d	0.003	0.016
	14d	< 0.001	0.013
	21d	< 0.001	0.009
	28d	< 0.001	0.007
	50d	< 0.001	0.004
	100d	< 0.001	0.002
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-32: PEC_{soil} for IM-1-2 on Onions (flower bulbs and flower tubers), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Onions	
		Single application	
		Actual	TWA
Initial		0.033	-
Short term	24h	0.023	0.027
	2d	0.016	0.023
	4d	0.008	0.017
Long term	7d	0.003	0.012
	14d	< 0.001	0.006
	21d	< 0.001	0.004
	28d	< 0.001	0.003
	50d	< 0.001	0.002
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-33: PEC_{soil} for IM-1-2 on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 20, annual

PEC _{soil} (mg/kg)		Onions	
		Multiple applications	
		Actual	TWA
Initial		0.022	-
Short term	24h	0.015	0.018
	2d	0.010	0.016
	4d	0.005	0.012
Long term	7d	0.002	0.010
	14d	< 0.001	0.009
	21d	< 0.001	0.006
	28d	< 0.001	0.005
	50d	< 0.001	0.003
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-34: PEC_{soil} for IM-1-2 on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 12, annual ~~biennial~~

PEC _{soil} (mg/kg)		Onions	
		Multiple applications	
		Actual	TWA
Initial		0.026	-
Short term	24h	0.018	0.022
	2d	0.013	0.019
	4d	0.006	0.014
Long term	7d	0.002	0.012
	14d	< 0.001	0.010
	21d	< 0.001	0.007
	28d	< 0.001	0.005
	50d	< 0.001	0.003
	100d	< 0.001	0.002
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-35: PEC_{soil} for IM-1-2 on Cabbage (floriculture crops, perennial nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Cabbage	
		Single application	
		Actual	TWA
Initial		0.027	-
Short term	24h	0.019	0.023
	2d	0.013	0.019
	4d	0.006	0.014
Long term	7d	0.002	0.010
	14d	< 0.001	0.005
	21d	< 0.001	0.004
	28d	< 0.001	0.003
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-36: PEC_{soil} for IM-1-2 on Cabbage (floriculture crops, perennial nursery crops), 2x34 g a.s./ha, BBCH 12, annual and biennial

PEC _{soil} (mg/kg)		Cabbage	
		Multiple applications	
		Actual	TWA
Initial		0.022	-
Short term	24h	0.015	0.018
	2d	0.010	0.016
	4d	0.005	0.012
Long term	7d	0.002	0.010
	14d	< 0.001	0.009
	21d	< 0.001	0.006
	28d	< 0.001	0.005
	50d	< 0.001	0.003
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-37: PEC_{soil} for IM-1-2 on Pome fruit (tree nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.015	-
Short term	24h	0.010	0.012
	2d	0.007	0.010
	4d	0.003	0.008
Long term	7d	0.001	0.005
	14d	< 0.001	0.003
	21d	< 0.001	0.002
	28d	< 0.001	0.001
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-38: PEC_{soil} for IM-1-2 on Pome fruit (tree nursery crops), 2x34 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.012	-
Short term	24h	0.008	0.010
	2d	0.006	0.008
	4d	0.003	0.006
Long term	7d	0.001	0.006
	14d	< 0.001	0.005
	21d	< 0.001	0.003
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-39: PEC_{soil} for IM-1-4 on Maize, 1x60 g a.s./ha, BBCH 51, annual

PEC _{soil} (mg/kg)		Maize	
		Single application	
		Actual	TWA
Initial		0.010	-
Short term	24h	0.010	0.010
	2d	0.010	0.010
	4d	0.010	0.010
Long term	7d	0.010	0.010
	14d	0.009	0.010
	21d	0.009	0.010
	28d	0.009	0.009
	50d	0.008	0.009
	100d	0.006	0.008
Plateau concentration (20 cm) after year 26		0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.011	-

Table 8.7-40: PEC_{soil} for IM-1-4 on Pome fruit, 1x80 g a.s./ha, BBCH 71, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.019	-
Short term	24h	0.019	0.019
	2d	0.019	0.019
	4d	0.019	0.019
Long term	7d	0.018	0.019
	14d	0.018	0.018
	21d	0.017	0.018
	28d	0.017	0.018
	50d	0.015	0.017
	100d	0.012	0.015
Plateau concentration (5 cm) after year 26		0.004	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		0.023	-

Table 8.7-41: PEC_{soil} for IM-1-4 on Pome fruit, 2x25 g a.s./ha, BBCH 62, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.013	-
Short term	24h	0.013	0.013
	2d	0.013	0.013
	4d	0.013	0.013
Long term	7d	0.013	0.013
	14d	0.012	0.013
	21d	0.012	0.013
	28d	0.012	0.012
	50d	0.010	0.012
	100d	0.008	0.011
Plateau concentration (5 cm) after year 26		0.003	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		0.016	-

Table 8.7-42: PEC_{soil} for IM-1-4 on Potato, 1x36 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Potato	
		Single application	
		Actual	TWA
Initial		0.021	-
Short term	24h	0.021	0.021
	2d	0.020	0.021
	4d	0.020	0.020
Long term	7d	0.020	0.020
	14d	0.019	0.020
	21d	0.019	0.020
	28d	0.018	0.019
	50d	0.016	0.018
	100d	0.013	0.016
Plateau concentration (20 cm) after year 26		0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.022	-

Table 8.7-43: PEC_{soil} for IM-1-4 on Spring cereals, 2x35 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		0.005	-
Short term	24h	0.005	0.005
	2d	0.005	0.005
	4d	0.005	0.005
Long term	7d	0.004	0.005
	14d	0.004	0.004
	21d	0.004	0.004
	28d	0.004	0.004
	50d	0.004	0.004
	100d	0.003	0.004
Plateau concentration (20 cm) after year 26		< 0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.005	-

Table 8.7-44: PEC_{soil} for IM-1-4 on Spring cereals, 2x35 g a.s./ha, 1st appl.: BBCH 12, 2nd appl.: BBCH 40, annual ~~and biennial~~

PEC_{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		0.024	-
Short term	24h	0.023	0.024
	2d	0.023	0.023
	4d	0.023	0.023
Long term	7d	0.023	0.023
	14d	0.022	0.023
	21d	0.021	0.022
	28d	0.021	0.022
	50d	0.019	0.022
	100d	0.015	0.020
Plateau concentration (20 cm) after year 46		0.001 (annual) ≤ 0.001 (biennial)	-
$PEC_{accumulation}$ (PEC_{act} (5 cm) + PEC_{soil} plateau (20 cm))		0.025 (annual) 0.024 (biennial)	-

Table 8.7-45: PEC_{soil} for IM-1-4 on Winter cereals, 2x36 g a.s./ha, BBCH 40, annual

PEC_{soil} (mg/kg)		Winter cereals	
		Multiple applications	
		Actual	TWA
Initial		0.005	-
Short term	24h	0.005	0.005
	2d	0.005	0.005
	4d	0.005	0.005
Long term	7d	0.005	0.005
	14d	0.004	0.005
	21d	0.004	0.005
	28d	0.004	0.004
	50d	0.004	0.004
	100d	0.003	0.004
Plateau concentration (20 cm) after year 26		< 0.001	-
$PEC_{accumulation}$ (PEC_{act} (5 cm) + PEC_{soil} plateau (20 cm))		0.005	-

Table 8.7-46: PEC_{soil} for IM-1-4 on Winter cereals, 1x30 g a.s./ha, BBCH 12, annual

PEC_{soil} (mg/kg)		Winter cereals	
		Single application	
		Actual	TWA
Initial		0.020	-
Short term	24h	0.020	0.020
	2d	0.020	0.020
	4d	0.020	0.020
Long term	7d	0.020	0.020
	14d	0.019	0.020
	21d	0.018	0.019
	28d	0.018	0.019
	50d	0.016	0.018
	100d	0.013	0.016
Plateau concentration (20 cm) after year 26		0.001	-
$PEC_{accumulation}$ (PEC_{act} (5 cm) + PEC_{soil} plateau (20 cm))		0.021	-

Table 8.7-47: PEC_{soil} for IM-1-4 on Oilseed rape, 2x60 g a.s./ha, BBCH 31, annual

PEC _{soil} (mg/kg)		Oilseed rape	
		Multiple applications	
		Actual	TWA
Initial		0.016	-
Short term	24h	0.016	0.016
	2d	0.016	0.016
	4d	0.016	0.016
Long term	7d	0.015	0.016
	14d	0.015	0.015
	21d	0.014	0.015
	28d	0.014	0.015
	50d	0.013	0.014
	100d	0.010	0.013
Plateau concentration (20 cm) after year 26		0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.017	-

Table 8.7-48: PEC_{soil} for IM-1-4 on Oilseed rape (winter), 1x60 g a.s./ha, BBCH 11, annual ^{biennial}

PEC _{soil} (mg/kg)		Oilseed rape (winter)	
		Single application	
		Actual	TWA
Initial		0.024	-
Short term	24h	0.024	0.024
	2d	0.024	0.024
	4d	0.024	0.024
Long term	7d	0.023	0.024
	14d	0.023	0.023
	21d	0.022	0.023
	28d	0.021	0.023
	50d	0.019	0.022
	100d	0.015	0.019
Plateau concentration (20 cm) after year 46		< 0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.024	-

Table 8.7-49: PEC_{soil} for IM-1-4 on Sugar beet, 2x50 g a.s./ha, BBCH 12, ^{biennial} and ^{triennial} (note that annual application has been assumed in calculations as representing worst case and covering the intended use pattern)

PEC _{soil} (mg/kg)		Sugar beet	
		Multiple applications	
		Actual	TWA
Initial		0.053	-
Short term	24h	0.053	0.053
	2d	0.053	0.053
	4d	0.052	0.053
Long term	7d	0.051	0.052
	14d	0.050	0.051
	21d	0.048	0.050
	28d	0.046	0.050
	50d	0.042	0.047
	100d	0.033	0.042
Plateau concentration (20 cm) after year 63		< 0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.053	-

Table 8.7-50: PEC_{soil} for IM-1-4 on Onions (flower bulbs and flower tubers), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Onions	
		Single application	
		Actual	TWA
Initial		0.023	-
Short term	24h	0.023	0.023
	2d	0.023	0.023
	4d	0.023	0.023
Long term	7d	0.022	0.023
	14d	0.022	0.023
	21d	0.021	0.022
	28d	0.020	0.022
	50d	0.018	0.021
	100d	0.014	0.019
Plateau concentration (20 cm) after year 26		0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.025	-

Table 8.7-51: PEC_{soil} for IM-1-4 on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 20, annual

PEC _{soil} (mg/kg)		Onions	
		Multiple applications	
		Actual	TWA
Initial		0.034	-
Short term	24h	0.034	0.034
	2d	0.034	0.034
	4d	0.033	0.034
Long term	7d	0.033	0.033
	14d	0.032	0.033
	21d	0.031	0.032
	28d	0.030	0.032
	50d	0.027	0.030
	100d	0.021	0.027
Plateau concentration (20 cm) after year 26		0.002	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.036	-

Table 8.7-52: PEC_{soil} for IM-1-4 on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 12 and BBCH 20, annual biennial

PEC _{soil} (mg/kg)		Onions	
		Multiple applications	
		Actual	TWA
Initial		0.041	-
Short term	24h	0.040	0.040
	2d	0.040	0.040
	4d	0.040	0.040
Long term	7d	0.039	0.040
	14d	0.038	0.039
	21d	0.037	0.039
	28d	0.036	0.038
	50d	0.032	0.036
	100d	0.025	0.032
Plateau concentration (20 cm) after year 46		< 0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.041	-

Table 8.7-53: PEC_{soil} for IM-1-4 on Cabbage (floriculture crops, perennial nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Cabbage	
		Single application	
		Actual	TWA
Initial		0.023	-
Short term	24h	0.023	0.023
	2d	0.023	0.023
	4d	0.023	0.023
Long term	7d	0.022	0.023
	14d	0.022	0.023
	21d	0.021	0.022
	28d	0.020	0.022
	50d	0.018	0.021
	100d	0.014	0.019
Plateau concentration (20 cm) after year 26		0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.025	-

Table 8.7-54: PEC_{soil} for IM-1-4 on Cabbage (floriculture crops, perennial nursery crops), 2x34 g a.s./ha, BBCH 12, annual and biennial

PEC _{soil} (mg/kg)		Cabbage	
		Multiple applications	
		Actual	TWA
Initial		0.034	-
Short term	24h	0.034	0.034
	2d	0.034	0.034
	4d	0.033	0.034
Long term	7d	0.033	0.033
	14d	0.032	0.033
	21d	0.031	0.032
	28d	0.030	0.032
	50d	0.027	0.030
	100d	0.021	0.027
Plateau concentration (20 cm) after year 46		0.002 (annual) ≤ 0.001 (biennial)	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.036 (annual) 0.034 (biennial)	-

Table 8.7-55: PEC_{soil} for IM-1-4 on Pome fruit (tree nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.012	-
Short term	24h	0.012	0.012
	2d	0.012	0.012
	4d	0.012	0.012
Long term	7d	0.012	0.012
	14d	0.012	0.012
	21d	0.011	0.012
	28d	0.011	0.012
	50d	0.010	0.011
	100d	0.008	0.010
Plateau concentration (5 cm) after year 26		0.003	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		0.015	-

Table 8.7-56: PEC_{soil} for IM-1-4 on Pome fruit (tree nursery crops), 2x34 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.018	-
Short term	24h	0.018	0.018
	2d	0.018	0.018
	4d	0.018	0.018
Long term	7d	0.017	0.018
	14d	0.017	0.017
	21d	0.016	0.017
	28d	0.016	0.017
	50d	0.014	0.016
	100d	0.011	0.014
Plateau concentration (5 cm) after year 26		0.004	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		0.022	-

a) Not calculated due to DT₅₀ < 90 days

Table 8.7-57: PEC_{soil} for IC-0 on Maize, 1x60 g a.s./ha, BBCH 51, annual

PEC _{soil} (mg/kg)		Maize	
		Single application	
		Actual	TWA
Initial		0.002	-
Short term	24h	0.001	0.002
	2d	0.001	0.001
	4d	0.001	0.001
Long term	7d	0.001	0.001
	14d	< 0.001	0.001
	21d	< 0.001	0.001
	28d	< 0.001	< 0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

a) Not calculated due to DT₅₀ < 90 days

Table 8.7-58: PEC_{soil} for IC-0 on Pome fruit, 1x80 g a.s./ha, BBCH 71, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.003	-
Short term	24h	0.003	0.003
	2d	0.002	0.003
	4d	0.002	0.002
Long term	7d	0.001	0.002
	14d	0.001	0.001
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-59: PEC_{soil} for IC-0 on Pome fruit, 2x25 g a.s./ha, BBCH 62, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.001	-
Short term	24h	0.001	0.001
	2d	0.001	0.001
	4d	0.001	0.001
Long term	7d	0.001	0.001
	14d	< 0.001	0.001
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-60: PEC_{soil} for IC-0 on Potato, 1x36 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Potato	
		Single application	
		Actual	TWA
Initial		0.003	-
Short term	24h	0.003	0.003
	2d	0.003	0.003
	4d	0.002	0.003
Long term	7d	0.001	0.002
	14d	0.001	0.002
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-61: PEC_{soil} for IC-0 on Spring cereals, 2x35 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		< 0.001	-
Short term	24h	< 0.001	< 0.001
	2d	< 0.001	< 0.001
	4d	< 0.001	< 0.001
Long term	7d	< 0.001	< 0.001
	14d	< 0.001	< 0.001
	21d	< 0.001	< 0.001
	28d	< 0.001	< 0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-62: PEC_{soil} for IC-0 on Spring cereals, 2x35 g a.s./ha, 1st appl.: BBCH 12, 2nd appl.: BBCH 40, annual and biennial

PEC _{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		0.004	-
Short term	24h	0.003	0.004
	2d	0.003	0.003
	4d	0.002	0.003
Long term	7d	0.002	0.003
	14d	0.001	0.002
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-63: PEC_{soil} for IC-0 on Winter cereals, 2x36 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Winter cereals	
		Multiple applications	
		Actual	TWA
Initial		< 0.001	-
Short term	24h	< 0.001	< 0.001
	2d	< 0.001	< 0.001
	4d	< 0.001	< 0.001
Long term	7d	< 0.001	< 0.001
	14d	< 0.001	< 0.001
	21d	< 0.001	< 0.001
	28d	< 0.001	< 0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-64: PEC_{soil} for IC-0 on Winter cereals, 1x30 g a.s./ha, BBCH 12, annual and biennial

PEC _{soil} (mg/kg)		Winter cereals	
		Single application	
		Actual	TWA
Initial		0.003	-
Short term	24h	0.003	0.003
	2d	0.002	0.003
	4d	0.002	0.003
Long term	7d	0.001	0.002
	14d	0.001	0.002
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-65: PEC_{soil} for IC-0 on Oilseed rape, 2x60 g a.s./ha, BBCH 31, annual

PEC _{soil} (mg/kg)		Oilseed rape	
		Multiple applications	
		Actual	TWA
Initial		0.002	-
Short term	24h	0.002	0.002
	2d	0.001	0.002
	4d	0.001	0.001
Long term	7d	0.001	0.001
	14d	< 0.001	0.001
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-66: PEC_{soil} for IC-0 on Oilseed rape (winter), 1x60 g a.s./ha, BBCH 11, annual biennial

PEC _{soil} (mg/kg)		Oilseed rape (winter)	
		Single application	
		Actual	TWA
Initial		0.004	-
Short term	24h	0.003	0.004
	2d	0.003	0.003
	4d	0.002	0.003
Long term	7d	0.002	0.003
	14d	0.001	0.002
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-67: **PEC_{soil} for IC-0 on Sugar beet, 2x50 g a.s./ha, BBCH 12, biennial and triennial (note that annual application has been assumed in calculations as representing worst case and covering the intended use pattern)**

PEC _{soil} (mg/kg)		Sugar beet	
		Multiple applications	
		Actual	TWA
Initial		0.006	-
Short term	24h	0.005	0.006
	2d	0.005	0.005
	4d	0.004	0.005
Long term	7d	0.003	0.004
	14d	0.001	0.004
	21d	< 0.001	0.003
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-68: **PEC_{soil} for IC-0 on Onions (flower bulbs and flower tubers), 1x46 g a.s./ha, BBCH 12, annual**

PEC _{soil} (mg/kg)		Onions	
		Single application	
		Actual	TWA
Initial		0.004	-
Short term	24h	0.004	0.004
	2d	0.003	0.004
	4d	0.003	0.003
Long term	7d	0.002	0.003
	14d	0.001	0.002
	21d	< 0.001	0.002
	28d	< 0.001	0.001
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-69: **PEC_{soil} for IC-0 on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 20, annual**

PEC _{soil} (mg/kg)		Onions	
		Multiple applications	
		Actual	TWA
Initial		0.004	-
Short term	24h	0.003	0.004
	2d	0.003	0.003
	4d	0.002	0.003
Long term	7d	0.002	0.003
	14d	0.001	0.002
	21d	< 0.001	0.002
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-70: PEC_{soil} for IC-0 on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 12, annual ~~biennial~~

PEC _{soil} (mg/kg)		Onions	
		Multiple applications	
		Actual	TWA
Initial		0.005	-
Short term	24h	0.004	0.004
	2d	0.004	0.004
	4d	0.003	0.004
Long term	7d	0.002	0.003
	14d	0.001	0.003
	21d	< 0.001	0.002
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-71: PEC_{soil} for IC-0 on Cabbage (floriculture crops, perennial nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Cabbage	
		Single application	
		Actual	TWA
Initial		0.004	-
Short term	24h	0.003	0.003
	2d	0.003	0.003
	4d	0.002	0.003
Long term	7d	0.002	0.002
	14d	0.001	0.002
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-72: PEC_{soil} for IC-0 on Cabbage (floriculture crops, perennial nursery crops), 2x34 g a.s./ha, BBCH 12, annual ~~and biennial~~

PEC _{soil} (mg/kg)		Cabbage	
		Multiple applications	
		Actual	TWA
Initial		0.004	-
Short term	24h	0.003	0.004
	2d	0.003	0.003
	4d	0.002	0.003
Long term	7d	0.002	0.003
	14d	0.001	0.002
	21d	< 0.001	0.002
	28d	< 0.001	0.002
	50d	< 0.001	0.001
	100d	< 0.001	< 0.001
Plateau concentration (20 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-73: PEC_{soil} for IC-0 on Pome fruit (tree nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.002	-
Short term	24h	0.002	0.002
	2d	0.002	0.002
	4d	0.001	0.002
Long term	7d	0.001	0.001
	14d	< 0.001	0.001
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-74: PEC_{soil} for IC-0 on Pome fruit (tree nursery crops), 2x34 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.002	-
Short term	24h	0.002	0.002
	2d	0.002	0.002
	4d	0.001	0.002
Long term	7d	0.001	0.001
	14d	< 0.001	0.001
	21d	< 0.001	0.001
	28d	< 0.001	0.001
	50d	< 0.001	< 0.001
	100d	< 0.001	< 0.001
Plateau concentration (5 cm) after year 26		- ^{a)}	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		- ^{a)}	-

^{a)} Not calculated due to DT₅₀ < 90 days

Table 8.7-75: PEC_{soil} for IM-1-5 on Maize, 1x60 g a.s./ha, BBCH 51, annual

PEC _{soil} (mg/kg)		Maize	
		Single application	
		Actual	TWA
Initial		0.004	-
Short term	24h	0.004	0.004
	2d	0.004	0.004
	4d	0.004	0.004
Long term	7d	0.004	0.004
	14d	0.004	0.004
	21d	0.003	0.004
	28d	0.003	0.004
	50d	0.003	0.003
	100d	0.003	0.003
Plateau concentration (20 cm) after year 26		0.003	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.007	-

Table 8.7-76: PEC_{soil} for IM-1-5 on Pome fruit, 1x80 g a.s./ha, BBCH 71, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.007	-
Short term	24h	0.007	0.007
	2d	0.007	0.007
	4d	0.007	0.007
Long term	7d	0.007	0.007
	14d	0.007	0.007
	21d	0.007	0.007
	28d	0.006	0.007
	50d	0.006	0.007
	100d	0.006	0.006
Plateau concentration (5 cm) after year 26		0.023	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		0.030	-

Table 8.7-77: PEC_{soil} for IM-1-5 on Pome fruit, 2x25 g a.s./ha, BBCH 62, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.005	-
Short term	24h	0.005	0.005
	2d	0.005	0.005
	4d	0.005	0.005
Long term	7d	0.005	0.005
	14d	0.005	0.005
	21d	0.005	0.005
	28d	0.005	0.005
	50d	0.005	0.005
	100d	0.004	0.005
Plateau concentration (5 cm) after year 26		0.016	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		0.021	-

Table 8.7-78: PEC_{soil} for IM-1-5 on Potato, 1x36 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Potato	
		Single application	
		Actual	TWA
Initial		0.007	-
Short term	24h	0.007	0.007
	2d	0.007	0.007
	4d	0.007	0.007
Long term	7d	0.007	0.007
	14d	0.007	0.007
	21d	0.007	0.007
	28d	0.007	0.007
	50d	0.007	0.007
	100d	0.007	0.007
Plateau concentration (20 cm) after year 26		0.006	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.014	-

Table 8.7-79: PEC_{soil} for IM-1-5 on Spring cereals, 2x35 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		0.002	-
Short term	24h	0.002	0.002
	2d	0.002	0.002
	4d	0.002	0.002
Long term	7d	0.002	0.002
	14d	0.002	0.002
	21d	0.002	0.002
	28d	0.002	0.002
	50d	0.002	0.002
	100d	0.002	0.002
Plateau concentration (20 cm) after year 26		0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.003	-

Table 8.7-80: PEC_{soil} for IM-1-5 on Spring cereals, 2x35 g a.s./ha, 1st appl.: BBCH 12, 2nd appl.: BBCH 40, annual and biennial

PEC _{soil} (mg/kg)		Spring cereals	
		Multiple applications	
		Actual	TWA
Initial		0.009	-
Short term	24h	0.009	0.009
	2d	0.009	0.009
	4d	0.009	0.009
Long term	7d	0.009	0.009
	14d	0.009	0.009
	21d	0.009	0.009
	28d	0.009	0.009
	50d	0.009	0.009
	100d	0.008	0.009
Plateau concentration (20 cm) after year 46		0.008 (annual) 0.003 (biennial)	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.017 (annual) 0.012 (biennial)	-

Table 8.7-81: PEC_{soil} for IM-1-5 on Winter cereals, 2x36 g a.s./ha, BBCH 40, annual

PEC _{soil} (mg/kg)		Winter cereals	
		Multiple applications	
		Actual	TWA
Initial		0.002	-
Short term	24h	0.002	0.002
	2d	0.002	0.002
	4d	0.002	0.002
Long term	7d	0.002	0.002
	14d	0.002	0.002
	21d	0.002	0.002
	28d	0.002	0.002
	50d	0.002	0.002
	100d	0.002	0.002
Plateau concentration (20 cm) after year 26		0.001	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.003	-

Table 8.7-82: PEC_{soil} for IM-1-5 on Winter cereals, 1x30 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Winter cereals	
		Single application	
		Actual	TWA
Initial		0.007	-
Short term	24h	0.007	0.007
	2d	0.007	0.007
	4d	0.007	0.007
Long term	7d	0.007	0.007
	14d	0.007	0.007
	21d	0.007	0.007
	28d	0.007	0.007
	50d	0.007	0.007
	100d	0.007	0.007
Plateau concentration (20 cm) after year 26		0.006	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.013	-

Table 8.7-83: PEC_{soil} for IM-1-5 on Oilseed rape, 2x60 g a.s./ha, BBCH 31, annual

PEC _{soil} (mg/kg)		Oilseed rape	
		Multiple applications	
		Actual	TWA
Initial		0.006	-
Short term	24h	0.006	0.006
	2d	0.006	0.006
	4d	0.006	0.006
Long term	7d	0.006	0.006
	14d	0.006	0.006
	21d	0.006	0.006
	28d	0.006	0.006
	50d	0.005	0.006
	100d	0.005	0.005
Plateau concentration (20 cm) after year 26		0.005	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.011	-

Table 8.7-84: PEC_{soil} for IM-1-5 on Oilseed rape (winter), 1x60 g a.s./ha, BBCH 11, annual ^{biennial}

PEC _{soil} (mg/kg)		Oilseed rape (winter)	
		Single application	
		Actual	TWA
Initial		0.009	-
Short term	24h	0.009	0.009
	2d	0.008	0.009
	4d	0.008	0.008
Long term	7d	0.008	0.008
	14d	0.008	0.008
	21d	0.008	0.008
	28d	0.008	0.008
	50d	0.008	0.008
	100d	0.008	0.008
Plateau concentration (20 cm) after year 46		0.003	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.012	-

Table 8.7-85: PEC_{soil} for IM-1-5 on Sugar beet, 2x50 g a.s./ha, BBCH 12, biennial and triennial (note that annual application has been assumed in calculations as representing worst case and covering the intended use pattern)

PEC _{soil} (mg/kg)		Sugar beet	
		Multiple applications	
		Actual	TWA
Initial		0.019	-
Short term	24h	0.019	0.019
	2d	0.019	0.019
	4d	0.019	0.019
Long term	7d	0.019	0.019
	14d	0.019	0.019
	21d	0.019	0.019
	28d	0.019	0.019
	50d	0.018	0.019
	100d	0.018	0.018
Plateau concentration (20 cm) after year 63		0.004	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		0.023	-

Table 8.7-86: PEC_{soil} for IM-1-5 on Onions (flower bulbs and flower tubers), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Onions	
		Single application	
		Actual	TWA
Initial		0.010	-
Short term	24h	0.010	0.010
	2d	0.010	0.010
	4d	0.010	0.010
Long term	7d	0.010	0.010
	14d	0.010	0.010
	21d	0.010	0.010
	28d	0.010	0.010
	50d	0.009	0.010
	100d	0.009	0.009
Plateau concentration (20 cm) after year 26		0.008	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		0.018	-

Table 8.7-87: PEC_{soil} for IM-1-5 on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 20, annual

PEC _{soil} (mg/kg)		Onions	
		Multiple applications	
		Actual	TWA
Initial		0.012	-
Short term	24h	0.012	0.012
	2d	0.012	0.012
	4d	0.012	0.012
Long term	7d	0.012	0.012
	14d	0.012	0.012
	21d	0.012	0.012
	28d	0.012	0.012
	50d	0.012	0.012
	100d	0.011	0.012
Plateau concentration (20 cm) after year 26		0.010	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil} plateau (20 cm))		0.023	-

Table 8.7-88: PEC_{soil} for IM-1-5 on Onions (flower bulbs and flower tubers), 2x34 g a.s./ha, BBCH 12, annual ~~and biennial~~

PEC _{soil} (mg/kg)		Onions	
		Multiple applications	
		Actual	TWA
Initial		0.014	-
Short term	24h	0.014	0.014
	2d	0.014	0.014
	4d	0.014	0.014
Long term	7d	0.014	0.014
	14d	0.014	0.014
	21d	0.014	0.014
	28d	0.014	0.014
	50d	0.014	0.014
	100d	0.013	0.014
Plateau concentration (20 cm) after year 46		0.006	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.020	-

Table 8.7-89: PEC_{soil} for IM-1-5 on Cabbage (floriculture crops, perennial nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Cabbage	
		Single application	
		Actual	TWA
Initial		0.008	-
Short term	24h	0.008	0.008
	2d	0.008	0.008
	4d	0.008	0.008
Long term	7d	0.008	0.008
	14d	0.008	0.008
	21d	0.008	0.008
	28d	0.008	0.008
	50d	0.008	0.008
	100d	0.008	0.008
Plateau concentration (20 cm) after year 26		0.007	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.015	-

Table 8.7-90: PEC_{soil} for IM-1-5 on Cabbage (floriculture crops, perennial nursery crops), 2x34 g a.s./ha, BBCH 12, annual ~~and biennial~~

PEC _{soil} (mg/kg)		Cabbage	
		Multiple applications	
		Actual	TWA
Initial		0.012	-
Short term	24h	0.012	0.012
	2d	0.012	0.012
	4d	0.012	0.012
Long term	7d	0.012	0.012
	14d	0.012	0.012
	21d	0.012	0.012
	28d	0.012	0.012
	50d	0.012	0.012
	100d	0.011	0.012
Plateau concentration (20 cm) after year 46		0.010 (annual) 0.005 (biennial)	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (20 cm))		0.023 (annual) 0.017 (biennial)	-

Table 8.7-91: PEC_{soil} for IM-1-5 on Pome fruit (tree nursery crops), 1x46 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Single application	
		Actual	TWA
Initial		0.004	-
Short term	24h	0.004	0.004
	2d	0.004	0.004
	4d	0.004	0.004
Long term	7d	0.004	0.004
	14d	0.004	0.004
	21d	0.004	0.004
	28d	0.004	0.004
	50d	0.004	0.004
	100d	0.004	0.004
Plateau concentration (5 cm) after year 26		0.015	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		0.019	-

Table 8.7-92: PEC_{soil} for IM-1-5 on Pome fruit (tree nursery crops), 2x34 g a.s./ha, BBCH 12, annual

PEC _{soil} (mg/kg)		Pome fruit	
		Multiple applications	
		Actual	TWA
Initial		0.006	-
Short term	24h	0.006	0.006
	2d	0.006	0.006
	4d	0.006	0.006
Long term	7d	0.006	0.006
	14d	0.006	0.006
	21d	0.006	0.006
	28d	0.006	0.006
	50d	0.006	0.006
	100d	0.006	0.006
Plateau concentration (5 cm) after year 26		0.022	-
PEC _{accumulation} (PEC _{act} (5 cm) + PEC _{soil plateau} (5 cm))		0.029	-

zRMS comments:

Input parameters for acetamiprid and its metabolites presented in Table 8.7-2 are in line with EU agreed endpoints reported in EFSA Journal 2016;14(11):4610.

The use pattern presented in Table 8.7-1 is in general in line with the GAP table presented in point 8.1 with following exception and remarks:

- For application to apples (uses No. 4, 6, 9, 11, 13, 15). lower application rate of 60 g a.s./ha is presented in the GAP table. Since calculations presented in Table 8.7-4 were performed for higher application rate (1 x 80 g a.s./ha) thus it covers rate of 60 g a.s./ha and additional calculation is not necessary.
- For application to spring cereals for uses No. 24, 28, 31 single annual application rate of 35 g a.s./ha and at BBCH stage of 20-29 is presented in the GAP table, with crop interception of 20 %, thus respective changes were introduced to the Table 8.7-1. Calculation presented in Table 8.7-8 were performed for single application rate of 35 g a.s./ha and BBCH stage of 12-29, where crop interception of 0% was considered, since this presents a worse case, additional calculation for uses No. 24, 28, 31 are not necessary.
- For application to spring cereals for use No. 26 double application rate (2 x 35 g a.s./ha) at BBCH stage of 12-29 (1st application) and 40-69 (2nd application) is presented in the GAP table, thus respective changes were introduced to the Table 8.7-1. Since presented in Table 8.7-8 PEC_{soil} values correspond to single application, zRMS performed additional calculation for multiple application and add obtained PEC_{soil} values to the Table 8.7-8.
- For application to winter cereals (use No. 40) lower application rate of 29 g a.s./ha is presented in the GAP

table. Since calculations presented in Table 8.7-10 were performed for higher application rate (1 x 30 g a.s./ha) thus it covers rate of 29 g a.s./ha and additional calculation is not necessary.

- For application to winter oilseed rape (uses No. 44, 52, 59, 61, 65) lower application rate of 48 g a.s./ha is presented in the GAP table. Since calculations presented in Table 8.7- 12 were performed for higher application rate (1 x 60 g a.s./ha) thus it covers rate of 48 g a.s./ha and additional calculation is not necessary.
- For application to winter oilseed rape (uses No. 45 and 60) lower application rate of 40 g a.s./ha is presented in the GAP table. Since calculations presented in Table 8.7-12 were performed for higher application rate (1 x 60 g a.s./ha) thus it covers rate of 40 g a.s./ha and additional calculation is not necessary.
- For application to sugar beet (uses No. 80-84) presented calculations refer only to double application at rate 2 x 50 g a.s./ha. It is noted that in the GAP table uses of single application at rate of 50 g a.s./ha is also presented for uses No. 80, 81b, 83b, 84. Since calculations performed for double application (2 x 50 g a.s./ha) covers single application (1x 50 g a.s./ha) additional calculation is not necessary.
- For application to flower bulbs and flower tubers (use No. 87) single application at rate of 34 g a.s./ha is presented in the GAP table. Since calculations were performed for double application (2 x 34 g a.s./ha) it covers rate of single application (1x 34 g a.s./ha), and additional calculation is not necessary.
- For application to floriculture crops, perennial nursery crops (use No. 90) single application at rate of 34 g a.s./ha is presented in the GAP table. Since calculations were performed for double application (2 x 34 g a.s./ha) it covers rate of single application (1x 34 g a.s./ha), and additional calculation is not necessary.

The soil exposure for acetamiprid and its metabolites has been independently validated by the zRMS using FOCUS methods using EU agreed endpoints and the pseudo-application rates of metabolites derived with consideration of the parent rate, molar ratio and peak occurrence in soil.

The calculated PEC_{SOIL} values were similar to those obtained by the Applicant, and therefore results reported in tables above may be used for the soil risk assessment purposes.

The new calculation for acetamiprid were required by ecotox expert for the evaluation of the soil risk assessment for following uses: pome fruit, 1x60 g a.s./ha at BBCH 71; oilseed rape (winter), 1x48 g a.s./ha at BBCH 11; sugar beet, 1x50 g a.s./ha at BBCH 12; and floriculture crops, perennial nursery crops, 1x34 g a.s./ha at BBCH 12. The PEC_{SOIL} results are presented in the table below. The PEC_{SOIL,ACCU} was not required as DT₅₀ is below 100 days. The short- and long-term PEC_{SOIL} values are not reported below as they are not necessary for the risk assessment purposes. Only 21 TWA PEC_{SOIL} is provided as being required for evaluation of the risk of secondary poisoning for birds and mammals.

PECs (mg/kg)	Pome fruit, 1x60 g a.s./ha, BBCH 71, annual	Oilseed rape (winter), 1x48 g a.s./ha, BBCH 11, annual	Sugar beet, 1x50 g a.s./ha, BBCH 12, biennial*	floriculture crops, perennial nursery crops), 1x34 g a.s./ha, BBCH 12, annual
Initial	0.028	0.038	0.053	0.034
21-d TWA	0.017	0.023	0.032	0.020

* note that annual application has been assumed in calculations as representing worst case and covering the intended use pattern

8.7.2.2 PEC_{soil} of ADM.00150.I.2.A / LEAXO

Table 8.7-93: PEC_{soil} for ADM.00150.I.2.A / LEAXO on various crops

Crop	Application rate ^{a)}	Interception (%) ^{b)}	PEC _{act} (mg/kg)
Corn	0.3 L/ha = 0.341 kg/ha	75	0.114
Apple	0.125 L/ha = 0.142 kg/ha	60	0.076
	0.3 L/ha = 0.341 kg/ha	65	0.159
	0.4 L/ha = 0.454 kg/ha		0.212
Potato	0.18 L/ha = 0.204 kg/ha	15	0.232
Spring cereals	0.175 L/ha = 0.199 kg/ha	0	0.265
Winter cereals	0.15 L/ha = 0.170 kg/ha	0	0.227
	0.18 L/ha = 0.204 kg/ha	90	0.027
Winter and spring oilseed rape	0.3 L/ha = 0.341 kg/ha	40	0.273
Winter oilseed rape	0.240 L/ha = 0.273 kg/ha		0.218
Sugar beet	0.25 L/ha = 0.284 kg/ha	20	0.303

Crop	Application rate ^{a)}	Interception (%) ^{b)}	PEC _{act} (mg/kg)
Flower bulbs, flower tubers, floriculture, tree nursery and perennial nursery crops	0.17 L/ha = 0.193 kg/ha	10	0.232
	0.23 L/ha = 0.261 kg/ha	10	0.314

^{a)} The application rate of the formulation was calculated based on a product density of 1.1361 g/mL and the maximum single application rate for each crop.

^{b)} For each use pattern, the minimal relevant crop interception was considered in the PEC_{soil} calculations.

zRMS comments:

Soil exposure for the formulated product for the various crops were recalculated by the zRMS and the same PEC_{soil} were obtained, for this reason PEC_{soil} as reported in table above are considered relevant for the soil risk assessment. Some minor changes were introduced to the Table 8.7-93.

8.8 Predicted Environmental Concentrations in groundwater (PEC_{gw}) (KCP 9.2.4)

8.8.1 Justification for new endpoints

For estimation of the PEC in groundwater (PEC_{gw}) of acetamiprid and its metabolites, no new endpoints were defined. PEC_{gw} have been assessed with FOCUS groundwater models and the endpoints as proposed in the EFSA conclusion of acetamiprid (EFSA Journal 2016;14(11):4610).

8.8.2 Active substance and relevant metabolites (KCP 9.2.4.1)

The use patterns and risk envelopes used for the calculations are presented in the table below. Please note: Since the Tier 2 calculations were not accepted by the zRMS, several use patterns had to be modified to obtain Tier 2 PEC_{gw} < 0.1 µg/L. However, this was only done if the FOCUS scenarios showing exceedance of 0.1 µg/L is relevant for the country for which the use is intended. The following scenarios are considered relevant for the respective country:

- Central European Zone in general: Châteaudun, Hamburg, Kremsmünster, Okehampton, Piacenza and Porto
- Czech Republic: Hamburg, Kremsmünster
- Germany: Hamburg
- Hungary: Châteaudun, Hamburg, Kremsmünster, Okehampton, Piacenza
- Netherlands: Kremsmünster. Please note: Uses only intended for the Netherlands were not modified since the Netherlands have their own specific PEC_{gw} calculations presented in the national addendum.
- Poland: Châteaudun, Hamburg, Kremsmünster
- Slovakia: Châteaudun, Hamburg, Kremsmünster
- Slovenia: Châteaudun, Hamburg, Kremsmünster, Okehampton

Table 8.8-1: Input parameters related to application for PEC_{gw} calculations

[illegible]

<u>Agricultural use pattern of acetamiprid continued</u>								
Use No.	32, 34, 36, 39	33, 35, 37, 38, 40	40	41-43, 46-51, 53-58, 62-64, 66-79	44, 45 ^{e)} , 52, 59, 60 ^{e)} , 61, 65	80, 81a, 82, 83a, 84	80, 81b, 83b, 84	85 ^{f)}
Crop in GAP	Winter wheat, winter barley, winter rye, winter triticale, winter oat, spelt	Winter wheat, winter barley, winter rye, winter triticale, winter oat, spelt	Winter wheat, winter barley, winter rye, winter triticale	Winter oilseed rape and spring oilseed rape	Winter oilseed rape	Sugar beet	Sugar beet	Flower bulbs and flower tubers
FOCUS _{gw} Crop	Winter cereals	Winter cereals	Winter cereals	Oilseed rape winter, oilseed rape spring	Oilseed rape winter	Sugar beet	Sugar beet	Onions (potato) ^{e)}
BBCH	40-69 (spring)	12-29 (autumn)	12-29 (autumn)	31-71	11-19	12-39	12-39	12-91
Application rate (g a.s./ha)	36	30	29	60	60 48 ^{e)}	50	50	46
Number of applications / interval (d)	2 / 10	1 / 0	1 / 0	2 / 7	1 / 0	2 / 7	1 / -	1 / 0
Crop interception (%)	90	0	0	80	40	20	20	10
Soil load rate (g a.s./ha)	3.6	30	29	12	36 28.8	40	40	41.4
Frequency of application	annual	annual	annual	annual	biennial annual	triennial	biennial	annual
Application type	To the soil surface							
Models used for calculation	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, FOCUS MACRO v5.5.4							

Agricultural use pattern of acetamiprid continued								
Use No.	86 ^{f)}	87	88 ^{f)}	89 ^{f)}	90	88 ^{f)}	89 ^{f)} , 90	90
Crop	Flower bulbs and flower tubers	Flower bulbs and flower tubers	Floriculture, perennial nursery crops	Floriculture, perennial nursery crops	Floriculture, perennial nursery crops	Tree nursery	Tree nursery	Tree nursery
FOCUS _{gw} Crop	Onions (potato) ^{e)}	Onions (potato) ^{e)}	Cabbage (potato) ^{e)}	Cabbage (potato) ^{e)}	Cabbage (potato) ^{e)}	Pome fruit (MACRO), apples (PEARL, PELMO)	Pome fruit (MACRO), apples (PEARL, PELMO)	Pome fruit (MACRO), apples (PEARL, PELMO)
BBCH	20-91	12-91	12-91	12-91	12-91	12-91	12-91	12-91
Application rate (g a.s./ha)	34	34	46	34	34	46	34	34
Number of applications / interval (d)	2 / 7	2 / 7 1 / -	1 / 0	2 / 7	2 / 7 1 / -	1 / 0	2 / 7	1 / -
Crop interception (%)	25	10	25	25	25	60	60	60
Soil load rate (g a.s./ha)	25.5	30.6	34.5	25.5	25.5	18.4	13.6	13.6
Frequency of application	annual	biennial annual	annual	annual	biennial annual	annual	annual	annual
Application type	To the soil surface							
Models used for calculation	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, FOCUS MACRO v5.5.4							

- a) PHI = Pre-Harvest Interval.
b) 1 application at BBCH 12-29 followed by 1 application at BBCH 40-69
c) Also covering lower application rates (application rate of 40 g a.s./ha for uses No. 45 and 60) based on a risk envelope.
d) Early appl. scenario from BBCH 62 onwards: 60% interception; late appl. scenario until PHI: 65% interception.
e) In brackets: Surrogate crop used for those FOCUS scenarios not defined for the main crop but relevant for the central zone.
f) NL specific use only, only presented in the core dossier for the sake of completeness.

Application dates for modelling were selected with AppDate v3.06 (see table below) based on the earliest possible BBCH stage. For potatoes, calculations were additionally done for the latest possible BBCH stage since the GAP foresees a very wide BBCH range.

The relevant scenarios for the central European zone are Châteaudun, Hamburg, Kremsmünster, Okehampton, Piacenza and Porto. Wherever one of these scenarios was not defined for the relevant crop, a surrogate crop was chosen for this scenario as requested by zRMS Poland. Application dates were determined with AppDate v3.06 based on this surrogate crop if possible. Interception values for the calculations were only selected based on the main crop, i.e., not based on the surrogate crop for individual scenarios.

Table 8.8-2: Application dates used for groundwater risk assessment

Crop	Scenario	Application dates (absolute)	
		1 st application	2 nd application
Maize 1x60 g a.s./ha BBCH 51	Châteaudun	15-Jul (196) ^{a)}	-
	Hamburg	5-Jul	-
	Kremsmünster	5-Jul	-
	Okehampton	30-Jun	-
	Piacenza	8-Jul	-
	Porto	15-Jul	-
	Sevilla	16-May	-
	Thiva	30-May	-

Crop	Scenario	Application dates (absolute)	
		1 st application	2 nd application
Pome fruit 1x80 g a.s./ha 1x60 g a.s./ha BBCH 71	Châteaudun	6-Jun (157) ^{a)}	-
	Hamburg	7-Jul	-
	Jokioinen	1-Jun	-
	Kremsmünster	7-Jul	-
	Okehampton	20-Jun	-
	Piacenza	8-Jun	-
	Porto	6-Jul	-
	Sevilla	7-Jun	-
	Thiva	6-Jul	-
Pome fruit 2x25 g a.s./ha early application BBCH 62	Châteaudun	19-May (139) ^{a)}	27-May (147) ^{a)}
	Hamburg	16-Jun	24-Jun
	Jokioinen	22-May	30-May
	Kremsmünster	16-Jun	24-Jun
	Okehampton	30-May	7-Jun
	Piacenza	19-May	27-May
	Porto	9-Jun	17-Jun
	Sevilla	16-May	24-May
	Thiva	9-Jun	17-Jun
Pome fruit 2x25 g a.s./ha late application pre-harvest	Châteaudun	9-Sep (252) ^{a)}	17-Sep (260) ^{a)}
	Hamburg	8-Oct	16-Oct
	Jokioinen	23-Sep	1-Oct
	Kremsmünster	8-Oct	16-Oct
	Okehampton	24-Aug	1-Sep
	Piacenza	10-Oct	18-Oct
	Porto	9-Oct	17-Oct
	Sevilla	23-Sep	1-Oct
	Thiva	28-Sep	6-Oct
Potato 1x36 g a.s./ha BBCH 12	Châteaudun	3-May (123) ^{a)}	-
	Hamburg	15-May	-
	Jokioinen	10-Jun	-
	Kremsmünster	15-May	-
	Okehampton	5-May	-
	Piacenza	23-Apr	-
	Porto	20-Mar	-
	Sevilla	4-Feb	-
	Thiva	5-Mar	-
Potato 1x36 g a.s./ha BBCH 79	Châteaudun	3-Aug (215) ^{a)}	-
	Hamburg	25-Aug	-
	Jokioinen	15-Sep	-
	Kremsmünster	25-Aug	-
	Okehampton	14-Aug	-
	Piacenza	04-Aug	-
	Porto	09-Jun	-
	Sevilla	09-May	-
	Thiva	27-Jun	-

Crop	Scenario	Application dates (absolute)	
		1 st application	2 nd application
Spring cereals (winter cereals as surrogate for Piac.) 2x35 g a.s./ha BBCH 40 ^{b)}	Châteaudun	6-May (126) ^{a)}	16-May (136) ^{a)}
	Hamburg	12-May	22-May
	Jokioinen	14-Jun	24-Jun
	Kremsmünster	11-May	21-May
	Okehampton	3-May	13-May
	Piacenza (winter cereals)	07-Apr	17-Apr
	Porto	6-May	16-May
Spring cereals (winter cereals as surrogate for Piac.) 2x35 g a.s./ha 1 st appl.: BBCH 12 2 nd appl.: BBCH 40 ^{b)}	Châteaudun	15-Mar (74) ^{a)}	6-May (126) ^{a)}
	Hamburg	5-Apr	12-May
	Jokioinen	21-May	14-Jun
	Kremsmünster	5-Apr	11-May
	Okehampton	4-Apr	3-May
	Piacenza	15-Mar ^{d)}	07-Apr
	Porto	15-Mar	6-May
Spring cereals (winter cereals as surrogate for Piac.) 1x35 g a.s./ha BBCH 20	Châteaudun	29-Mar (88) ^{a)}	-
	Hamburg	15-Apr	-
	Jokioinen	27-May	-
	Kremsmünster	15-Apr	-
	Okehampton	12-Apr	-
	Piacenza	29-Mar ^{d)}	-
	Porto	29-Mar	-
Winter cereals 2x36 g a.s./ha BBCH 40 ^{b)}	Châteaudun	2-May (122) ^{a)}	12-May (132) ^{a)}
	Hamburg	14-May	24-May
	Jokioinen	29-May	8-Jun
	Kremsmünster	9-May	19-May
	Okehampton	30-Apr	10-May
	Piacenza	7-Apr	17-Apr
	Porto	4-Mar	14-Mar
	Sevilla	25-Jan	4-Feb
	Thiva	13-Feb	23-Feb
Winter cereals 1x30 g a.s./ha or 1x29 g a.s./ha BBCH 12	Châteaudun	30-Oct (303) ^{a)}	-
	Hamburg	5-Nov	-
	Jokioinen	24-Sep	-
	Kremsmünster	9-Nov	-
	Okehampton	21-Oct	-
	Piacenza	5-Dec	-
	Porto	7-Dec	-
	Sevilla	5-Dec	-
	Thiva	6-Dec	-
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31	Châteaudun	13-Mar (72) ^{a)}	20-Mar (79) ^{a)}
	Hamburg	19-Apr	26-Apr
	Kremsmünster	16-Apr	23-Apr
	Okehampton	10-Apr	17-Apr
	Piacenza	9-Mar	16-Mar
	Porto	4-Jan	11-Jan

Crop	Scenario	Application dates (absolute)	
		1 st application	2 nd application
Oilseed rape (spring) (Oilseed rape, winter as surrogate for Chât., Hamb, Krems., Piac.) 2x60 g a.s./ha BBCH 31	Châteaudun	13-Mar (72) ^{a)}	20-Mar (79) ^{a)}
	Hamburg	19-Apr	26-Apr
	Jokioinen	14-Jun	21-Jun
	Kremsmünster	16-Apr	23-Apr
	Okehampton	24-Apr	1-May
	Piacenza	09-Mar	16-Mar
	Porto	28-Apr	5-May
Oilseed rape (winter) 1x60 g a.s./ha 1x48 g a.s./ha BBCH 11	Châteaudun	9-Sep (252) ^{a)}	-
	Hamburg	4-Sep	-
	Kremsmünster	4-Sep	-
	Okehampton	16-Aug	-
	Piacenza	7-Oct	-
	Porto	14-Sep	-
Sugar beet 2x50 g a.s./ha BBCH 12	Châteaudun	26-Apr (116) ^{a)}	3-May (123) ^{a)}
	Hamburg	30-Apr	7-May
	Jokioinen	3-Jun	10-Jun
	Kremsmünster	30-Apr	7-May
	Okehampton	9-May	16-May
	Piacenza	2-Apr	9-Apr
	Porto	21-Mar	28-Mar
	Sevilla	27-Nov	4-Dec
	Thiva	8-May	15-May
Sugar beet 1x50 g a.s./ha BBCH 12	Châteaudun	26-Apr (116) ^{a)}	-
	Hamburg	30-Apr	-
	Jokioinen	3-Jun	-
	Kremsmünster	30-Apr	-
	Okehampton	9-May	-
	Piacenza	2-Apr	-
	Porto	21-Mar	-
	Sevilla	27-Nov	-
	Thiva	8-May	-
Onions / potatoes (flower bulbs and flower tubers) 1x46 g a.s./ha BBCH 12	Châteaudun	9-May (129) ^{a)}	-
	Hamburg	9-May	-
	Jokioinen	28-May	-
	Kremsmünster	9-May	-
	Okehampton (potatoes)	05-May	-
	Piacenza (potatoes)	23-Apr	-
	Porto	16-Mar	-
	Thiva	24-Apr	-
Onions / potatoes (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20 ^{e)}	Châteaudun	24-Jun (175) ^{a)}	1-Jul (182) ^{a)}
	Hamburg	24-Jun	1-Jul
	Jokioinen	22-Jun	29-Jun
	Kremsmünster	24-Jun	1-Jul
	Okehampton (potatoes)	18-May	25-May
	Piacenza (potatoes)	30-Apr	07-May
	Porto	8-May	15-May
	Sevilla	-	-
	Thiva	9-Jun	16-Jun

Crop	Scenario	Application dates (absolute)	
		1 st application	2 nd application
Onions / potatoes (flower bulbs and flower tubers) 2x34 g a.s./ha 1x34 g a.s./ha BBCH 12	Châteaudun	9-May (129) ^{a)}	16-May (136)^{a)}
	Hamburg	9-May	16-May
	Jokioinen	28-May	4-Jun
	Kremsmünster	9-May	16-May
	Okehampton (potatoes)	05-May	12-May
	Piacenza (potatoes)	23-Apr	30-Apr
	Porto	16-Mar	23-Mar
	Thiva	24-Apr	1-May
Cabbage (1 st) / potatoes (floriculture & perennial nursery crops) 1x46 g a.s./ha BBCH 12	Châteaudun	29-Apr (119) ^{a)}	-
	Hamburg	29-Apr	-
	Jokioinen	11-Jun	-
	Kremsmünster	29-Apr	-
	Okehampton (potatoes)	05-May	
	Piacenza (potatoes)	23-Apr	-
	Porto	16-Mar	-
	Sevilla	14-Mar	-
Cabbage (1 st) / potatoes (floriculture & perennial nursery crops) 2x34 g a.s./ha BBCH 12	Châteaudun	29-Apr (119) ^{a)}	6-May (126) ^{a)}
	Hamburg	29-Apr	6-May
	Jokioinen	11-Jun	18-Jun
	Kremsmünster	29-Apr	6-May
	Okehampton (potatoes)	05-May	12-May
	Piacenza (potatoes)	23-Apr	30-Apr
	Porto	16-Mar	23-Mar
	Sevilla	14-Mar	21-Mar
Cabbage (1 st) / potatoes (floriculture & perennial nursery crops) 1x34 g a.s./ha BBCH 12	Châteaudun	29-Apr (119) ^{a)}	-
	Hamburg	29-Apr	-
	Jokioinen	11-Jun	-
	Kremsmünster	29-Apr	-
	Okehampton (potatoes)	05-May	-
	Piacenza (potatoes)	23-Apr	-
	Porto	16-Mar	-
	Sevilla	14-Mar	-
Pome fruit (tree nursery) 1x46 g a.s./ha BBCH 12	Châteaudun	3-Apr (93) ^{a)}	-
	Hamburg	18-Apr	-
	Jokioinen	11-May	-
	Kremsmünster	18-Apr	-
	Okehampton	28-Mar	-
	Piacenza	3-Apr	-
	Porto	19-Mar	-
	Sevilla	18-Mar	-
	Thiva	19-Mar	-

Crop	Scenario	Application dates (absolute)	
		1 st application	2 nd application
Pome fruit (tree nursery) 2x34 g a.s./ha BBCH 12	Châteaudun	3-Apr (93) ^{a)}	10-Apr (100) ^{a)}
	Hamburg	18-Apr	25-Apr
	Jokioinen	11-May	18-May
	Kremsmünster	18-Apr	25-Apr
	Okehampton	28-Mar	4-Apr
	Piacenza	3-Apr	10-Apr
	Porto	19-Mar	26-Mar
	Sevilla	18-Mar	25-Mar
	Thiva	19-Mar	26-Mar
Pome fruit (tree nursery) 1x34 g a.s./ha BBCH 12	Châteaudun	3-Apr (93) ^{a)}	-
	Hamburg	18-Apr	-
	Jokioinen	11-May	-
	Kremsmünster	18-Apr	-
	Okehampton	28-Mar	-
	Piacenza	3-Apr	-
	Porto	19-Mar	-
	Sevilla	18-Mar	-
	Thiva	19-Mar	-

- a) Julian day as input for MACRO.
b) For spring and winter cereals, the date at BBCH 41 was set as date of the 1st application since BBCH 40 is not defined in AppDate (v3.06).
c) For onions at BBCH 20, the date at BBCH 19 was set as date of the 1st application since in AppDate (v3.06) onions are only defined until BBCH 19 and from BBCH 41 onwards.
d) The application date was set to the date of Porto as determined with AppDate for spring cereals. The AppDate date for winter cereals at BBCH 12 or 20 would be in autumn and thus does not fit to the intended spring application.

zRMS comments:

The application pattern presented in Table 8.8-1 assumed in simulations is in general in line with the critical Central Zone GAP presented in Table 8.1-1, with following exception and remarks:

- For application to spring cereals for uses No. 24, 28, 31 single annual application rate of 35 g a.s./ha and at BBCH stage of 20-29 is presented in the GAP table, thus respective changes were introduced to the Table 8.8-1.
- For application to spring cereals for use No. 26 double application rate (2 x 35 g a.s./ha) with 1st application at BBCH stage of 12-29 and 2nd application at BBCH stage of 40-69 is presented in the GAP table, thus respective changes were introduced to the Table 8.8-1.
- For application to winter oilseed rape (uses No. 45 and 60) lower application rate of 40 g a.s./ha is presented in the GAP table. Since calculations were performed for higher application rate (1 x 48 g a.s./ha) thus, it covers rate of 40 g a.s./ha and additional calculations are not necessary.

Crop interception assumed for all crops corresponds with BBCH stages at which product is intended to be applied. Absolute application dates presented in Table 8.8-2 were checked by the zRMS using AppDate ver. 3.06 tool and are considered acceptable.

Since not all relevant to the central zone scenarios are defined for the evaluated crops, the following surrogate crops were considered by the Applicant in simulations:

- Winter cereals was used as a surrogate crop for spring cereals for missing scenario Piacenza
- Winter oilseed rape was used as a surrogate crop for spring oilseed rape for missing scenarios Châteaudun, Hamburg, Kremsmünster and Piacenza
- Onions and potatoes were used as surrogate crop for flower bulbs and flower tubers for all relevant scenarios to the central zone.
- Cabbage and potatoes were used as surrogate crop for floriculture & perennial nursery crops for all relevant scenarios to the Central Zone.

8.8.2.1 Acetamiprid and its metabolites

Table 8.8-3: Input parameters related to active substance acetamiprid and its relevant metabolites for PEC_{gw} calculations

Compound	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5	Value in accordance with EU endpoint / Reference
Molecular weight (g/mol)	222.68	240.69	156.61	157.55	197.66	Yes / EFSA, 2016
Water solubility (g/mol)	2950 (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	Yes / EFSA, 2016
Saturated vapour pressure (Pa)	1 x 10 ⁻⁶ (20°C)	1 x 10 ⁻⁸ (20°C)	1 x 10 ⁻⁸ (20°C)	1 x 10 ⁻⁸ (20°C)	1 x 10 ⁻⁸ (20°C)	Yes / EFSA, 2016
DT ₅₀ in soil (d)	1.45 (geometric mean, lab, n = 7, normalised to pF2, 20°C, Q ₁₀ of 2.58)	1.7 (geometric mean, lab, n = 3, normalised to pF2, 20°C, Q ₁₀ of 2.58)	14.6 (geometric mean, lab, n = 7, normalised to pF2, 20°C, Q ₁₀ of 2.58)	2.7 (geometric mean, lab, n = 7, normalised to pF2, 20°C, Q ₁₀ of 2.58)	495 (geometric mean, lab, n = 7, normalised to pF2, 20°C, Q ₁₀ of 2.58)	Yes / EFSA, 2016
K _{foc} / K _{fom} ^{a)} (mL/g)	106.5 / 61.8 (arithmetic mean, n = 5)	54 / 31.3 (arithmetic mean, n = 4)	171 / 99.2 (arithmetic mean, n = 4)	122 / 70.8 (arithmetic mean, n = 5)	325 / 189 (arithmetic mean, n = 4)	Yes / EFSA, 2016
1/n	0.860 (arithmetic mean, n = 5)	0.903 (arithmetic mean, n = 4)	0.764 (arithmetic mean, n = 4)	0.953 (arithmetic mean, n = 5)	0.886 (arithmetic mean, n = 4)	Yes / EFSA, 2016
Plant uptake factor	0	0	0	0	Tier 1: 0 Tier 2: 0.5	Yes / EFSA, 2016
Formation fraction	-	0.77 (from parent)	0.72 (from IM-1-2)	0.67 (from IM-1-4)	0.15 (from parent)	Yes / EFSA, 2016
Conversion factor for MACRO	-	0.832	0.390	0.263	0.133	Calculated ^{b)}

^{a)} Calculated with $K_{fom} = K_{foc} / 1.724$.

^{b)} Calculated as: Formation fraction x MolarMassMetabolite / MolarMassParent

Since MACRO can only handle one metabolite, it was assumed that all metabolites are directly formed from the parent.

Table 8.8-4: PEC_{GW} for acetamiprid and its metabolites IM-1-2, IM-1-4, IC-0 and IM-1-5 following application of acetamiprid on various crops (with FOCUS PEARL v5.5.5)

FOCUS PEARL		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 1-3: Maize 1x60 g a.s./ha BBCH 51 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.021	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.036	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.026	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.041	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.036	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.019	- ^{a)}
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- ^{a)}
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.015	- ^{a)}

FOCUS PEARL		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 4, 6, 9, 11, 13, 15: Pome fruit 1x80 g a.s./ha BBCH 71 (annual)	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.136	0.080
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.137	0.088
	Jokioinen	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.091	0.062
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.099	0.077
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.129	0.068
	Porto	<0.001	<0.001	<0.001	<0.001	0.058	0.044
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.114	0.052
	Thiva	<0.001	<0.001	<0.001	<0.001	0.163	0.075
Use no. 4, 6, 9, 11, 13, 15: Pome fruit 1x60 g a.s./ha BBCH 71 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.093	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.094	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.062	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.069	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.089	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.040	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.078	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.113	- a)
Use no. 5, 7, 8, 10, 12, 14, 16: Pome fruit 2x25 g a.s./ha early application BBCH 62 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.087	0.051
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.088	0.057
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.058	0.040
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.064	0.050
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.082	0.044
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.036	0.028
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.073	0.033
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.104	0.048
Use no. 5, 7, 8, 10, 12, 14, 16: Pome fruit 2x25 g a.s./ha late application pre-harvest (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.074	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.076	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.048	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.057	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.075	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.033	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.060	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.091	- a)
Use no. 17-22: Potato 1x36 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.040	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.070	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.056	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.084	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.065	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.038	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.002	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.021	- a)

FOCUS PEARL		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 17-22: Potato 1x36 g a.s./ha BBCH 79 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.002	– ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.006	– ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	– ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.004	– ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.008	– ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.007	– ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.003	– ^{a)}
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	– ^{a)}
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.001	– ^{a)}
Use no. 23, 25, 27, 29, 30: Spring cereals (Winter cereals as surrogate for Piac.) 2x35 g a.s./ha BBCH 40 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	– ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.014	– ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	– ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.009	– ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.013	– ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.009	– ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.006	– ^{a)}
Use no. 26*: Spring cereals (Winter cereals as surrogate for Piac.) 2x35 g a.s./ha 1 st appl.: BBCH 12 2 nd appl.: BBCH 40 (annual) * <i>NL specific use only</i>	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.018	0.014
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.151	0.106
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.104	0.076
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.130	0.102
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.090	– ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.064	0.052
Spring cereals (Winter cereals as surrogate for Piacenza) 2x35 g a.s./ha 1 st appl.: BBCH 12 2 nd appl.: BBCH 40 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.014	0.011
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.074	0.053
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	0.010	0.008
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.049	0.036
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.058	0.045
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.040	– ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.028	0.023
Use no. 24, 28, 31: Spring cereals (Winter cereals as surrogate for Piacenza) 1x35 g a.s./ha BBCH 20 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.009	– ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.098	– ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	– ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.068	– ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.086	– ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.059	– ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.041	– ^{a)}
Use no. 32, 34, 36, 39: Winter cereals 2x36 g a.s./ha BBCH 40 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.001	– ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.013	– ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	– ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.010	– ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.016	– ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.010	– ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.007	– ^{a)}
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	– ^{a)}
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	– ^{a)}

FOCUS PEARL		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 33, 35, 37, 38: Winter cereals 1x30 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.017	0.013
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.099	0.076
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.072	0.055
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.103	0.082
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.070	0.053
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.056	0.045
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.002	0.001
Use no. 40: Winter cereals 1x29 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.016	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.095	- ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.069	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.099	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.067	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.053	- ^{a)}
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- ^{a)}
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.002	- ^{a)}
Use no. 41-43, 46-51, 53-58, 62-64: Oilseed rape (winter) 2x60 g a.s./ha BBCH 31 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.021	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.076	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.055	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.070	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.037	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.042	- ^{a)}
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.027	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.064	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.044	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.053	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.030	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.033	- ^{a)}
Use no. 44, 45, 52, 59, 60, 61, 65: Oilseed rape (winter) 1x48 g a.s./ha BBCH 11 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.030	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.099	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.071	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.091	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.051	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.056	- ^{a)}
Use no. 66-79: Oilseed rape (spring) (oilseed rape, winter as surrogate for Chât., Hamb., Krems., Piac.) 2x60 g a.s./ha BBCH 31 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.021	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.076	- ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.055	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.065	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.037	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.035	- ^{a)}

FOCUS PEARL		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 81a, 82, 83a: Sugar beet 2x50 g a.s./ha BBCH 12 (triennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.115	0.079
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.098	0.072
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	0.034	0.026
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.071	0.055
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.077	0.064
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.071	0.052
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.052	0.041
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.011	0.006
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.067	0.031
Use no. 80, 81b, 83b, 84: Sugar beet 1x50 g a.s./ha BBCH 12 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.079	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.065	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	0.012	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.045	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.053	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.048	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.035	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.007	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.038	- a)
Use no. 85*: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 1x46 g a.s./ha BBCH 12 (annual) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.040	0.032
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.107	0.090
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.080	0.068
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.123	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.097	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.052	0.048
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.022	0.017
Use no. 86*: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 20 (annual) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.054	0.043
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.143	0.120
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.105	0.091
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.161	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.127	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.067	0.063
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.029	0.023
Use no. 86*: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 20 (biennial) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.032	0.025
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.072	0.060
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	0.010	0.009
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.051	0.043
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.071	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.057	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.028	0.026
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.011	0.009

FOCUS PEARL		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 87: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 12 (biennial)	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.042	— ^{a)}
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.089	— ^{a)}
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.014	— ^{a)}
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.064	— ^{a)}
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.089	— ^{a)}
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.073	— ^{a)}
	Porto	<0.001	<0.001	<0.001	<0.001	0.037	— ^{a)}
	Thiva	<0.001	<0.001	<0.001	<0.001	0.016	— ^{a)}
Use no. 87: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 1x34 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.024	— ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.071	— ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	— ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.053	— ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.084	— ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.065	— ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.035	— ^{a)}
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.013	— ^{a)}
Use no. 88*: Cabbage (1 st) (floriculture & perennial nursery crops) (potatoes as surrogate for Okeh., Piac.) 1x46 g a.s./ha BBCH 12 (annual) <i>* NL specific use only</i>	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.048	— ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.088	— ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	— ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.063	— ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.098	— ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.077	— ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.054	— ^{a)}
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.002	— ^{a)}
Use no. 89*: Cabbage (1 st) (floriculture & perennial nursery crops) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 12 (annual) <i>* NL specific use only</i>	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.027	— ^{a)}
	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.087	0.067
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.148	0.120
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.107	0.089
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.161	— ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.127	— ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.090	0.071
Use no. 90: Cabbage (1 st) (floriculture & perennial nursery crops) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 12 (biennial)	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.005	0.003
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.048	0.039
	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.043	0.033
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.074	0.060
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.014	0.012
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.052	0.042
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.071	— ^{a)}
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.057	— ^{a)}
	Porto	<0.001	<0.001	<0.001	<0.001	0.038	0.030
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.004	0.002
	Thiva	<0.001	<0.001	<0.001	<0.001	0.019	0.015

FOCUS PEARL		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 90: Cabbage (1 st) (floriculture & perennial nursery crops) (potatoes as surrogate for Okeh., Piac.) 1x34 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.030	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.058	- ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.041	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.066	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.051	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.036	- ^{a)}
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.001	- ^{a)}
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.017	- ^{a)}
Use no. 88*: Pome fruit (tree nursery) 1x46 g a.s./ha BBCH 12 (annual) <i>* NL specific use only</i>	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.079	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.078	- ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.052	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.059	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.074	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.033	- ^{a)}
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.067	- ^{a)}
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.093	- ^{a)}
Use no. 89*: Pome fruit (tree nursery) 2x34 g a.s./ha BBCH 12 (annual) <i>* NL specific use only</i>	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.133	0.078
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.131	0.084
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.087	0.059
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.096	0.075
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.123	0.064
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.054	0.041
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.113	0.051
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.154	0.070
Use no. 90: Pome fruit (tree nursery) 1x34 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.052	- ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.053	- ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.034	- ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.040	- ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.049	- ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.022	- ^{a)}
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.045	- ^{a)}
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.062	- ^{a)}

* Bold values are above 0.1 µg/L.

^{a)} Not calculated.

Table 8.8-5: PEC_{gw} for acetamiprid and its metabolites IM-1-2, IM-1-4, IC-0 and IM-1-5 following application of acetamiprid on various crops (with PELMO v6.6.4)

FOCUS PELMO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 1-3: Maize 1x60 g a.s./ha BBCH 51 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.011	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.025	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.021	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.038	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.034	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.019	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.010	- a)
Use no. 4, 6, 9, 11, 13, 15: Pome fruit 1x80 g a.s./ha BBCH 71 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.128	0.073
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.099	0.064
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.082	0.051
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.116	0.082
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.102	0.068
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.062	0.044
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.045	0.014
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.111	0.045
Use no. 4, 6, 9, 11, 13, 15: Pome fruit 1x60 g a.s./ha BBCH 71 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.087	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.065	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.054	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.081	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.071	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.043	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.028	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.074	- a)
Use no. 5, 7, 8, 10, 12, 14, 16: Pome fruit 2x25 g a.s./ha early application BBCH 62 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.082	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.061	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.051	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.076	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.067	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.041	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.026	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.070	- a)
Use no. 5, 7, 8, 10, 12, 14, 16: Pome fruit 2x25 g a.s./ha late application pre-harvest (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.068	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.050	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.042	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.068	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.061	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.037	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.022	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.062	- a)

FOCUS PELMO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 17-22: Potato 1x36 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.026	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.054	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.048	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.086	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.063	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.050	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.020	- a)
Use no. 17-22: Potato 1x36 g a.s./ha BBCH 79 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.001	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.003	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.003	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.008	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.006	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.005	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.001	- a)
Use no. 23, 25, 27, 29, 30: Spring cereals (Winter cereals as surrogate for Piac.) 2x35 g a.s./ha BBCH 40 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.007	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.006	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.013	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.009	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.007	- a)
Use no. 26*: Spring cereals (Winter cereals as sur- rogate for Piac.) 2x35 g a.s./ha 1 st appl.: BBCH 12 2 nd appl.: BBCH 40 (annual) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.006	0.004
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.107	0.076
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.086	0.061
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.125	0.097
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.090	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.073	0.060
Spring cereals (Winter cereals as surrogate for Piac.) 2x35 g a.s./ha 1 st appl.: BBCH 12 2 nd appl.: BBCH 40 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.009	— ^{a)}
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.062	— ^{a)}
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	0.009	— ^{a)}
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.043	— ^{a)}
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.054	— ^{a)}
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.041	— ^{a)}
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.031	— ^{a)}
Use no. 24, 28, 31: Spring cereals (Winter cereals as surrogate for Piacenza) 1x35 g a.s./ha BBCH 20 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.003	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.067	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.053	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.083	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.060	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.048	- a)

FOCUS PELMO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 32, 34, 36, 39: Winter cereals 2x36 g a.s./ha BBCH 40 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.007	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.007	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.014	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.009	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.008	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
Use no. 33, 35, 37, 38: Winter cereals 1x30 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.008 0.003 b)	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.043 0.073 b)	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.032 0.061 b)	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.043 0.098 b)	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.031 0.068 b)	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.030 0.066 b)	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
Use no. 40: Winter cereals 1x29 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.002	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.070	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	s- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.058	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.094	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.065	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.064	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
Use no. 41-43, 46-51, 53-58, 62-64: Oilseed rape (winter) 2x60 g a.s./ha BBCH 31 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.002	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.053	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.046	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.072	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.039	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.055	- a)
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.013	— ²⁷
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.056	— ²⁷
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.040	— ²⁷
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.054	— ²⁷
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.034	— ²⁷
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.043	— ²⁷

FOCUS PELMO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 44, 45, 52, 59, 60, 61, 65: Oilseed rape (winter) 1x48 g a.s./ha BBCH 11 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.004	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.072	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.060	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.093	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.054	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.071	- a)
Use no. 66-79: Oilseed rape (spring) (oilseed rape, winter as surrogate for Chât., Hamb., Krems., Piac.) 2x60 g a.s./ha BBCH 31 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.002	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.053	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.046	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.069	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.039	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.042	- a)
Use no. 81a, 82, 83a: Sugar beet 2x50 g a.s./ha BBCH 12 (triennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.094	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.088	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	0.029	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.068	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.083	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.077	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.062	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.006	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.040	- a)
Use no. 80, 81b, 83b, 84: Sugar beet 1x50 g a.s./ha BBCH 12 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.062	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.059	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	0.010	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.044	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.058	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.049	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.042	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.003	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.024	- a)
Use no. 85*: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 1x46 g a.s./ha BBCH 12 (annual) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.028	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.089	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.072	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.126	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.093	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.069	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.018	- a)
Use no. 86*: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 20 (annual) * NL specific use	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.039	0.027
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.122	0.097
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.097	0.077
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.165	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.122	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.088	0.081
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.026	0.019

FOCUS PELMO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
<i>only</i>							
Use no. 87: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 12 (biennial)	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.024	— ^{a)}
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.067	— ^{a)}
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.011	— ^{a)}
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.052	— ^{a)}
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.090	— ^{a)}
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.067	— ^{a)}
	Porto	<0.001	<0.001	<0.001	<0.001	0.044	— ^{a)}
	Thiva	<0.001	<0.001	<0.001	<0.001	0.008	— ^{a)}
Use no. 87: Onions (flower bulbs and flower tubers) (potatoes as surrogate for Okeh., Piac.) 1x34 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.016	— a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.057	— a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	— a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.048	— a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.086	— a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.063	— a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.047	— a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.011	— a)
Use no. 88*: Cabbage (1 st) (floriculture & perennial nursery crops) (potatoes as surrogate for Okeh., Piac.) 1x46 g a.s./ha BBCH 12 (annual) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.038	— a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.072	— a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	— a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.057	— a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.100	— a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.073	— a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.062	— a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.001	— a)
Use no. 89*: Cabbage (1 st) (floriculture & perennial nursery crops) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 12 (annual) * NL specific use only	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.026	— a)
	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.072	0.049
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.128	0.095
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.098	0.074
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.165	— a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.122	— a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.101	0.077
Use no. 90: Cabbage (1 st) (floriculture & perennial nursery crops) (potatoes as surrogate for Okeh., Piac.) 2x34 g a.s./ha BBCH 12 (biennial)	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.003	0.001
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.049	0.035
	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.038	— ^{a)}
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.077	— ^{a)}
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.013	— ^{a)}
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.053	— ^{a)}
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.072	— ^{a)}
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.053	— ^{a)}
	Porto	<0.001	<0.001	<0.001	<0.001	0.045	— ^{a)}
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.002	— ^{a)}
	Thiva	<0.001	<0.001	<0.001	<0.001	0.018	— ^{a)}

FOCUS PELMO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L) *					
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)	IM-1-5 (Tier 2)
Use no. 90: Cabbage (1 st) (floriculture & perennial nursery crops) (potatoes as surrogate for Okeh., Piac.) 1x34 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.023	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.046	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.036	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.086	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.063	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.042	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.001	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.016	- a)
Use no. 88*: Pome fruit (tree nursery) 1x46 g a.s./ha BBCH 12 (annual) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.075	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.053	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.045	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.070	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.061	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.037	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.025	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.065	- a)
Use no. 89*: Pome fruit (tree nursery) 2x34 g a.s./ha BBCH 12 (annual) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.127	0.072
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.094	0.060
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.079	0.049
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.114	0.080
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.099	0.066
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.061	0.042
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.048	0.015
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.114	0.045
Use no. 90: Pome fruit (tree nursery) 1x34 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.049	- a)
	Hamburg	< 0.001	< 0.001	< 0.001	< 0.001	0.034	- a)
	Jokioinen	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	- a)
	Kremsmünster	< 0.001	< 0.001	< 0.001	< 0.001	0.029	- a)
	Okehampton	< 0.001	< 0.001	< 0.001	< 0.001	0.048	- a)
	Piacenza	< 0.001	< 0.001	< 0.001	< 0.001	0.042	- a)
	Porto	< 0.001	< 0.001	< 0.001	< 0.001	0.025	- a)
	Sevilla	< 0.001	< 0.001	< 0.001	< 0.001	0.015	- a)
	Thiva	< 0.001	< 0.001	< 0.001	< 0.001	0.042	- a)

* Bold values are above 0.1 µg/L.

a) Not calculated.

b) Error in original calculations corrected.

Table 8.8-6: PEC_{gw} for acetamiprid and its metabolites IM-1-2, IM-1-4, IC-0 and IM-1-5 following application of acetamiprid on various crops calculated with MACRO v5.5.4, scenario Châteaudun

FOCUS MACRO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L)				
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)
Use no. 1: Maize 1x60 g a.s./ha BBCH 51 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.010

FOCUS MACRO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L)				
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)
Use no. 4, 6, 9, 11, 13, 15: Pome fruit 1x80 g a.s./ha ^{a)} BBCH 71 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.025
Use no. 5, 7, 8, 10, 12, 14, 16: Pome fruit 2x25 g a.s./ha early application, BBCH 62 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.011
Use no. 5, 7, 8, 10, 12, 14, 16: Pome fruit 2x25 g a.s./ha late application, pre-harvest (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.013
Use no. 17-22: Potato 1x36 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.031
Use no. 17-22: Potato 1x36 g a.s./ha BBCH 79 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.001
Use no. 23, 25, 27, 29, 30: Spring cereals 2x35 g a.s./ha BBCH 40 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.001
Use no. 24, 26, 28, 31: Spring cereals 2x35 g a.s./ha 1 st appl.: BBCH 12, 2 nd appl.: BBCH 40 (annual) ^{b)}	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.022
Spring cereals 2x35 g a.s./ha 1 st appl.: BBCH 12, 2 nd appl.: BBCH 40 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.016
Use no. 32, 34, 36, 39: Winter cereals 2x36 g a.s./ha BBCH 40 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.001
Use no. 33, 35, 37, 38, 40: Winter cereals 1x30 g a.s./ha ^{a)} BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.016
Use no. 41-43, 46-51, 53-58, 62-64, 66-79: Oilseed rape (winter), covering oilseed rape (spring) 2x60 g a.s./ha BBCH 31 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.011
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.020
Use no. 44, 45, 52, 59, 60, 61, 65: Oilseed rape (winter) 1x48 g a.s./ha BBCH 11 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.019
Use no. 81a, 82, 83a: Sugar beet 2x50 g a.s./ha BBCH 12 (triennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.068
Use no. 80, 81b, 83b, 84: Sugar beet 1x50 g a.s./ha BBCH 12 (biennial)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.044
Use no. 85*: Onions (flower bulbs and flower tubers) 1x46 g a.s./ha BBCH 12 (annual) * NL specific use only	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.041
Use no. 86*: Onions (flower bulbs and flower tubers) 2x34 g a.s./ha	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.059

FOCUS MACRO		80 th percentile PEC _{GW} at 1 m soil depth (µg/L)				
Application pattern	Scenario	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5 (Tier 1)
BBCH 20 (annual) <i>* NL specific use only</i>						
Onions (flower bulbs and flower tubers) 2x34 g a.s./ha, BBCH 12 (biennial)	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.041
Use no. 87: Onions (flower bulbs and flower tubers) 1x34 g a.s./ha BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.025
Use no. 88, 90: Cabbage (1 st) (floriculture & perennial nursery crops) 1x46 g a.s./ha ^{a)} BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.057
Use 89*: Cabbage (1 st) (floriculture & perennial nursery crops) 2x34 g a.s./ha BBCH 20 BBCH 12 ^{c)} (annual) <i>* NL specific use only</i>	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.099
Cabbage (1st) (floriculture & perennial nursery crops) 2x34 g a.s./ha, BBCH 12 (biennial)	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.048
Use 88, 90: Pome fruit (tree nursery) 1x46 g a.s./ha ^{a)} BBCH 12 (annual)	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.016
Use 89*: Pome fruit (tree nursery) 2x34 g a.s./ha BBCH 12 (annual) <i>* NL specific use only</i>	Châteaudun	< 0.001	< 0.001	< 0.001	< 0.001	0.028

a) Risk envelope; this elevated rate covers all intended lower application rates.

b) Risk envelope covering also single application at BBCH 20.

c) BBCH 20 was given by mistake. The original calculations had been conducted for BBCH 12.

zRMS comments:

Input parameters for acetamiprid and its metabolites presented in Table 8.8.2-3 are in line with EU agreed parameters reported in EFSA Journal 2016;14(11):4610. The only exception is PUF value for metabolite IM-1-5, for which at the EU level PUF of 0.5 relevant for systemic substances was assumed, in line with indications of FOCUS groundwater guidance valid at the time of evaluation. According to the most up-to-date versions of the FOCUS Groundwater Guidance, the PUF value must be set to 0 for all compounds, regardless if they are systemic or not.

Tier 1

The groundwater modelling was independently validated by the zRMS in additional modelling with FOCUS PEARL 5.5.5 and FOCUS PELMO 6.6.4 using the EU agreed input parameters, PUF of 0 and application dates as suggested by AppDate 3.06. Obtained results were in good agreement with these derived by the Applicant for acetamiprid and its metabolites.

On the basis of the obtained results no unacceptable leaching of acetamiprid and its metabolites is expected following:

- **annual application of ADM.00150.I.2.A to following uses:** maize (uses No.1-3), single application to pome fruit (uses No. 4, 6, 9, 11, 13, 15), double application to pome fruit (uses No. 5, 7, 8, 10, 12, 14, 16), single application to potato (uses No. 17-22), double application to spring cereals (uses No. 23, 25, 27, 29, 30), single application to spring cereals (uses No. 24, 28, 31), double application to winter cereals (uses No. 32, 34, 36, 39), single application to winter cereals (use No. 40), double application to winter oilseed rape (uses No. 41-43, 46-51, 53-58, 62-64), single application to winter oilseed rape (uses No. 44, 45, 52, 59, 60, 61, 65), double application to spring oilseed rape (uses No. 66-79), single application to flower bulbs and flower

tubers (use No.87), single application to floriculture, tree nursery & perennial nursery crops (uses No. 88, 90)

- biennial application of ADM.00150.I.2.A to following uses: single application to sugar beet (uses No. 80, 81b, 83b, 84)

However, unacceptable leaching of toxicologically relevant metabolite IM-1-5 was demonstrated following application of ADM.00150.I.2.A to following uses:

- annual single application to spring cereals (use No. 26 - intended for the Netherlands), max PEC_{gw} 0.151 $\mu\text{g/L}$ FOCUS PEARL 5.5.5/ Hamburg
- annual single application to winter cereals (uses No. 33, 35, 37, 38), max PEC_{gw} 0.103 $\mu\text{g/L}$ FOCUS PEARL 5.5.5/ Okehampton
- triennial double application to sugar beet (uses No. 81a, 82, 83a), max PEC_{gw} 0.115 $\mu\text{g/L}$ FOCUS PEARL 5.5.5/ Châteaudun
- annual single application to flower bulbs and flower tubers (use No. 85 - intended for the Netherlands), max PEC_{gw} 0.126 $\mu\text{g/L}$ FOCUS PELMO 6.6.4/ Okehampton
- annual double application to flower bulbs and flower tubers (use No. 86 - intended for the Netherlands), max PEC_{gw} 0.165 $\mu\text{g/L}$ FOCUS PELMO 6.6.4/ Okehampton
- annual double application to floriculture & perennial nursery crops (use No. 89 - intended for the Netherlands), max PEC_{gw} 0.165 $\mu\text{g/L}$ FOCUS PELMO 6.6.4/ Okehampton

According the GAP table and information provided by the Applicant, the application of the product for uses No. 26, 35, 82 85, 86 and 89 are intended for the Netherlands, that have their own specific PEC_{gw} calculations presented in the national addendum.

For annual single application to winter cereals PEC_{gw} values was higher only for Okehampton scenario. Since in Poland (use No. 38) this scenario is not relevant further refinement is not necessary, however other concerned Member States (Germany and Czech Republic uses No. 37 and 33, respectively) must decide on the acceptance of the results at the Tier 2 modelling based on the refined PUF of 0.5.

For triennial double application to sugar beet PEC_{gw} values exceed the threshold concentration only for Châteaudun scenario. Thus, concerned Member States (Germany and Czech Republic for uses No. 81a and 83a, respectively) must decide on the acceptance of the results at the Tier 2 modelling based on the refined PUF of 0.5.

Tier 2

Since the PEC_{gw} values for metabolite IM-1-5 were above the threshold concentration of 0.1 $\mu\text{g/L}$ in scenarios relevant for the Central Zone at Tier 1, the Applicant performed additional calculations at Tier 2 with consideration PUF of 0.5. However, according to the most up-to-date versions of the FOCUS Groundwater Guidance, the PUF value must be set to 0 for all compounds, regardless if they are systemic or not. Therefore, the refined PUF of 0.5 is up to the decision of each Member States. This consider application of the product ADM.00150.I.2.A to following uses:

- annual single application to winter cereals (use No 37 and 33)
- triennial double application to sugar beet (use No. 81a and 83a)

Thus, concerned Member States: Germany and Czech Republic must decide on the acceptance of the results at the Tier 2 modelling.

Please note that results obtained with PUF of 0.5 were validated by the zRMS in additional modelling and were in good agreement with these derived by the Applicant.

Please note that additional groundwater modelling may be required by the concerned Member States that do not accept simulations performed according to FOCUS recommendations

[illegible]

timing (STEP 2)	March-May June-Sept								
Application method	Ground spray	Air blast	Air blast	Ground spray	Ground spray	Ground spray	Ground spray	Ground spray	Ground spray
CAM (Chemical appl. method) (STEP 3-4)	Foliar linear								
Soil depth (cm) (STEP 3-4)	4								
Models used for calculation	FOCUS STEPS 1-2 v3.2, FOCUS SWASH v5.3, FOCUS PRZM v4.3.1, FOCUS MACRO v5.5.4, FOCUS TOXWA v5.5.3, SWAN v5.0								
<u>Agricultural use pattern of acetamiprid continued</u>									
Use No.	44, 45, 52, 59, 60, 61, 65	80-84	85	86	87	88	89, 90	88	89, 90
Umbrella use No. as used in the ETX ^{a)} risk assessment	VIb	VIIIa	IXa	IXb	IXb	Xa	Xb	Xa	Xb
Crop	Winter oilseed rape	Sugar beet	Flower bulbs and flower tubers	Flower bulbs and flower tubers	Flower bulbs and flower tubers	Floriculture crops, perennial nursery crops	Floriculture crops, perennial nursery crops	Tree nursery crops	Tree nursery crops
FOCUS _{sw} crop	Oilseed rape, winter (winter cereals) ^{e)}	Sugar beet (maize) ^{e)}	Bulb vegetables (legumes) ^{e)}	Bulb vegetables (legumes) ^{e)}	Bulb vegetables (legumes) ^{e)}	Leafy vegetables (1 st) (legumes) ^{e)}	Leafy vegetables (1 st) (legumes) ^{e)}	Pome fruit, early & late	Pome fruit, early & late
BBCH	11-19	12-39	12-91	20-91	12-91	12-91	12-91	12-91 (Mar-Aug)	12-91 (Mar-Aug)
BBCH used in modelling	11	12	12	20	12	12	12	12; up to 91 (Aug)	12; up to 91 (Aug)
Application rate (g a.s./ha)	60 ^{***}	50	46	34	34	46	34	46	34
Number of applications / interval (d)	1 / 0	2 / 7 1 / 0	1 / 0	2 / 7 1 / 0	2 / 7 1 / 0	1 / 0	2 / 7 1 / 0 (use no. 90)	1 / 0	2 / 7 1 / 0 (use no 90)
Crop interception (%) (STEP 2)	40 (minimal crop cover)	20 (minimal crop cover)	10 (minimal crop cover)	25 (intermediate crop cover)	10 (minimal crop cover)	25 (minimal crop cover)	25 (minimal crop cover)	20 (minimal crop cover)	20 (minimal crop cover)
Application timing (STEP 2)	Oct-Feb March-May June-Sept								
Application method	Ground spray	Ground spray	Ground spray	Ground spray	Ground spray	Ground spray	Ground spray	Air blast	Air blast
CAM (Chemical appl. method) (STEP 3-4)	2 – foliar linear								
Soil depth (cm) (STEP 3-4)	4								
Models used for calculation	FOCUS STEPS 1-2 v3.2, FOCUS SWASH v5.3, FOCUS PRZM v4.3.1, FOCUS MACRO v5.5.4, FOCUS TOXWA v5.5.3, SWAN v5.0								

^{a)} ETX = Ecotoxicology

- b) PHI=Pre-Havest Interval.
- c) Also covering lower application rates based on a risk envelope
 - * 60 g a.s./ha according to GAP table for uses No. 4, 6, 9, 11, 13, 15
 - ** 29 g a.s./ha according to GAP table for use No.40
 - *** 48 g a.s./ha according to GAP table for uses No. 44, 52, 59, 61, 65 and 40 g a.s./ha for uses No. 45 and 60.
- d) 0% (no interception) for 1st application at BBCH 12-29 followed by 70% (full canopy) for 2nd application at BBCH 40-69
- e) In brackets: Surrogate crop used for those FOCUS scenarios not defined for the main crop but relevant for the central zone.
- g) for use No 26 - 1st application at BBCH 12-29 followed by 2nd application at BBCH 40-69

Where applicable, application windows in SWASH v5.3 were estimated with the tool AppDate v3.06 (Klein, 2019) based on the intended crop growth stages. In general, the start of the application windows was set to the earliest possible BBCH stage. For potatoes, calculations were additionally done for the latest possible BBCH stage (set as end of the application window) since the GAP foresees a very wide BBCH range. For uses, where applications up to the pre-harvest interval (PHI) are foreseen, the end of the corresponding application window was calculated based on the harvest date considering the PHI stated in the recommended GAP. An overview of the chosen application windows is given in the following table.

Table 8.9-2: FOCUS Step 3 Scenario related input parameters for PEC_{SW/SED} calculations for the application of acetamiprid

Application pattern	Scenario	Application window used in modelling			
		Single application		Multiple application	
		Start date	End date	Start date	End date
Maize 1x60 g a.s./ha BBCH 51	D3	12-Jul	11-Aug	-	-
	D4	19-Jul	18-Aug	-	-
	D5	26-Jun	26-Jul	-	-
	D6	30-May	29-Jun	-	-
	R1	10-Jul	9-Aug	-	-
	R2	15-Jul	14-Aug	-	-
	R3	30-Jun	30-Jul	-	-
	R4	27-May	26-Jun	-	-
Pome fruit 1x80 g a.s./ha BBCH 71	D3	7-Jul	6-Aug	-	-
	D4	11-Jul	10-Aug	-	-
	D5	7-Jun	7-Jul	-	-
	R1	7-Jul	6-Aug	-	-
	R2	3-Aug	2-Sep	-	-
	R3	7-Jun	7-Jul	-	-
	R4	7-Jun	7-Jul	-	-
Pome fruit 2x25 g a.s./ha early application BBCH 62	D3	16-Jun	16-Jul	16-Jun	24-Jul
	D4	20-Jun	20-Jul	20-Jun	28-Jul
	D5	19-May	18-Jun	19-May	26-Jun
	R1	16-Jun	16-Jul	16-Jun	24-Jul
	R2	4-Jul	3-Aug	4-Jul	11-Aug
	R3	19-May	18-Jun	19-May	26-Jun
	R4	16-May	15-Jun	16-May	23-Jun
Pome fruit 2x25 g a.s./ha late application pre-harvest	D3	16-Sep	16-Oct	8-Sep	16-Oct
	D4	16-Sep	16-Oct	8-Sep	16-Oct
	D5	27-Aug	26-Sep	19-Aug	26-Sep
	R1	16-Sep	16-Oct	8-Sep	16-Oct
	R2	17-Aug	16-Sep	9-Aug	16-Sep
	R3	1-Sep	1-Oct	24-Aug	1-Oct
	R4	1-Sep	1-Oct	24-Aug	1-Oct

Application pattern	Scenario	Application window used in modelling			
		Single application		Multiple application	
		Start date	End date	Start date	End date
Potato (maize as surrogate for D5 & R4) 1x36 g a.s./ha BBCH 12	D3	15-May	14-Jun	-	-
	D4	28-May	27-Jun	-	-
	D5	15-May	14-Jun	-	-
	D6 (1 st)	13-Apr	13-May	-	-
	D6 (2 nd)	9-Aug	8-Sep	-	-
	R1	9-May	8-Jun	-	-
	R2	20-Mar	19-Apr	-	-
	R3	13-Apr	13-May	-	-
	R4	15-Apr	15-May	-	-
Potato (maize as surrogate for D5 & R4) 1x36 g a.s./ha BBCH 79	D3	26-Jul	25-Aug	-	-
	D4	12-Aug	11-Sep	-	-
	D5	24-Jul	23-Aug	-	-
	D6 (1 st)	29-May	28-Jun	-	-
	D6 (2 nd)	05-Oct	04-Nov	-	-
	R1	13-Jul	12-Aug	-	-
	R2	10-May	09-Jun	-	-
	R3	29-Jun	29-Jul	-	-
	R4	04-Jul	03-Aug	-	-
Spring cereals (winter cereals as surrogate for R1, R3) 2x35 g a.s./ha BBCH 40 ^a	D1	6-Jun	6-Jul	6-Jun	16-Jul
	D3	9-May	8-Jun	9-May	18-Jun
	D4	28-May	27-Jun	28-May	7-Jul
	D5	20-Apr	20-May	20-Apr	30-May
	R1	8-May	7-Jun	8-May	17-Jun
	R3	4-Apr	4-May	4-Apr	14-May
	R4	20-Apr	20-May	20-Apr	30-May
Spring cereals (winter cereals as surrogate for R1, R3) 2x35 g a.s./ha BBCH 12	D1	8-May	7-Jun	8-May	7-Jul
	D3	5-Apr	5-May	5-Apr	4-Jun
	D4	29-Apr	29-May	29-Apr	28-Jun
	D5	18-Mar	17-Apr	18-Mar	17-May
	R1 ^d	08-Apr	08-May	08-Apr	7-Jun
	R3 ^d	05-Mar	04-Apr	05-Mar	04-May
	R4	18-Mar	17-Apr	18-Mar	17-May
Winter cereals 2x36 g a.s./ha BBCH 40 ^a	D1	21-Apr	21-May	21-Apr	31-May
	D2	30-Apr	30-May	30-Apr	9-Jun
	D3	16-May	15-Jun	16-May	25-Jun
	D4	16-Apr	16-May	16-Apr	26-May
	D5	2-Apr	2-May	2-Apr	12-May
	D6	1-Mar	31-Mar	1-Mar	10-Apr
	R1	8-May	7-Jun	8-May	17-Jun
	R3	4-Apr	4-May	4-Apr	14-May
	R4	26-Feb	28-Mar	26-Feb	7-Apr
Winter cereals 1x30 g a.s./ha BBCH 12	D1	29-Sep	29-Oct	-	-
	D2	29-Oct	28-Nov	-	-
	D3	25-Nov	25-Dec	-	-
	D4	26-Sep	26-Oct	-	-
	D5	14-Nov	14-Dec	-	-
	D6	4-Dec	3-Jan	-	-
	R1	16-Nov	16-Dec	-	-

Application pattern	Scenario	Application window used in modelling			
		Single application		Multiple application	
		Start date	End date	Start date	End date
	R3	5-Dec	4-Jan	-	-
	R4	18-Nov	18-Dec	-	-
Oilseed rape (winter) (winter cereals as surrogate for R4) 2x60 g a.s./ha BBCH 31	D2	15-Mar	14-Apr	15-Mar	21-Apr
	D3	26-Feb	28-Mar	26-Feb	4-Apr
	D4	6-Mar	5-Apr	6-Mar	12-Apr
	D5	5-Mar	4-Apr	5-Mar	11-Apr
	R1	17-Apr	17-May	17-Apr	24-May
	R3	9-Mar	8-Apr	9-Mar	15-Apr
	R4	28-Jan	27-Feb	28-Jan	06-Mar
Oilseed rape (winter) (cereals, winter as surrogate for R4) 1x60 g a.s./ha BBCH 11	D2	17-Sep	17-Oct	-	-
	D3	4-Sep	4-Oct	-	-
	D4	5-Sep	5-Oct	-	-
	D5	22-Sep	22-Oct	-	-
	R1	6-Sep	6-Oct	-	-
	R3	7-Oct	6-Nov	-	-
	R4	15-Nov	15-Dec	-	-
Oilseed rape (spring) (legumes as surrogate for R3 & R4) 2x60 g a.s./ha BBCH 31	D1	13-Jun	13-Jul	13-Jun	20-Jul
	D3	15-May	14-Jun	15-May	21-Jun
	D4	26-May	25-Jun	26-May	2-Jul
	D5	22-Apr	22-May	22-Apr	29-May
	R1	11-May	10-Jun	11-May	17-Jun
	R3	02-May	01-Jun	02-May	08-Jun
	R4	02-May	01-Jun	02-May	08-Jun
Sugar beet (maize as surrogate for D5 & R4) 2x50 g a.s./ha BBCH 12	D3	5-May	4-Jun	5-May	11-Jun
	D4	13-May	12-Jun	13-May	19-Jun
	D5	15-May	14-Jun	15-May	21-Jun
	R1	26-Apr	26-May	26-Apr	2-Jun
	R3	31-Mar	30-Apr	31-Mar	7-May
	R4	15-Apr	15-May	15-Apr	22-May
Bulb vegetables (legumes as surrogate for D5) (flower bulbs & flower tubers) 1x46 g a.s./ha BBCH 12	D3	9-May	8-Jun	-	-
	D4	9-May	8-Jun	-	-
	D5	21-Mar	20-Apr	-	-
	D6 (1 st)	21-May	20-Jun	-	-
	D6 (2 nd)	18-Nov	18-Dec	-	-
	R1	4-May	3-Jun	-	-
	R2	16-Mar	15-Apr	-	-
	R3	17-Mar	16-Apr	-	-
	R4	17-Mar	16-Apr	-	-
Bulb vegetables (legumes as surrogate for D5) (flower bulbs & flower tubers) 2x34 g a.s./ha BBCH 20 ^b	D3	24-Jun	24-Jul	24-Jun	31-Jul
	D4	2-Jul	1-Aug	2-Jul	8-Aug
	D5	08-Apr	08-May	08-Apr	15-May
	D6 (1 st)	25-Jun	25-Jul	25-Jun	1-Aug
	D6 (2 nd)	24-Feb	26-Mar	24-Feb	2-Apr
	R1	19-Jun	19-Jul	19-Jun	26-Jul
	R2	8-May	7-Jun	8-May	14-Jun
	R3	8-May	7-Jun	8-May	14-Jun
	R4	8-May	7-Jun	8-May	14-Jun

Application pattern	Scenario	Application window used in modelling			
		Single application		Multiple application	
		Start date	End date	Start date	End date
Bulb vegetables (legumes as surrogate for D5) (flower bulbs & flower tubers) 1 x34 g a.s./ha BBCH 12	D3	9-May	8-Jun	9-May	15-Jun
	D4	9-May	8-Jun	9-May	15-Jun
	D5	21-Mar	20-Apr	21-Mar	27-Apr
	D6 (1 st)	21-May	20-Jun	21-May	27-Jun
	D6 (2 nd)	18-Nov	18-Dec	18-Nov	25-Dec
	R1	4-May	3-Jun	4-May	10-Jun
	R2	16-Mar	15-Apr	16-Mar	22-Apr
	R3	17-Mar	16-Apr	17-Mar	23-Apr
	R4	17-Mar	16-Apr	17-Mar	23-Apr
Leafy vegetables (1 st) (legumes as surrogate for D5) (floriculture & perennial nursery crops) 1x46 g a.s./ha BBCH 12	D3	4-May	3-Jun	-	-
	D4	25-May	24-Jun	-	-
	D5	21-Mar	20-Apr	-	-
	D6	25-Aug	24-Sep	-	-
	R1	29-Apr	29-May	-	-
	R2	16-Mar	15-Apr	-	-
	R3	14-Mar	13-Apr	-	-
	R4	14-Mar	13-Apr	-	-
Leafy vegetables (1 st) (legumes as surrogate for D5) (floriculture & perennial nursery crops) 2x34 g a.s./ha BBCH 12	D3	4-May	3-Jun	4-May	10-Jun
	D4	25-May	24-Jun	25-May	1-Jul
	D5	21-Mar	20-Apr	21-Mar	27-Apr
	D6	25-Aug	24-Sep	25-Aug	1-Oct
	R1	29-Apr	29-May	29-Apr	5-Jun
	R2	16-Mar	15-Apr	16-Mar	22-Apr
	R3	14-Mar	13-Apr	14-Mar	20-Apr
	R4	14-Mar	13-Apr	14-Mar	20-Apr
Pome fruit (tree nursery crops) early application BBCH 12	D3	18-Apr	18-May	-	-
	D4	23-Apr	23-May	-	-
	D5	3-Apr	3-May	-	-
	R1	18-Apr	18-May	-	-
	R2	19-Mar	18-Apr	-	-
	R3	3-Apr	3-May	-	-
	R4	18-Mar	17-Apr	-	-
Pome fruit (tree nursery crops) 1x46 g a.s./ha late application up to BBCH 91 (Aug) ^c	D3	15-Aug	14-Sep	-	-
	D4	15-Aug	14-Sep	-	-
	D5	15-Aug	14-Sep	-	-
	R1	15-Aug	14-Sep	-	-
	R2	15-Aug	14-Sep	-	-
	R3	15-Aug	14-Sep	-	-
	R4	15-Aug	14-Sep	-	-
Pome fruit (tree nursery crops) 2x34 g a.s./ha early application BBCH 12	D3	18-Apr	18-May	18-Apr	25-May
	D4	23-Apr	23-May	23-Apr	30-May
	D5	3-Apr	3-May	3-Apr	10-May
	R1	18-Apr	18-May	18-Apr	25-May
	R2	19-Mar	18-Apr	19-Mar	25-Apr
	R3	3-Apr	3-May	3-Apr	10-May
	R4	18-Mar	17-Apr	18-Mar	24-Apr

Application pattern	Scenario	Application window used in modelling			
		Single application		Multiple application	
		Start date	End date	Start date	End date
Pome fruit (tree nursery crops) 2x34 g a.s./ha late application up to BBCH 91 (Aug) ^c	D3	15-Aug	14-Sep	15-Aug	21-Sep
	D4	15-Aug	14-Sep	15-Aug	21-Sep
	D5	15-Aug	14-Sep	15-Aug	21-Sep
	R1	15-Aug	14-Sep	15-Aug	21-Sep
	R2	15-Aug	14-Sep	15-Aug	21-Sep
	R3	15-Aug	14-Sep	15-Aug	21-Sep
	R4	15-Aug	14-Sep	15-Aug	21-Sep

- ^a For spring and winter cereals, the date at BBCH 39 was set as date of the 1st application since BBCH 40 is not defined in AppDate.
- ^b For bulb vegetables at BBCH 20 (including the surrogate crop legumes), the date at BBCH 19 was set as date of the 1st application since in AppDate (v3.06) bulb vegetables / legumes are only defined until BBCH 19 and from BBCH 41 / BBCH 30 onwards.
- ^c The start dates of the application windows for late applications to tree nursery crops were set to 15th of August for all relevant scenarios in accordance with the recommended GAP.
- ^d The application date for BBCH 12 for winter cereals as surrogate for spring cereals in R1 and R3 was set to 30 days before the date of BBCH 40. In the existing FOCUS scenarios for spring cereals the interval between BBCH 12 and BBCH 40 is approximately 30 days. The AppDate date for BBCH 12 for winter cereals cannot be used here since it would be in autumn and thus makes no sense for a spring application to spring cereals.

zRMS comments:

The use pattern presented in Table 8.9-1 is in general in line with the GAP table presented in point 8.1 with following exception and remarks:

- For application to apples (uses No. 4, 6, 9, 11, 13, 15) lower application rate of 60 g a.s./ha is presented in the GAP table. Since calculations were performed for higher application rate (1 x 80 g a.s./ha) thus, it covers rate of 60 g a.s./ha and additional calculation is not necessary.
- For application to spring cereals (uses No. 24, 28, 31) single annual application rate of 35 g a.s./ha at BBCH stage of 20-29 is presented in the GAP table, whereas for use No. 26 double application rate (2 x 35 g a.s./ha) at BBCH stage of 12-29 (1st application) and 40-69 (2nd application) is presented in the GAP table. Thus, respective changes of the use pattern were introduced to the Table 8.9-1. Crop interception of 0% presents a worse case and it is accepted by the zRMS
- For application to winter cereals (use No. 40) lower application rate of 29 g a.s./ha is presented in the GAP table. Since calculations were performed for higher application rate (1 x 30 g a.s./ha) thus, it covers rate of 29 g a.s./ha and additional calculation is not necessary.
- For application to winter oilseed rape (uses No. 44, 52, 59, 61, 65) lower application rate of 48 g a.s./ha is presented in the GAP table. Since calculations were performed for higher application rate (1 x 60 g a.s./ha) thus, it covers rate of 48 g a.s./ha and additional calculation is not necessary.
- For application to winter oilseed rape (uses No. 45 and 60) lower application rate of 40 g a.s./ha is presented in the GAP table. Since calculations were performed for higher application rate (1 x 60 g a.s./ha) thus, it covers rate of 40 g a.s./ha and additional calculation is not necessary.

The crop interception for Step 1-2 is in line with FOCUS recommendation and is agreed by the zRMS.

Since not all relevant to the central zone scenarios are defined for the evaluated crops, the following surrogate crops were considered by the Applicant in simulations:

- Maize was used as surrogate crop for potato for missing D5 and R4 scenarios
- Winter cereals was used as a surrogate crop for spring cereals for missing scenarios: R1, R3
- Winter cereals was used as a surrogate crop for winter oilseed rape for missing scenarios R4
- Legumes were used as surrogate crop for spring oilseed rape for missing scenarios R3 and R4
- Maize was used as surrogate crop for sugar beet for missing scenarios D5 and R4
- Vegetables bulb was used as surrogate crop for flower bulbs and flower tuber for all relevant scenarios to the central zone, only for missing D5 scenario legumes were used as surrogate crop

Application dates presented in Table 8.9-2 were checked by the zRMS using AppDate ver. 3.06 tool and are considered acceptable.

8.9.2.1 Acetamiprid and its metabolites

Table 8.9-3: Input parameters related to active substance acetamiprid and its metabolites IM-1-2, IM-1-4, IC-0, IM-1-5 and IB-1-1 for PEC_{SW/SED} calculations at STEP 1-2 and STEP 3-4

Compound	Acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5	IB-1-1	Value in accordance to EU endpoint / Reference
Molecular weight (g/mol)	223	240.69	156.61	157.55	197.66	204.23	Yes / EFSA, 2016
Saturated vapour pressure (Pa)	1x10 ⁻⁶ (20°C)	not required for Step 1-2					Yes / EFSA, 2016
Water solubility (mg/L)	2950 (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	1 x 10 ⁶ (pH 7 and 25°C)	Yes / EFSA, 2016
Diffusion coefficient in water (m ² /d)	4.3 x 10 ⁻⁵	not required for Step 1-2					default
Diffusion coefficient in air (m ² /d)	0.43	not required for Step 1-2					default
K _{foc} / K _{fom} # (mL/g)	106.5 / 61.8 (arithmetic mean, n = 5)	54 / 31.3 (arithmetic mean, n = 4)	171 / 99.2 (arithmetic mean, n = 4)	122 / 70.8 (arithmetic mean, n = 5)	325 / 189 (arithmetic mean, n = 4)	0 / 0 (default value)	Yes / EFSA, 2016
Freundlich exponent 1/n	0.86 (arithmetic mean, n = 5)	not required for Step 1-2					Yes / EFSA, 2016
Plant uptake	0	not required for Step 1-2					default
Wash-off factor from crop (1/mm)	0.05 (MACRO) 0.50 (PRZM)	not required for Step 1-2					default
DT _{50,soil} (d)	1.45 (geometric mean lab, n = 7, normalised to pF2, 20°C, Q ₁₀ of 2.58)	1.7 (geometric mean lab, n = 3, normalised to pF2, 20°C, Q ₁₀ of 2.58)	14.6 (geometric mean lab, n = 7, normalised to pF2, 20°C, Q ₁₀ of 2.58)	2.7 (geometric mean lab, n = 7, normalised to pF2, 20°C, Q ₁₀ of 2.58)	495 (geometric mean lab, n = 7, normalised to pF2, 20°C, Q ₁₀ of 2.58)	-**	Yes / EFSA, 2016
DT _{50,water} (d)	27 (whole system value)	1000 (default)	1000 (default)	1000 (default)	1000 (default)	1000 (default)	Yes / EFSA, 2016
DT _{50,sed} (d)	Step1-2: 27 (whole system value) Step 3-4: 1000 (default)	1000 (default)	1000 (default)	1000 (default)	1000 (default)	1000 (default)	Yes / EFSA, 2016
DT _{50,whole system} (d)	27 (geometric mean n = 2)	1000 (default)	1000 (default)	1000 (default)	1000 (default)	1000 (default)	Yes / EFSA, 2016
Maximum occurrence (% molar basis with respect to the parent)	-	Soil: 55 Total w/s system: 13.4	Soil: 72 Total w/s system: 81.5***	Soil: 11.3 Total w/s system: 29.5	Soil: 20 Total w/s system: 0*	Soil: 0** Total w/s system: 35	Yes / EFSA, 2016

Calculated with K_{fom} = K_{foc} / 1.724.

* Soil metabolite; not formed in water or sediment.

** Metabolite only formed in water through photochemical degradation.

*** Maximum from aerobic mineralisation study.

PEC_{sw/sed} – FOCUS Step 1-2

Table 8.9-4: FOCUS Step 1-2 PEC_{sw} and PEC_{sed} for acetamiprid following single / multiple application(s) on various crops

Application pattern	Number of applications	Step	Region	Season	Acetamiprid		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Maize 1x60 g a.s./ha BBCH 51	1	1	-	-	18.065	13.913	18.680
		2	N EU	Oct – Feb	0.778	0.588	0.788
				Mar – May	0.584	0.438	0.587
				Jun – Sep	0.584	0.438	0.587
		2	S EU	Oct – Feb	0.714	0.538	0.721
				Mar – May	0.714	0.538	0.721
				Jun – Sep	0.649	0.488	0.654
Pome fruit (late) 1x80 g a.s./ha BBCH 71	1	1	-	-	27.544	20.901	28.050
		2	N EU	Oct – Feb	4.193	3.291	4.066
				Mar – May	4.193	3.044	3.690
				Jun – Sep	4.193	3.044	3.690
		2	S EU	Oct – Feb	4.193	3.209	3.941
				Mar – May	4.193	3.209	3.941
				Jun – Sep	4.193	3.126	3.816
Pome fruit (early) 2x25 g a.s./ha BBCH 62	2	1	-	-	19.460	14.590	19.572
		2	N EU	Oct – Feb	3.710	2.779	3.366
				Mar – May	3.710	2.700	3.246
				Jun – Sep	3.710	2.700	3.246
		2	S EU	Oct – Feb	3.710	2.752	3.326
				Mar – May	3.710	2.752	3.326
				Jun – Sep	3.710	2.726	3.286
Pome fruit (early) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	19.460	14.590	19.572
		2	N EU	Oct – Feb	2.433	1.799	2.192
				Mar – May	2.433	1.722	2.074
				Jun – Sep	2.433	1.722	2.074
		2	S EU	Oct – Feb	2.433	1.774	2.152
				Mar – May	2.433	1.774	2.152
				Jun – Sep	2.433	1.748	2.113
Pome fruit (late) 2x25 g a.s./ha BBCH 62	2	1	-	-	17.215	13.063	17.531
		2	N EU	Oct – Feb	1.763	1.389	1.704
				Mar – May	1.763	1.310	1.584
				Jun – Sep	1.763	1.310	1.584
		2	S EU	Oct – Feb	1.763	1.363	1.664
				Mar – May	1.763	1.363	1.664
				Jun – Sep	1.763	1.336	1.624
Pome fruit (late) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	17.215	13.063	17.531
		2	N EU	Oct – Feb	1.310	1.028	1.271
				Mar – May	1.310	0.951	1.153
				Jun – Sep	1.310	0.951	1.153
		2	S EU	Oct – Feb	1.310	1.003	1.232
				Mar – May	1.310	1.003	1.232
				Jun – Sep	1.310	0.977	1.192

Application pattern	Number of applications	Step	Region	Season	Acetamiprid		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Potato 1x36 g a.s./ha BBCH 12	1	1	-	-	10.839	8.348	11.208
		2	N EU	Oct – Feb	0.933	0.713	0.957
				Mar – May	0.537	0.407	0.546
				Jun – Sep	0.537	0.407	0.546
		2	S EU	Oct – Feb	0.801	0.611	0.820
				Mar – May	0.801	0.611	0.820
				Jun – Sep	0.669	0.509	0.683
Spring cereals 2x35 g a.s./ha BBCH 40	2	1	-	-	21.076	16.232	21.794
		2	N EU	Oct – Feb	0.644	0.485	0.651
				Mar – May	0.507	0.379	0.509
				Jun – Sep	0.507	0.379	0.509
		2	S EU	Oct – Feb	0.599	0.450	0.603
				Mar – May	0.599	0.450	0.603
				Jun – Sep	0.553	0.415	0.556
Spring cereals 2x35 g a.s./ha BBCH 40 (single application)	1	1	-	-	21.076	16.232	21.794
		2	N EU	Oct – Feb	0.492	0.372	0.499
				Mar – May	0.356	0.267	0.358
				Jun – Sep	0.356	0.267	0.358
		2	S EU	Oct – Feb	0.447	0.337	0.452
				Mar – May	0.447	0.337	0.452
				Jun – Sep	0.401	0.302	0.405
Spring cereals 2x35 g a.s./ha BBCH 12	2	1	-	-	21.076	16.232	21.794
		2	N EU	Oct – Feb	1.098	0.838	1.125
				Mar – May	0.645	0.488	0.655
				Jun – Sep	0.645	0.488	0.655
		2	S EU	Oct – Feb	0.947	0.721	0.968
				Mar – May	0.947	0.721	0.968
				Jun – Sep	0.796	0.605	0.811
Spring cereals 2x35 g a.s./ha BBCH 12 (single application)	1	1	-	-	21.076	16.232	21.794
		2	N EU	Oct – Feb	1.020	0.780	1.048
				Mar – May	0.567	0.430	0.577
				Jun – Sep	0.567	0.430	0.577
		2	S EU	Oct – Feb	0.869	0.664	0.891
				Mar – May	0.869	0.664	0.891
				Jun – Sep	0.718	0.547	0.734
Winter cereals 2x36 g a.s./ha BBCH 40	2	1	-	-	21.678	16.695	22.416
		2	N EU	Oct – Feb	0.663	0.499	0.669
				Mar – May	0.522	0.390	0.523
				Jun – Sep	0.522	0.390	0.523
		2	S EU	Oct – Feb	0.616	0.463	0.621
				Mar – May	0.616	0.463	0.621
				Jun – Sep	0.569	0.426	0.572
Winter cereals 2x36 g a.s./ha BBCH 40 (single application)	1	1	-	-	21.678	16.695	22.416
		2	N EU	Oct – Feb	0.506	0.383	0.513
				Mar – May	0.366	0.275	0.368
				Jun – Sep	0.366	0.275	0.368
		2	S EU	Oct – Feb	0.459	0.347	0.465
				Mar – May	0.459	0.347	0.465
				Jun – Sep	0.413	0.311	0.417

Application pattern	Number of applications	Step	Region	Season	Acetamiprid		
					Maximum PEC _{Sw} [µg/L]	21 d TWA PEC _{Sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Winter cereals 1x30 g a.s./ha BBCH 12	1	1	-	-	9.033	6.956	9.340
		2	N EU	Oct – Feb	0.874	0.669	0.898
				Mar – May	0.486	0.369	0.495
				Jun – Sep	0.486	0.369	0.495
		2	S EU	Oct – Feb	0.745	0.569	0.764
				Mar – May	0.745	0.569	0.764
				Jun – Sep	0.616	0.469	0.629
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31	2	1	-	-	36.130	27.826	37.361
		2	N EU	Oct – Feb	1.140	0.858	1.151
				Mar – May	0.899	0.672	0.901
				Jun – Sep	0.899	0.672	0.901
		2	S EU	Oct – Feb	1.059	0.796	1.068
				Mar – May	1.059	0.796	1.068
				Jun – Sep	0.979	0.734	0.984
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	0.843	0.638	0.856
		2	N EU	Oct – Feb	0.610	0.458	0.614
				Mar – May	0.610	0.458	0.614
				Jun – Sep	0.765	0.578	0.775
		2	S EU	Oct – Feb	0.765	0.578	0.775
				Mar – May	0.688	0.518	0.694
				Jun – Sep	0.843	0.638	0.856
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11	1	1	-	-	18.065	13.913	18.680
		2	N EU	Oct – Feb	1.231	0.938	1.259
				Mar – May	0.765	0.578	0.775
				Jun – Sep	0.765	0.578	0.775
		2	S EU	Oct – Feb	1.076	0.818	1.097
				Mar – May	1.076	0.818	1.097
				Jun – Sep	0.921	0.698	0.936
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31	2	1	-	-	36.130	27.826	37.361
		2	N EU	Oct – Feb	1.140	0.858	1.151
				Mar – May	0.899	0.672	0.901
				Jun – Sep	0.899	0.672	0.901
		2	S EU	Oct – Feb	1.059	0.796	1.068
				Mar – May	1.059	0.796	1.068
				Jun – Sep	0.979	0.734	0.984
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	36.130	27.826	37.361
		2	N EU	Oct – Feb	0.843	0.638	0.856
				Mar – May	0.610	0.458	0.614
				Jun – Sep	0.610	0.458	0.614
		2	S EU	Oct – Feb	0.765	0.578	0.775
				Mar – May	0.765	0.578	0.775
				Jun – Sep	0.688	0.518	0.694
Sugar beet 2x50 g a.s./ha BBCH 12	2	1	-	-	30.108	23.188	31.134
		2	N EU	Oct – Feb	1.508	1.147	1.539
				Mar – May	0.972	0.732	0.983
				Jun – Sep	0.972	0.732	0.983
		2	S EU	Oct – Feb	1.329	1.009	1.353
				Mar – May	1.329	1.009	1.353
				Jun – Sep	1.151	0.870	1.168

Application pattern	Number of applications	Step	Region	Season	Acetamiprid		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Sugar beet 2x50 g a.s./ha BBCH 12 (single application)	1	1	-	-	30.108	23.188	31.134
		2	N EU	Oct – Feb	1.242	0.948	1.273
				Mar – May	0.724	0.548	0.735
				Jun – Sep	0.724	0.548	0.735
		2	S EU	Oct – Feb	1.069	0.815	1.094
				Mar – May	1.069	0.815	1.094
				Jun – Sep	0.897	0.681	0.914
Bulb vegetables (flower bulbs and flower tubers) 1x46 g a.s./ha BBCH 12	1	1	-	-	13.850	10.667	14.322
		2	N EU	Oct – Feb	1.242	0.949	1.274
				Mar – May	0.706	0.535	0.718
				Jun – Sep	0.706	0.535	0.718
		2	S EU	Oct – Feb	1.063	0.811	1.088
				Mar – May	1.063	0.811	1.088
				Jun – Sep	0.884	0.673	0.903
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20	2	1	-	-	20.474	15.768	21.171
		2	N EU	Oct – Feb	0.987	0.750	1.007
				Mar – May	0.646	0.486	0.652
				Jun – Sep	0.646	0.486	0.652
		2	S EU	Oct – Feb	0.874	0.662	0.889
				Mar – May	0.874	0.662	0.889
				Jun – Sep	0.760	0.574	0.771
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20 (single application)	1	1	-	-	20.474	15.768	21.171
		2	N EU	Oct – Feb	0.808	0.616	0.827
				Mar – May	0.478	0.361	0.485
				Jun – Sep	0.478	0.361	0.485
		2	S EU	Oct – Feb	0.698	0.531	0.713
				Mar – May	0.698	0.531	0.713
				Jun – Sep	0.588	0.446	0.599
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 12	2	1	-	-	20.474	15.768	21.171
		2	N EU	Oct – Feb	1.101	0.838	1.125
				Mar – May	0.691	0.522	0.700
				Jun – Sep	0.691	0.522	0.700
		2	S EU	Oct – Feb	0.965	0.733	0.983
				Mar – May	0.965	0.733	0.983
				Jun – Sep	0.828	0.627	0.842
Bulb vegetables (flower bulbs and flower tubers) 1x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	20.474	15.768	21.171
		2	N EU	Oct – Feb	0.918	0.701	0.942
				Mar – May	0.522	0.395	0.531
				Jun – Sep	0.522	0.395	0.531
		2	S EU	Oct – Feb	0.786	0.599	0.805
				Mar – May	0.786	0.599	0.805
				Jun – Sep	0.654	0.497	0.668

Application pattern	Number of applications	Step	Region	Season	Acetamiprid		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Leafy vegetables (floriculture, perennial nursery crops) 1x46 g a.s./ha BBCH 12	1	1	-	-	13.850	10.667	14.322
		2	N EU	Oct – Feb	1.093	0.834	1.119
				Mar – May	0.646	0.489	0.656
				Jun – Sep	0.646	0.489	0.656
		2	S EU	Oct – Feb	0.944	0.719	0.965
				Mar – May	0.944	0.719	0.965
				Jun – Sep	0.795	0.604	0.810
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12	2	1	-	-	20.474	15.768	21.171
		2	N EU	Oct – Feb	0.987	0.750	1.007
				Mar – May	0.646	0.486	0.652
				Jun – Sep	0.646	0.486	0.652
		2	S EU	Oct – Feb	0.874	0.662	0.889
				Mar – May	0.874	0.662	0.889
				Jun – Sep	0.760	0.574	0.771
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	20.474	15.768	21.171
		2	N EU	Oct – Feb	0.808	0.616	0.827
				Mar – May	0.478	0.361	0.485
				Jun – Sep	0.478	0.361	0.485
		2	S EU	Oct – Feb	0.698	0.531	0.713
				Mar – May	0.698	0.531	0.713
				Jun – Sep	0.588	0.446	0.599
Pome fruit (early) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	17.904	13.423	18.006
		2	N EU	Oct – Feb	4.484	3.352	4.496
				Mar – May	4.477	3.291	4.002
				Jun – Sep	4.477	3.291	4.002
		2	S EU	Oct – Feb	4.477	3.506	4.331
				Mar – May	4.477	3.506	4.331
				Jun – Sep	4.477	3.399	4.166
Pome fruit (late) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	15.838	12.018	16.129
		2	N EU	Oct – Feb	2.781	2.088	2.802
				Mar – May	2.411	1.872	2.307
				Jun – Sep	2.411	1.872	2.307
		2	S EU	Oct – Feb	2.623	1.966	2.637
				Mar – May	2.623	1.966	2.637
				Jun – Sep	2.464	1.843	2.472
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	26.466	19.842	26.618
		2	N EU	Oct – Feb	5.102	4.055	4.987
				Mar – May	5.102	3.808	4.609
				Jun – Sep	5.102	3.808	4.609
		2	S EU	Oct – Feb	5.102	3.973	4.861
				Mar – May	5.102	3.973	4.861
				Jun – Sep	5.102	3.890	4.735
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	26.466	19.842	26.618
		2	N EU	Oct – Feb	3.314	2.478	3.323
				Mar – May	3.309	2.432	2.958
				Jun – Sep	3.309	2.432	2.958
		2	S EU	Oct – Feb	3.309	2.592	3.201
				Mar – May	3.309	2.592	3.201
				Jun – Sep	3.309	2.512	3.080

Application pattern	Number of applications	Step	Region	Season	Acetamiprid		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	23.413	17.766	23.842
		2	N EU	Oct – Feb	2.687	2.013	2.700
				Mar – May	2.424	1.896	2.322
				Jun – Sep	2.424	1.896	2.322
		2	S EU	Oct – Feb	2.566	1.919	2.574
				Mar – May	2.566	1.919	2.574
				Jun – Sep	2.444	1.825	2.448
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	23.413	17.766	23.842
		2	N EU	Oct – Feb	2.056	1.544	2.071
				Mar – May	1.782	1.384	1.705
				Jun – Sep	1.782	1.384	1.705
		2	S EU	Oct – Feb	1.938	1.453	1.949
				Mar – May	1.938	1.453	1.949
				Jun – Sep	1.821	1.362	1.827

N EU / S EU = Northern/ Southern Europe.

^a two-time as required by ecotox.

PEC_{SW/SED} – FOCUS Step 3

Table 8.9-5: FOCUS Step 3 PEC_{SW} and PEC_{SED} for acetamiprid following single / multiple application(s) on various crops

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{SW} (µg/L)*	Dominant entry route	21 d-PEC _{SW, twa} (µg/L)*	Max PEC _{SED} (µg/kg)*
Maize 1x60 g a.s./ha BBCH 51	D3	ditch	0.315	Spray drift	0.016	0.095
	D4	pond	0.013	Spray drift	0.010	0.023
	D4	stream	0.282	Spray drift	0.003	0.032
	D5	pond	0.013	Spray drift	0.010	0.024
	D5	stream	0.308	Spray drift	0.006	0.055
	D6	ditch	0.310	Spray drift	0.006	0.054
	R1	pond	0.033	Runoff	0.025	0.060
	R1	stream	0.535	Runoff	0.015	0.156
	R2	stream	0.293	Spray drift	0.001	0.020
	R3	stream	0.308	Spray drift	0.020	0.164
	R4	stream	0.213	Spray drift	0.004	0.034
	R4	stream	0.213	Spray drift	0.004	0.034
Pome fruit (late) 1x80 g a.s./ha BBCH 71	D3	ditch	2.941	Spray drift	0.276	1.049
	D4	pond	0.132	Spray drift	0.100	0.212
	D4	stream	2.951	Spray drift	0.041	0.399
	D5	pond	0.132	Spray drift	0.103	0.220
	D5	stream	3.184	Spray drift	0.058	0.510
	R1	pond	0.132	Spray drift	0.097	0.199
	R1	stream	2.213	Spray drift	0.020	0.170
	R2	stream	3.026	Spray drift	0.015	0.196
	R3	stream	3.182	Spray drift	0.057	0.502
	R4	Stream	2.257	Spray drift	0.065	0.389

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{SW, twa} (µg/L)*	Max PEC _{SED} (µg/kg)*
Pome fruit 2x25 g a.s./ha early application BBCH 62	D3	ditch	1.678	Spray drift	0.286	0.806
	D4	pond	0.185	Spray drift	0.143	0.321
	D4	stream	1.766	Spray drift	0.047	0.286
	D5	pond	0.180	Spray drift	0.143	0.338
	D5	stream	1.905	Spray drift	0.069	0.362
	R1	pond	0.174	Spray drift	0.134	0.305
	R1	stream	1.351	Spray drift	0.027	0.155
	R2	stream	1.810	Spray drift	0.018	0.137
	R3	stream	1.904	Spray drift	0.068	0.353
	R4	stream	1.350	Spray drift	0.021	0.165
Pome fruit 2x25 g a.s./ha early application BBCH 62 (single application)	D3	ditch	1.948*	Spray drift	0.162	0.675
	D4	pond	0.118	Spray drift	0.090	0.190
	D4	stream	2.065*	Spray drift	0.027	0.273
	D5	pond	0.118	Spray drift	0.093	0.204
	D5	stream	2.230*	Spray drift	0.040	0.358
	R1	pond	0.118	Spray drift	0.089	0.184
	R1	stream	1.582*	Spray drift	0.019	0.180*
	R2	stream	2.121*	Spray drift	0.011	0.139*
	R3	stream	2.230*	Spray drift	0.040	0.358*
	R4	stream	1.546*	Spray drift	0.009	0.115
Pome fruit 2x25 g a.s./ha late application pre-harvest	D3	ditch	0.729	Spray drift	0.142	0.385
	D4	pond	0.058	Spray drift	0.048	0.143
	D4	stream	0.722	Spray drift	0.009	0.072
	D5	pond	0.062	Spray drift	0.049	0.123
	D5	stream	0.797	Spray drift	0.029	0.164
	R1	pond	0.056	Spray drift	0.046	0.136
	R1	stream	0.565	Spray drift	0.011	0.075
	R2	stream	0.757	Spray drift	0.004	0.055
	R3	stream	0.796	Spray drift	0.022	0.160
	R4	stream	0.565	Spray drift	0.034	0.146
Pome fruit 2x25 g a.s./ha late application pre-harvest (single application)	D3	ditch	0.919*	Spray drift	0.087	0.355
	D4	pond	0.041	Spray drift	0.034	0.091
	D4	stream	0.901*	Spray drift	0.007	0.082*
	D5	pond	0.041	Spray drift	0.032	0.075
	D5	stream	0.995*	Spray drift	0.018	0.169*
	R1	pond	0.041	Spray drift	0.032	0.080
	R1	stream	0.706*	Spray drift	0.007	0.083*
	R2	stream	0.946*	Spray drift	0.005*	0.063*
	R3	stream	0.994*	Spray drift	0.020	0.165*
	R4	stream	0.705*	Spray drift	0.011	0.082

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{sw, t_{wa}} (µg/L)*	Max PEC _{SED} (µg/kg)*
Potato (maize as surrogate for D5 & R4) 1x36 g a.s./ha BBCH 12	D3	ditch	0.189	Spray drift	0.010	0.062
	D4	pond	0.008	Spray drift	0.006	0.015
	D4	stream	0.161	Spray drift	0.001	0.009
	D5	pond	0.008	Spray drift	0.006	0.015
	D5	stream	0.169	Spray drift	0.001	0.007
	D6 (1 st)	ditch	0.186	Spray drift	0.003	0.032
	D6 (2 nd)	ditch	0.185	Spray drift	0.003	0.028
	R1	pond	0.010	Runoff	0.008	0.024
	R1	stream	0.165	Runoff	0.006	0.032
	R2	stream	0.173	Spray drift	0.004	0.019
	R3	stream	0.209	Runoff	0.013	0.089
	R4	stream	0.331	Runoff	0.014	0.113
Potato (maize as surrogate for D5 & R4) 1x36 g a.s./ha BBCH 79	D3	ditch	0.189	Spray drift	0.010	0.060
	D4	pond	0.008	Spray drift	0.006	0.016
	D4	stream	0.142	Spray drift	< 0.001	0.003
	D5	pond	0.008	Spray drift	0.006	0.015
	D5	stream	0.185	Spray drift	0.003	0.034
	D6 (1 st)	ditch	0.188	Spray drift	0.005	0.044
	D6 (2 nd)	ditch	0.189	Spray drift	0.010	0.062
	R1	pond	0.024	Runoff	0.018	0.042
	R1	stream	0.408	Runoff	0.012	0.122
	R2	stream	0.176	Spray drift	0.002	0.028
	R3	stream	0.185	Spray drift	0.010	0.096
	R4	stream	0.509	Runoff	0.024	0.177
Spring cereals (winter cereals as surrogate for R1, R3) 2x35 g a.s./ha BBCH 40	D1	ditch	0.322	Spray drift	0.221	0.487
	D1	stream	0.170	Spray drift	0.015	0.064
	D3	ditch	0.194	Spray drift	0.023	0.083
	D4	pond	0.009	Spray drift	0.007	0.023
	D4	stream	0.165	Spray drift	0.002	0.024
	D5	pond	0.011	Spray drift	0.008	0.026
	D5	stream	0.167	Spray drift	0.001	0.011
	R1	pond	0.039	Runoff	0.030	0.084
	R1	stream	0.282	Runoff	0.012	0.174
	R3	stream	0.604	Runoff	0.034	0.250
	R4	stream	0.397	Runoff	0.026	0.119
Spring cereals (winter cereals as surrogate for R1, R3) 2x35 g a.s./ha BBCH 40 (single application)	D1	ditch	0.225	Spray drift	0.163	0.305
	D1	stream	0.196*	Spray drift	0.009	0.061
	D3	ditch	0.222*	Spray drift	0.012	0.072
	D4	pond	0.008	Spray drift	0.006	0.016
	D4	stream	0.181*	Spray drift	0.001	0.011
	D5	pond	0.008	Spray drift	0.006	0.017
	D5	stream	0.193*	Spray drift	0.001	0.010
	R1	pond	0.015	Runoff	0.013	0.034
	R1	stream	0.267	Runoff	0.011	0.065
	R3	stream	0.206	Spray drift	0.009	0.056
	R4	stream	0.397	Runoff	0.027	0.119

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{sw, t_{wa}} (µg/L)*	Max PEC _{sed} (µg/kg)*
Spring cereals (winter cereals as surrogate for R1, R3) 2x35 g a.s./ha BBCH 12	D1	ditch	0.197	Spray drift	0.143	0.288
	D1	stream	0.170	Spray drift	0.007	0.053
	D3	ditch	0.194	Spray drift	0.011	0.073
	D4	pond	0.010	Spray drift	0.007	0.024
	D4	stream	0.163	Spray drift	0.001	0.019
	D5	pond	0.010	Spray drift	0.008	0.026
	D5	stream	0.167	Spray drift	0.001	0.010
	R1	pond	0.010	Spray drift	0.008	0.032
	R1	stream	0.167	Runoff	0.005	0.037
	R3	stream	0.337	Runoff	0.019	0.155
	R4	stream	0.397	Runoff	0.026	0.120
Spring cereals (winter cereals as surrogate for R1, R3) 2x35 g a.s./ha BBCH 12 (single application)	D1	ditch	0.223*	Spray drift	0.030	0.109
	D1	stream	0.179*	Spray drift	0.001	0.009
	D3	ditch	0.222*	Spray drift	0.010	0.066
	D4	pond	0.008	Spray drift	0.006	0.017
	D4	stream	0.170*	Spray drift	< 0.001	0.006
	D5	pond	0.008	Spray drift	0.006	0.018
	D5	stream	0.176*	Spray drift	< 0.001	0.005
	R1	pond	0.008	Spray drift	0.006	0.019
	R1	stream	0.146	Spray drift	0.003	0.018
	R3	stream	0.205	Spray drift	0.008	0.055
	R4	stream	0.146	Spray drift	0.001	0.016
Winter cereals 2x36 g a.s./ha BBCH 40	D1	ditch	0.207	Spray drift	0.140	0.330
	D1	stream	0.173	Spray drift	0.007	0.043
	D2	ditch	0.202	Spray drift	0.098	0.229
	D2	stream	0.177	Spray drift	0.051	0.170
	D3	ditch	0.200	Spray drift	0.023	0.085
	D4	pond	0.012	Spray drift	0.010	0.028
	D4	stream	0.157	Spray drift	0.001	0.008
	D5	pond	0.011	Spray drift	0.009	0.029
	D5	stream	0.174	Spray drift	0.001	0.012
	D6	ditch	0.201	Spray drift	0.031	0.110
	R1	pond	0.040	Runoff	0.031	0.086
	R1	stream	0.291	Runoff	0.013	0.179
	R3	stream	0.623	Runoff	0.035	0.257
	R4	stream	1.219	Runoff	0.054	0.370

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{sw, t_{wa}} (µg/L)*	Max PEC _{sed} (µg/kg)*
Winter cereals 2x36 g a.s./ha BBCH 40 (single application)	D1	ditch	0.230*	Spray drift	0.103	0.255
	D1	stream	0.197*	Spray drift	0.002	0.027
	D2	ditch	0.231*	Spray drift	0.067	0.225
	D2	stream	0.204*	Spray drift	0.057*	0.195*
	D3	ditch	0.228*	Spray drift	0.013	0.074
	D4	pond	0.008	Spray drift	0.007	0.018
	D4	stream	0.174*	Spray drift	< 0.001	0.006
	D5	pond	0.008	Spray drift	0.006	0.018
	D5	stream	0.182*	Spray drift	< 0.001	0.005
	D6	ditch	0.228*	Spray drift	0.012	0.071
	R1	pond	0.016	Runoff	0.013	0.035
	R1	stream	0.275	Runoff	0.011	0.067
	R3	stream	0.212	Spray drift	0.009	0.058
	R4	stream	0.224	Runoff	0.011	0.076
Winter cereals 1x30 g a.s./ha BBCH 12	D1	ditch	0.193	Spray drift	0.147	0.322
	D1	stream	0.168	Spray drift	0.020	0.071
	D2	ditch	0.191	Spray drift	0.038	0.127
	D2	stream	0.155	Spray drift	0.009	0.024
	D3	ditch	0.189	Spray drift	0.007	0.050
	D4	pond	0.007	Spray drift	0.005	0.016
	D4	stream	0.164	Spray drift	0.002	0.025
	D5	pond	0.007	Spray drift	0.006	0.017
	D5	stream	0.177	Spray drift	0.003	0.033
	D6	ditch	0.192	Spray drift	0.073	0.162
	R1	pond	0.011	Runoff	0.009	0.028
	R1	stream	0.467	Runoff	0.011	0.103
	R3	stream	0.966	Runoff	0.030	0.230
	R4	stream	0.198	Runoff	0.008	0.054
Oilseed rape (winter) (winter cereals as surrogate for R4) 2x60 g a.s./ha BBCH 31	D2	ditch	0.337	Spray drift	0.116	0.310
	D2	stream	0.296	Spray drift	0.039	0.194
	D3	ditch	0.332	Spray drift	0.028	0.114
	D4	pond	0.019	Spray drift	0.016	0.048
	D4	stream	0.245	Spray drift	0.001	0.007
	D5	pond	0.017	Spray drift	0.014	0.047
	D5	stream	0.266	Spray drift	0.001	0.009
	R1	pond	0.024	Runoff	0.020	0.062
	R1	stream	0.686	Runoff	0.025	0.157
	R3	stream	0.404	Runoff	0.019	0.106
	R4	stream	0.401	Runoff	0.019	0.133

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{SW, t_{wa}} (µg/L)*	Max PEC _{SED} (µg/kg)*
Oilseed rape (winter) (winter cereals as surrogate for R4) 2x60 g a.s./ha BBCH 31 (single application)	D2	ditch	0.385*	Spray drift	0.072	0.257
	D2	stream	0.343*	Spray drift	0.043*	0.222*
	D3	ditch	0.379*	Spray drift	0.015	0.101
	D4	pond	0.013	Spray drift	0.011	0.031
	D4	stream	0.284*	Spray drift	0.001	0.008
	D5	pond	0.013	Spray drift	0.011	0.030
	D5	stream	0.303*	Spray drift	0.001	0.008
	R1	pond	0.013	Spray drift	0.011	0.034
	R1	stream	0.250	Spray drift	0.009	0.057
	R3	stream	0.404	Runoff	0.015	0.107
	R4	stream	0.252	Spray drift	0.003	0.030
Oilseed rape (winter) (winter cereals as surrogate for R4) 1x60 g a.s./ha BBCH 11	D2	ditch	0.385	Spray drift	0.155	0.420
	D2	stream	0.343	Spray drift	0.135	0.375
	D3	ditch	0.382	Spray drift	0.034	0.152
	D4	pond	0.013	Spray drift	0.010	0.030
	D4	stream	0.329	Spray drift	0.005	0.049
	D5	pond	0.013	Spray drift	0.010	0.029
	D5	stream	0.355	Spray drift	0.007	0.063
	R1	pond	0.013	Spray drift	0.010	0.027
	R1	stream	0.251	Spray drift	0.003	0.030
	R3	stream	0.483	Runoff	0.026	0.161
	R4	stream	0.405	Runoff	0.016	0.106
Oilseed rape (spring) (legumes as surrogate for R3 & R4) 2x60 g a.s./ha BBCH 31	D1	ditch	0.603	Spray drift	0.441	0.840
	D1	stream	0.291	Spray drift	0.025	0.114
	D3	ditch	0.333	Spray drift	0.041	0.151
	D4	pond	0.020	Spray drift	0.016	0.041
	D4	stream	0.273	Spray drift	0.003	0.023
	D5	pond	0.018	Spray drift	0.015	0.043
	D5	stream	0.287	Spray drift	0.002	0.018
	R1	pond	0.047	Spray drift	0.039	0.107
	R1	stream	0.765	Runoff	0.032	0.215
	R3	stream	0.643	Runoff	0.026	0.164
Oilseed rape (spring) (legumes as surrogate for R3 & R4) 2x60 g a.s./ha BBCH 31 (single application)	R4	stream	1.054	Runoff	0.054	0.316
	D1	ditch	0.385	Spray drift	0.281	0.505
	D1	stream	0.337*	Spray drift	0.015	0.100
	D3	ditch	0.381*	Spray drift	0.023	0.125
	D4	pond	0.013	Spray drift	0.010	0.026
	D4	stream	0.312*	Spray drift	0.001	0.019
	D5	pond	0.013	Spray drift	0.011	0.028
	D5	stream	0.331*	Spray drift	0.001	0.018
	R1	pond	0.043	Runoff	0.037	0.087
	R1	stream	0.765	Runoff	0.026	0.216
	R3	stream	0.643	Runoff	0.022	0.165
	R4	stream	1.054	Runoff	0.053	0.316
	D3	ditch	0.228	Spray drift	0.026	0.097
	D4	pond	0.016	Spray drift	0.013	0.034
	D4	stream	0.189	Spray drift	0.001	0.010

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{sw, t_{wa}} (µg/L)*	Max PEC _{SED} (µg/kg)*
Sugar beet (maize as surrogate for D5 & R4) 2x50 g a.s./ha BBCH 12	D5	pond	0.015	Spray drift	0.012	0.033
	D5	stream	0.213	Spray drift	0.002	0.020
	R1	pond	0.016	Spray drift	0.013	0.038
	R1	stream	0.156	Spray drift	0.004	0.025
	R3	stream	0.328	Runoff	0.023	0.139
	R4	stream	0.884	Runoff	0.053	0.307
Sugar beet (maize as surrogate for D5 & R4) 2x50 g a.s./ha BBCH 12 (single application)	D3	ditch	0.262*	Spray drift	0.015	0.086
	D4	pond	0.011	Spray drift	0.008	0.022
	D4	stream	0.214*	Spray drift	0.001	0.008
	D5	pond	0.011	Spray drift	0.008	0.021
	D5	stream	0.234*	Spray drift	0.001	0.010
	R1	pond	0.011	Spray drift	0.008	0.023
	R1	stream	0.181*	Spray drift	0.002	0.020
	R3	stream	0.256	Spray drift	0.007	0.043
	R4	stream	0.469	Runoff	0.020	0.157
Bulb vegetables (legumes as surrogate for D5) (flower bulbs & flower tubers) 1x46 g a.s./ha BBCH 12	D3	ditch	0.292	Spray drift	0.016	0.093
	D4	pond	0.010	Spray drift	0.008	0.020
	D4	stream	0.224	Spray drift	0.001	0.008
	D5	pond	0.010	Spray drift	0.008	0.022
	D5	stream	0.201	Spray drift	< 0.001	0.005
	D6 (1 st)	ditch	0.293	Spray drift	0.036	0.136
	D6 (2 nd)	ditch	0.294	Spray drift	0.103	0.214
	R1	pond	0.014	Runoff	0.011	0.032
	R1	stream	0.251	Runoff	0.008	0.047
	R2	stream	0.254	Spray drift	0.005	0.030
	R3	stream	0.270	Spray drift	0.004	0.040
	R4	stream	0.659	Runoff	0.028	0.212
Bulb vegetables (legumes as surrogate for D5) (flower bulbs & flower tubers) 2x34 g a.s./ha BBCH 20	D3	ditch	0.189	Spray drift	0.020	0.077
	D4	pond	0.011	Spray drift	0.008	0.021
	D4	stream	0.144	Spray drift	0.001	0.006
	D5	pond	0.010	Spray drift	0.009	0.026
	D5	stream	0.140	Spray drift	0.001	0.008
	D6 (1 st)	ditch	0.270	Spray drift	0.119	0.255
	D6 (2 nd)	ditch	0.190	Spray drift	0.027	0.101
	R1	pond	0.035	Runoff	0.030	0.075
	R1	stream	0.383	Runoff	0.023	0.114
	R2	stream	0.165	Spray drift	0.006	0.050
	R3	stream	0.366	Runoff	0.018	0.102
	R4	stream	0.740	Runoff	0.037	0.233

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{SW, twa} (µg/L)*	Max PEC _{SED} (µg/kg)*
Bulb vegetables (legumes as surrogate for D5) (flower bulbs & flower tubers) 2x34 g a.s./ha BBCH 20 (single application)	D3	ditch	0.215*	Spray drift	0.011	0.067
	D4	pond	0.007	Spray drift	0.005	0.013
	D4	stream	0.164*	Spray drift	< 0.001	0.005
	D5	pond	0.007	Spray drift	0.006	0.017
	D5	stream	0.148*	Spray drift	< 0.001	0.004
	D6 (1 st)	ditch	0.217	Spray drift	0.069	0.170
	D6 (2 nd)	ditch	0.213*	Spray drift	0.005	0.041
	R1	pond	0.030	Runoff	0.023	0.056
	R1	stream	0.383	Runoff	0.016	0.099
	R2	stream	0.191	Spray drift	0.005	0.050
	R3	stream	0.366	Runoff	0.015	0.103
	R4	stream	0.740	Runoff	0.037	0.233
Bulb vegetables (legumes as surrogate for D5) (flower bulbs & flower tubers) 2x34 g a.s./ha BBCH 12	D3	ditch	0.189	Spray drift	0.021	0.081
	D4	pond	0.011	Spray drift	0.009	0.024
	D4	stream	0.143	Spray drift	0.001	0.005
	D5	pond	0.010	Spray drift	0.009	0.026
	D5	stream	0.140	Spray drift	0.001	0.008
	D6 (1 st)	ditch	0.194	Spray drift	0.062	0.155
	D6 (2 nd)	ditch	0.492	Drainage	0.128	0.351
	R1	pond	0.029	Runoff	0.024	0.060
	R1	stream	0.441	Runoff	0.016	0.126
	R2	stream	0.163	Spray drift	0.004	0.026
	R3	stream	0.173	Spray drift	0.006	0.040
	R4	stream	0.738	Runoff	0.048	0.272
Bulb vegetables (legumes as surrogate for D5) (flower bulbs & flower tubers) 1 x34 g a.s./ha BBCH 12 (single application)	D3	ditch	0.216*	Spray drift	0.012	0.070
	D4	pond	0.007	Spray drift	0.006	0.015
	D4	stream	0.165*	Spray drift	< 0.001	0.006*
	D5	pond	0.007	Spray drift	0.006	0.017
	D5	stream	0.148*	Spray drift	< 0.001	0.004
	D6 (1 st)	ditch	0.217*	Spray drift	0.026	0.102
	D6 (2 nd)	ditch	0.217	Spray drift	0.074	0.161
	R1	pond	0.010	Runoff	0.008	0.024
	R1	stream	0.181	Runoff	0.006	0.035
	R2	stream	0.188*	Spray drift	0.004	0.022
	R3	stream	0.199*	Spray drift	0.003	0.030
	R4	stream	0.479	Runoff	0.021	0.157
Leafy vegetables (1 st) (legumes as surrogate for D5) (floriculture & perennial nursery crops) 1x46 g a.s./ha BBCH 12	D3	ditch	0.292	Spray drift	0.016	0.092
	D4	pond	0.010	Spray drift	0.008	0.019
	D4	stream	0.236	Spray drift	0.001	0.013
	D5	pond	0.010	Spray drift	0.008	0.022
	D5	stream	0.201	Spray drift	< 0.001	0.005
	D6	ditch	0.286	Spray drift	0.004	0.044
	R1	pond	0.010	Spray drift	0.008	0.022
	R1	stream	0.192	Spray drift	0.002	0.022
	R2	stream	0.254	Spray drift	0.005	0.034
	R3	stream	0.270	Spray drift	0.004	0.040
	R4	stream	0.655	Runoff	0.029	0.214

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{sw, twa} (µg/L)*	Max PEC _{sed} (µg/kg)*
Leafy vegetables (1 st) (legumes as surrogate for D5) (floriculture & perennial nursery crops) 2x34 g a.s./ha BBCH 12	D3	ditch	0.189	Spray drift	0.021	0.079
	D4	pond	0.010	Spray drift	0.007	0.022
	D4	stream	0.151	Spray drift	0.001	0.008
	D5	pond	0.010	Spray drift	0.009	0.026
	D5	stream	0.140	Spray drift	0.001	0.008
	D6	ditch	0.186	Spray drift	0.006	0.040
	R1	pond	0.015	Runoff	0.012	0.037
	R1	stream	0.151	Runoff	0.005	0.047
	R2	stream	0.163	Spray drift	0.004	0.032
	R3	stream	0.174	Spray drift	0.009	0.058
	R4	stream	0.630	Runoff	0.046	0.241
Leafy vegetables (1 st) (legumes as surrogate for D5) (floriculture & perennial nursery crops) 2x34 g a.s./ha BBCH 12 (single application)	D3	ditch	0.216*	Spray drift	0.012	0.070
	D4	pond	0.007	Spray drift	0.006	0.015
	D4	stream	0.174*	Spray drift	0.001	0.009*
	D5	pond	0.007	Spray drift	0.006	0.017
	D5	stream	0.148*	Spray drift	< 0.001	0.004
	D6	ditch	0.212*	Spray drift	0.003	0.033
	R1	pond	0.007	Spray drift	0.006	0.017
	R1	stream	0.142	Spray drift	0.002	0.016
	R2	stream	0.188*	Spray drift	0.004	0.025
	R3	stream	0.200*	Spray drift	0.003	0.030
	R4	stream	0.475	Runoff	0.021	0.158
Pome fruit (tree nursery crops) 1x46 g a.s./ha early application BBCH 12	D3	ditch	3.572	Spray drift	0.195	0.971
	D4	pond	0.217	Spray drift	0.179	0.399
	D4	stream	3.442	Spray drift	0.009	0.132
	D5	pond	0.217	Spray drift	0.180	0.406
	D5	stream	3.543	Spray drift	0.007	0.098
	R1	pond	0.217	Spray drift	0.174	0.371
	R1	stream	2.889	Spray drift	0.023	0.275
	R2	stream	3.826	Spray drift	0.015	0.198
	R3	stream	4.087	Spray drift	0.064	0.580
	R4	stream	2.906	Spray drift	0.031	0.310
Pome fruit (tree nursery crops) 1x46 g a.s./ha late application up to BBCH 91	D3	ditch	1.697	Spray drift	0.382	0.920
	D4	pond	0.076	Spray drift	0.059	0.142
	D4	stream	1.657	Spray drift	0.012	0.144
	D5	pond	0.076	Spray drift	0.058	0.133
	D5	stream	1.831	Spray drift	0.034	0.301
	R1	pond	0.076	Spray drift	0.057	0.126
	R1	stream	1.298	Spray drift	0.013	0.149
	R2	stream	1.740	Spray drift	0.009	0.115
	R3	stream	1.830	Spray drift	0.048	0.296
	R4	stream	1.298	Spray drift	0.028	0.148

Application pattern	Scenario FOCUS	Water-body	Acetamiprid			
			Max PEC _{sw} (µg/L)*	Dominant entry route	21 d-PEC _{sw, twa} (µg/L)*	Max PEC _{SED} (µg/kg)*
Pome fruit (tree nursery crops) 2x34 g a.s./ha early application BBCH 12	D3	ditch	2.273	Spray drift	0.260	0.819
	D4	pond	0.216	Spray drift	0.173	0.477
	D4	stream	2.298	Spray drift	0.012	0.157
	D5	pond	0.249	Spray drift	0.209	0.506
	D5	stream	2.435	Spray drift	0.015	0.146
	R1	pond	0.260	Spray drift	0.208	0.465
	R1	stream	1.823	Spray drift	0.026	0.176
	R2	stream	2.418	Spray drift	0.010	0.140
	R3	stream	2.579	Spray drift	0.088	0.447
	R4	stream	1.833	Spray drift	0.044	0.233
Pome fruit (tree nursery crops) 2x34 g a.s./ha early application BBCH 12 (single application)	D3	ditch	2.640*	Spray drift	0.144	0.732
	D4	pond	0.161	Spray drift	0.132	0.301
	D4	stream	2.544*	Spray drift	0.007	0.098
	D5	pond	0.161	Spray drift	0.133	0.306
	D5	stream	2.619*	Spray drift	0.005	0.072
	R1	pond	0.161	Spray drift	0.128	0.279
	R1	stream	2.135*	Spray drift	0.017	0.205*
	R2	stream	2.828*	Spray drift	0.011*	0.147*
	R3	stream	3.020*	Spray drift	0.047	0.435
	R4	stream	2.148*	Spray drift	0.023	0.232
Pome fruit (tree nursery crops) 2x34 g a.s./ha late application up to BBCH 91 (Aug)	D3	ditch	1.141	Spray drift	0.479	0.947
	D4	pond	0.080	Spray drift	0.065	0.178
	D4	stream	0.981	Spray drift	0.012	0.086
	D5	pond	0.085	Spray drift	0.067	0.164
	D5	stream	1.084	Spray drift	0.040	0.221
	R1	pond	0.070	Spray drift	0.055	0.160
	R1	stream	0.768	Spray drift	0.008	0.099
	R2	stream	1.030	Spray drift	0.011	0.080
	R3	stream	1.083	Spray drift	0.059	0.250
	R4	stream	0.768	Spray drift	0.018	0.111
Pome fruit (tree nursery crops) 2x34 g a.s./ha late application up to BBCH 91 (Aug) (single application)	D3	ditch	1.254*	Spray drift	0.282	0.693
	D4	pond	0.056	Spray drift	0.044	0.107
	D4	stream	1.225*	Spray drift	0.009	0.107*
	D5	pond	0.056	Spray drift	0.043	0.100
	D5	stream	1.353*	Spray drift	0.025	0.226*
	R1	pond	0.056	Spray drift	0.042	0.095
	R1	stream	0.960*	Spray drift	0.010*	0.111*
	R2	stream	1.286*	Spray drift	0.007	0.086*
	R3	stream	1.352*	Spray drift	0.035	0.222
	R4	stream	0.959*	Spray drift	0.020*	0.111

* Maxima resulting from single application are marked with *.

PEC_{sw/sed} – FOCUS Step 4

Table 8.9-6: FOCUS Step 4 PEC_{sw} for acetamiprid following single / multiple application(s) on various crops

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
<i>Maize, 1x60 g a.s./ha, BBCH 51</i>									
None	D3 ditch	-	0.103	0.055	0.037	0.028	0.055	0.037	0.028
50 %		0.157	0.052	0.027	0.019	0.014	0.027	0.019	0.014
75 %		0.079	0.026	0.014	0.009	0.007	0.014	0.009	0.007
90 %		0.031	0.010	0.005	0.004	0.003	0.005	0.004	0.003
None	D4 pond	-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.006	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D4 stream	-	0.119	0.063	0.043	0.033	0.063	0.043	0.033
50 %		0.141	0.059	0.031	0.021	0.016	0.031	0.021	0.016
75 %		0.070	0.030	0.016	0.011	0.008	0.016	0.011	0.008
90 %		0.028	0.012	0.006	0.004	0.003	0.006	0.004	0.003
None	D5 pond	-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.006	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D5 stream	-	0.130	0.069	0.047	0.036	0.069	0.047	0.036
50 %		0.154	0.065	0.034	0.023	0.018	0.034	0.023	0.018
75 %		0.077	0.032	0.017	0.012	0.009	0.017	0.012	0.009
90 %		0.031	0.013	0.007	0.005	0.004	0.007	0.005	0.004
None	D6 ditch	-	0.102	0.054	0.037	0.028	0.054	0.037	0.028
50 %		0.155	0.051	0.027	0.018	0.014	0.027	0.018	0.014
75 %		0.078	0.025	0.013	0.009	0.007	0.013	0.009	0.007
90 %		0.031	0.010	0.005	0.004	0.003	0.005	0.004	0.003
None	R1 pond	-	0.032	0.030	0.028	0.028	0.016	0.014	0.009
50 %		0.028	0.028	0.026	0.026	0.025	0.013	0.012	0.007
75 %		0.026	0.026	0.025	0.025	0.024	0.011	0.011	0.006
90 %		0.024	0.024	0.024	0.024	0.024	0.010	0.010	0.005
None	R1 stream	-	0.535	0.535	0.535	0.535	0.243	0.243	0.127
50 %		0.535	0.535	0.535	0.535	0.535	0.243	0.243	0.127
75 %		0.535	0.535	0.535	0.535	0.535	0.243	0.243	0.127
90 %		0.535	0.535	0.535	0.535	0.535	0.243	0.243	0.127
None	R2 stream	-	0.123	0.065	0.045	0.034	0.065	0.045	0.034
50 %		0.146	0.062	0.033	0.022	0.017	0.033	0.022	0.017
75 %		0.073	0.031	0.016	0.011	0.008	0.016	0.011	0.008

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
90 %		0.029	0.012	0.007	0.004	0.003	0.007	0.004	0.003
None	R3 stream	-	0.292	0.292	0.292	0.292	0.133	0.133	0.070
50 %		0.292	0.292	0.292	0.292	0.292	0.133	0.133	0.070
75 %		0.292	0.292	0.292	0.292	0.292	0.133	0.133	0.070
90 %		0.292	0.292	0.292	0.292	0.292	0.133	0.133	0.070
None	R4 stream	-	0.090	0.087	0.087	0.087	0.048	0.040	0.025
50 %		0.106	0.087	0.087	0.087	0.087	0.040	0.040	0.021
75 %		0.087	0.087	0.087	0.087	0.087	0.040	0.040	0.021
90 %		0.087	0.087	0.087	0.087	0.087	0.040	0.040	0.021
Pome fruit (late), 1x80 g a.s./ha, BBCH 71									
None	D3 ditch	-	1.985	0.887	0.448	0.274	0.887	0.448	0.274
50 %		1.471	0.993	0.444	0.224	0.137	0.444	0.224	0.137
75 %		0.735	0.496	0.222	0.112	0.068	0.222	0.112	0.068
90 %		0.294	0.199	0.089	0.045	0.027	0.089	0.045	0.027
None	D4 pond	-	0.151	0.084	0.053	0.038	0.084	0.053	0.038
50 %		0.066	0.075	0.042	0.027	0.019	0.042	0.027	0.019
75 %		0.033	0.038	0.021	0.013	0.010	0.021	0.013	0.010
90 %		0.013	0.015	0.008	0.005	0.004	0.008	0.005	0.004
None	D4 stream	-	2.304	1.029	0.520	0.318	1.029	0.520	0.318
50 %		1.476	1.152	0.515	0.260	0.159	0.515	0.260	0.159
75 %		0.738	0.576	0.257	0.130	0.079	0.257	0.130	0.079
90 %		0.295	0.230	0.103	0.052	0.032	0.103	0.052	0.032
None	D5 pond	-	0.151	0.084	0.053	0.038	0.084	0.053	0.038
50 %		0.066	0.075	0.042	0.027	0.019	0.042	0.027	0.019
75 %		0.033	0.038	0.021	0.013	0.010	0.021	0.013	0.010
90 %		0.013	0.015	0.008	0.005	0.004	0.008	0.005	0.004
None	D5 stream	-	2.485	1.111	0.561	0.343	1.111	0.561	0.343
50 %		1.592	1.243	0.555	0.280	0.171	0.555	0.280	0.171
75 %		0.796	0.621	0.278	0.140	0.086	0.278	0.140	0.086
90 %		0.318	0.249	0.111	0.056	0.034	0.111	0.056	0.034
None	R1 pond	-	0.151	0.083	0.053	0.038	0.083	0.053	0.038
50 %		0.066	0.075	0.042	0.027	0.019	0.042	0.027	0.019
75 %		0.033	0.038	0.021	0.013	0.009	0.021	0.013	0.009
90 %		0.013	0.015	0.008	0.006	0.005	0.008	0.005	0.004
None	R1 stream	-	1.727	0.772	0.390	0.317	0.772	0.390	0.238
50 %		1.106	0.864	0.386	0.317	0.317	0.386	0.195	0.119
75 %		0.553	0.432	0.317	0.317	0.317	0.193	0.133	0.067
90 %		0.317	0.317	0.317	0.317	0.317	0.133	0.133	0.067

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R2 stream	-	2.362	1.055	0.533	0.326	1.055	0.533	0.326
50 %		1.513	1.181	0.528	0.266	0.163	0.528	0.266	0.163
75 %		0.757	0.590	0.264	0.133	0.081	0.264	0.133	0.081
90 %		0.303	0.236	0.106	0.053	0.033	0.106	0.053	0.033
None	R3 stream	-	2.484	1.110	0.560	0.343	1.110	0.560	0.343
50 %		1.591	1.242	0.555	0.280	0.171	0.555	0.280	0.171
75 %		0.796	0.621	0.277	0.140	0.086	0.277	0.140	0.086
90 %		0.318	0.248	0.111	0.056	0.034	0.111	0.056	0.034
None	R4 stream	-	1.762	1.113	1.113	1.113	0.787	0.487	0.251
50 %		1.129	1.113	1.113	1.113	1.113	0.487	0.487	0.251
75 %		1.113	1.113	1.113	1.113	1.113	0.487	0.487	0.251
90 %		1.113	1.113	1.113	1.113	1.113	0.487	0.487	0.251
Pome fruit, 2x25 g a.s./ha, early application, BBCH 62									
None	D3 ditch	-	1.294	0.764	0.419	0.198	0.764	0.419	0.198
50 %		0.839	0.647	0.382	0.210	0.099	0.382	0.210	0.099
75 %		0.419	0.323	0.191	0.105	0.049	0.191	0.105	0.049
90 %		0.168	0.129	0.076	0.042	0.020	0.076	0.042	0.020
None	D4 pond	-	0.208	0.118	0.062	0.036	0.118	0.062	0.036
50 %		0.093	0.104	0.059	0.031	0.018	0.059	0.031	0.018
75 %		0.046	0.052	0.029	0.015	0.009	0.029	0.015	0.009
90 %		0.018	0.021	0.012	0.006	0.004	0.012	0.006	0.004
None	D4 stream	-	1.499	0.885	0.486	0.229	0.885	0.486	0.229
50 %		0.883	0.749	0.443	0.243	0.115	0.443	0.243	0.115
75 %		0.441	0.375	0.221	0.122	0.057	0.221	0.122	0.057
90 %		0.177	0.150	0.089	0.049	0.023	0.089	0.049	0.023
None	D5 pond	-	0.201	0.114	0.060	0.034	0.114	0.060	0.034
50 %		0.090	0.101	0.057	0.030	0.017	0.057	0.030	0.017
75 %		0.045	0.050	0.028	0.015	0.009	0.028	0.015	0.009
90 %		0.018	0.020	0.011	0.006	0.003	0.011	0.006	0.003
None	D5 stream	-	1.617	0.955	0.525	0.247	0.955	0.525	0.247
50 %		0.953	0.808	0.478	0.262	0.124	0.478	0.262	0.124
75 %		0.476	0.404	0.239	0.131	0.062	0.239	0.131	0.062
90 %		0.191	0.162	0.096	0.052	0.025	0.096	0.052	0.025
None	R1 pond	-	0.200	0.116	0.063	0.039	0.113	0.060	0.034
50 %		0.092	0.103	0.061	0.034	0.022	0.057	0.031	0.018
75 %		0.049	0.054	0.033	0.020	0.014	0.030	0.017	0.009
90 %		0.023	0.025	0.016	0.011	0.009	0.013	0.008	0.004

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R1 stream	-	1.147	0.677	0.372	0.175	0.677	0.372	0.175
50 %		0.675	0.573	0.339	0.186	0.091	0.339	0.186	0.088
75 %		0.338	0.287	0.169	0.093	0.091	0.169	0.093	0.044
90 %		0.135	0.115	0.091	0.091	0.091	0.068	0.038	0.020
None	R2 stream	-	1.537	0.908	0.498	0.235	0.908	0.498	0.235
50 %		0.905	0.768	0.454	0.249	0.118	0.454	0.249	0.118
75 %		0.453	0.384	0.227	0.125	0.059	0.227	0.125	0.059
90 %		0.181	0.154	0.091	0.050	0.024	0.091	0.050	0.024
None	R3 stream	-	1.616	0.955	0.524	0.247	0.955	0.524	0.247
50 %		0.952	0.808	0.477	0.262	0.124	0.477	0.262	0.124
75 %		0.476	0.404	0.239	0.131	0.062	0.239	0.131	0.062
90 %		0.190	0.162	0.095	0.052	0.025	0.095	0.052	0.025
None	R4 stream	-	1.146	0.677	0.372	0.175	0.677	0.372	0.175
50 %		0.675	0.573	0.339	0.186	0.125	0.339	0.186	0.088
75 %		0.338	0.287	0.169	0.125	0.125	0.169	0.093	0.044
90 %		0.135	0.125	0.125	0.125	0.125	0.068	0.053	0.027
Pome fruit, 2x25 g a.s./ha, early application, BBCH 62 (single application)									
None	D3 ditch	-	1.530	0.940	0.423	0.215	0.940	0.423	0.215
50 %		0.974	0.765	0.470	0.211	0.107	0.470	0.211	0.107
75 %		0.487	0.383	0.235	0.106	0.054	0.235	0.106	0.054
90 %		0.195	0.153	0.094	0.042	0.021	0.094	0.042	0.021
None	D4 pond	-	0.133	0.073	0.038	0.024	0.073	0.038	0.024
50 %		0.059	0.066	0.036	0.019	0.012	0.036	0.019	0.012
75 %		0.030	0.033	0.018	0.010	0.006	0.018	0.010	0.006
90 %		0.012	0.013	0.007	0.004	0.002	0.007	0.004	0.002
None	D4 stream	-	1.774	1.089	0.490	0.249	1.089	0.490	0.249
50 %		1.032	0.887	0.545	0.245	0.125	0.545	0.245	0.125
75 %		0.516	0.444	0.272	0.123	0.062	0.272	0.123	0.062
90 %		0.206	0.177	0.109	0.049	0.025	0.109	0.049	0.025
None	D5 pond	-	0.133	0.073	0.038	0.024	0.073	0.038	0.024
50 %		0.059	0.066	0.036	0.019	0.012	0.036	0.019	0.012
75 %		0.030	0.033	0.018	0.010	0.006	0.018	0.010	0.006
90 %		0.012	0.013	0.007	0.004	0.002	0.007	0.004	0.002
None	D5 stream	-	1.916	1.176	0.529	0.269	1.176	0.529	0.269
50 %		1.115	0.958	0.588	0.265	0.135	0.588	0.265	0.135
75 %		0.558	0.479	0.294	0.132	0.067	0.294	0.132	0.067
90 %		0.223	0.192	0.118	0.053	0.027	0.118	0.053	0.027
None	R1 pond	-	0.133	0.073	0.038	0.024	0.073	0.038	0.024
50 %		0.059	0.066	0.036	0.019	0.014	0.036	0.019	0.012

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
75 %	R1 stream	0.030	0.033	0.019	0.012	0.010	0.018	0.010	0.006
90 %		0.014	0.015	0.011	0.008	0.007	0.007	0.005	0.003
None		-	1.359	0.835	0.376	0.191	0.835	0.376	0.191
50 %		0.791	0.680	0.417	0.188	0.095	0.417	0.188	0.095
75 %		0.396	0.340	0.209	0.094	0.083	0.209	0.094	0.048
90 %		0.158	0.136	0.083	0.083	0.083	0.083	0.038	0.020
None	R2 stream	-	1.822	1.119	0.503	0.256	1.119	0.503	0.256
50 %		1.060	0.911	0.559	0.252	0.128	0.559	0.252	0.128
75 %		0.530	0.456	0.280	0.126	0.064	0.280	0.126	0.064
90 %		0.212	0.182	0.112	0.050	0.026	0.112	0.050	0.026
None	R3 stream	-	1.916	1.176	0.529	0.269	1.176	0.529	0.269
50 %		1.115	0.958	0.588	0.265	0.135	0.588	0.265	0.135
75 %		0.558	0.479	0.294	0.132	0.067	0.294	0.132	0.067
90 %		0.223	0.192	0.118	0.053	0.027	0.118	0.053	0.027
None	R4 stream	-	1.329	0.816	0.367	0.187	0.816	0.367	0.187
50 %		0.773	0.664	0.408	0.184	0.093	0.408	0.184	0.093
75 %		0.387	0.332	0.204	0.092	0.047	0.204	0.092	0.047
90 %		0.155	0.133	0.082	0.037	0.019	0.082	0.037	0.019
Pome fruit, 2x25 g a.s./ha, late application, pre-harvest									
None	D3 ditch	-	0.507	0.244	0.119	0.069	0.244	0.119	0.069
50 %		0.365	0.254	0.122	0.060	0.035	0.122	0.060	0.035
75 %		0.182	0.127	0.061	0.030	0.017	0.061	0.030	0.017
90 %		0.073	0.051	0.024	0.012	0.007	0.024	0.012	0.007
None	D4 pond	-	0.066	0.036	0.022	0.015	0.036	0.022	0.015
50 %		0.029	0.033	0.018	0.011	0.007	0.018	0.011	0.007
75 %		0.014	0.016	0.009	0.005	0.004	0.009	0.005	0.004
90 %		0.006	0.007	0.004	0.002	0.001	0.004	0.002	0.001
None	D4 stream	-	0.574	0.276	0.135	0.078	0.276	0.135	0.078
50 %		0.361	0.287	0.138	0.068	0.039	0.138	0.068	0.039
75 %		0.180	0.144	0.069	0.034	0.020	0.069	0.034	0.020
90 %		0.072	0.057	0.028	0.014	0.008	0.028	0.014	0.008
None	D5 pond	-	0.071	0.039	0.024	0.016	0.039	0.024	0.016
50 %		0.031	0.035	0.019	0.012	0.008	0.019	0.012	0.008
75 %		0.015	0.018	0.010	0.006	0.004	0.010	0.006	0.004
90 %		0.006	0.007	0.004	0.002	0.002	0.004	0.002	0.002
None	D5 stream	-	0.634	0.305	0.149	0.086	0.305	0.149	0.086
50 %		0.398	0.317	0.152	0.075	0.043	0.152	0.075	0.043
75 %		0.199	0.159	0.076	0.037	0.022	0.076	0.037	0.022
90 %		0.080	0.063	0.030	0.015	0.009	0.030	0.015	0.009

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R1 pond	-	0.064	0.035	0.021	0.015	0.035	0.021	0.015
50 %		0.028	0.032	0.018	0.011	0.007	0.018	0.011	0.007
75 %		0.014	0.016	0.009	0.005	0.004	0.009	0.005	0.004
90 %		0.006	0.006	0.004	0.002	0.001	0.004	0.002	0.001
None	R1 stream	-	0.450	0.216	0.106	0.061	0.216	0.106	0.061
50 %		0.282	0.225	0.108	0.053	0.031	0.108	0.053	0.031
75 %		0.141	0.112	0.054	0.026	0.015	0.054	0.026	0.015
90 %		0.056	0.045	0.022	0.011	0.006	0.022	0.011	0.006
None	R2 stream	-	0.603	0.289	0.142	0.082	0.289	0.142	0.082
50 %		0.379	0.301	0.145	0.071	0.041	0.145	0.071	0.041
75 %		0.189	0.151	0.072	0.035	0.021	0.072	0.035	0.021
90 %		0.076	0.060	0.029	0.014	0.008	0.029	0.014	0.008
None	R3 stream	-	0.634	0.304	0.186	0.186	0.304	0.149	0.086
50 %		0.398	0.317	0.186	0.186	0.186	0.152	0.084	0.044
75 %		0.199	0.186	0.186	0.186	0.186	0.084	0.084	0.044
90 %		0.186	0.186	0.186	0.186	0.186	0.084	0.084	0.044
None	R4 stream	-	0.450	0.288	0.288	0.288	0.216	0.129	0.067
50 %		0.288	0.288	0.288	0.288	0.288	0.129	0.129	0.067
75 %		0.288	0.288	0.288	0.288	0.288	0.129	0.129	0.067
90 %		0.288	0.288	0.288	0.288	0.288	0.129	0.129	0.067
Pome fruit, 2x25 g a.s./ha, late application, pre-harvest (single application)									
None	D3 ditch	-	0.620	0.277	0.140	0.086	0.277	0.140	0.086
50 %		0.460	0.310	0.139	0.070	0.043	0.139	0.070	0.043
75 %		0.230	0.155	0.069	0.035	0.021	0.069	0.035	0.021
90 %		0.092	0.062	0.028	0.014	0.009	0.028	0.014	0.009
None	D4 pond	-	0.047	0.026	0.017	0.012	0.026	0.017	0.012
50 %		0.021	0.024	0.013	0.008	0.006	0.013	0.008	0.006
75 %		0.010	0.012	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.004	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D4 stream	-	0.704	0.314	0.159	0.097	0.314	0.159	0.097
50 %		0.451	0.352	0.157	0.079	0.049	0.157	0.079	0.049
75 %		0.225	0.176	0.079	0.040	0.024	0.079	0.040	0.024
90 %		0.090	0.070	0.031	0.016	0.010	0.031	0.016	0.010
None	D5 pond	-	0.047	0.026	0.017	0.012	0.026	0.017	0.012
50 %		0.021	0.024	0.013	0.008	0.006	0.013	0.008	0.006
75 %		0.010	0.012	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.004	0.005	0.003	0.002	0.001	0.003	0.002	0.001

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D5 stream	-	0.777	0.347	0.175	0.107	0.347	0.175	0.107
50 %		0.498	0.388	0.174	0.088	0.054	0.174	0.088	0.054
75 %		0.249	0.194	0.087	0.044	0.027	0.087	0.044	0.027
90 %		0.100	0.078	0.035	0.018	0.011	0.035	0.018	0.011
None	R1 pond	-	0.047	0.026	0.017	0.012	0.026	0.017	0.012
50 %		0.021	0.024	0.013	0.008	0.006	0.013	0.008	0.006
75 %		0.010	0.012	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.004	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	R1 stream	-	0.551	0.246	0.124	0.076	0.246	0.124	0.076
50 %		0.353	0.275	0.123	0.062	0.038	0.123	0.062	0.038
75 %		0.176	0.138	0.062	0.031	0.019	0.062	0.031	0.019
90 %		0.071	0.055	0.025	0.012	0.008	0.025	0.012	0.008
None	R2 stream	-	0.738	0.330	0.167	0.102	0.330	0.167	0.102
50 %		0.473	0.369	0.165	0.083	0.051	0.165	0.083	0.051
75 %		0.236	0.185	0.082	0.042	0.025	0.082	0.042	0.025
90 %		0.095	0.074	0.033	0.017	0.010	0.033	0.017	0.010
None	R3 stream	-	0.776	0.347	0.175	0.107	0.347	0.175	0.107
50 %		0.497	0.388	0.173	0.088	0.054	0.173	0.088	0.054
75 %		0.249	0.194	0.087	0.044	0.027	0.087	0.044	0.027
90 %		0.099	0.078	0.035	0.021	0.021	0.035	0.018	0.011
None	R4 stream	-	0.551	0.246	0.124	0.076	0.246	0.124	0.076
50 %		0.353	0.275	0.123	0.062	0.059	0.123	0.062	0.038
75 %		0.176	0.138	0.062	0.059	0.059	0.062	0.031	0.019
90 %		0.071	0.059	0.059	0.059	0.059	0.025	0.024	0.012
Spring cereals, 2x35 g a.s./ha, BBCH 40									
None	D1 ditch	-	0.083	0.043	0.029	0.022	0.043	0.029	0.022
50 %		0.160	0.041	0.021	0.014	0.011	0.021	0.014	0.011
75 %		0.080	0.021	0.011	0.007	0.005	0.011	0.007	0.005
90 %		0.032	0.008	0.004	0.003	0.002	0.004	0.003	0.002
None	D1 stream	-	0.060	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.085	0.030	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.042	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D3 ditch	-	0.050	0.026	0.018	0.013	0.026	0.018	0.013
50 %		0.097	0.025	0.013	0.009	0.007	0.013	0.009	0.007
75 %		0.049	0.013	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D4 pond	-	0.008	0.006	0.004	0.004	0.006	0.004	0.004
50 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
75 %	D4 stream	0.002	0.002	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		-	0.058	0.030	0.020	0.015	0.030	0.020	0.015
50 %		0.083	0.029	0.015	0.010	0.008	0.015	0.010	0.008
75 %	D5 pond	0.041	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None		-	0.009	0.006	0.005	0.004	0.006	0.005	0.004
50 %		0.005	0.005	0.003	0.003	0.002	0.003	0.003	0.002
75 %	D5 stream	0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	< 0.001	0.001	0.001	< 0.001
None		-	0.059	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.084	0.030	0.015	0.010	0.008	0.015	0.010	0.008
75 %	R1 pond (winter cereals as surrogate crop)	0.042	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None		-	0.038	0.036	0.036	0.035	0.017	0.016	0.009
50 %		0.036	0.035	0.034	0.034	0.034	0.015	0.015	0.008
75 %	R1 stream (winter cereals as surrogate crop)	0.034	0.034	0.033	0.033	0.033	0.014	0.014	0.007
90 %		0.033	0.033	0.033	0.032	0.032	0.013	0.013	0.007
None		-	0.282	0.282	0.282	0.282	0.128	0.128	0.067
50 %		0.282	0.282	0.282	0.282	0.282	0.128	0.128	0.067
75 %	R3 stream (winter cereals as surrogate crop)	0.282	0.282	0.282	0.282	0.282	0.128	0.128	0.067
90 %		0.282	0.282	0.282	0.282	0.282	0.128	0.128	0.067
None		-	0.604	0.604	0.604	0.604	0.276	0.276	0.145
50 %		0.604	0.604	0.604	0.604	0.604	0.276	0.276	0.145
75 %	R4 stream	0.604	0.604	0.604	0.604	0.604	0.276	0.276	0.145
90 %		0.604	0.604	0.604	0.604	0.604	0.276	0.276	0.145
None		-	0.397	0.397	0.397	0.397	0.179	0.179	0.094
50 %		0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094
75 %	D1 ditch	0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094
90 %		0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094
None		-	0.072	0.038	0.026	0.020	0.038	0.026	0.020
50 %		0.098	0.036	0.019	0.013	0.010	0.019	0.013	0.010
75 %	D1 stream	0.049	0.018	0.010	0.006	0.005	0.010	0.006	0.005
90 %		0.020	0.007	0.004	0.003	0.002	0.004	0.003	0.002

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D3 ditch	-	0.060	0.032	0.022	0.017	0.032	0.022	0.017
50 %		0.111	0.030	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.055	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.022	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D4 pond	-	0.007	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D4 stream	-	0.066	0.035	0.024	0.018	0.035	0.024	0.018
50 %		0.091	0.033	0.018	0.012	0.009	0.018	0.012	0.009
75 %		0.045	0.017	0.009	0.006	0.005	0.009	0.006	0.005
90 %		0.018	0.007	0.004	0.002	0.002	0.004	0.002	0.002
None	D5 pond	-	0.007	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D5 stream	-	0.070	0.037	0.026	0.019	0.037	0.026	0.019
50 %		0.096	0.035	0.019	0.013	0.010	0.019	0.013	0.010
75 %		0.048	0.018	0.009	0.006	0.005	0.009	0.006	0.005
90 %		0.019	0.007	0.004	0.003	0.002	0.004	0.003	0.002
None	R1 pond (winter cereals as surrogate crop)	-	0.014	0.013	0.012	0.012	0.007	0.007	0.004
50 %		0.012	0.012	0.011	0.011	0.011	0.006	0.005	0.003
75 %		0.011	0.011	0.010	0.010	0.010	0.005	0.004	0.002
90 %		0.010	0.010	0.010	0.010	0.010	0.004	0.004	0.002
None	R1 stream (winter cereals as surrogate crop)	-	0.267	0.267	0.267	0.267	0.112	0.112	0.057
50 %		0.267	0.267	0.267	0.267	0.267	0.112	0.112	0.057
75 %		0.267	0.267	0.267	0.267	0.267	0.112	0.112	0.057
90 %		0.267	0.267	0.267	0.267	0.267	0.112	0.112	0.057
None	R3 stream (winter cereals as surrogate crop)	-	0.112	0.112	0.112	0.112	0.051	0.051	0.027
50 %		0.112	0.112	0.112	0.112	0.112	0.051	0.051	0.027
75 %		0.112	0.112	0.112	0.112	0.112	0.051	0.051	0.027
90 %		0.112	0.112	0.112	0.112	0.112	0.051	0.051	0.027
None	R4 stream	-	0.397	0.397	0.397	0.397	0.179	0.179	0.094
50 %		0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094
75 %		0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094
90 %		0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
Spring cereals, 2x35 g a.s./ha, BBCH 12									
None	D1 ditch	-	0.051	0.027	0.018	0.014	0.027	0.018	0.014
50 %		0.098	0.026	0.013	0.009	0.007	0.013	0.009	0.007
75 %		0.049	0.013	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.020	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D1 stream	-	0.060	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.085	0.030	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.042	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D3 ditch	-	0.050	0.026	0.018	0.013	0.026	0.018	0.013
50 %		0.097	0.025	0.013	0.009	0.007	0.013	0.009	0.007
75 %		0.049	0.013	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D4 pond	-	0.008	0.006	0.005	0.004	0.006	0.005	0.004
50 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
75 %		0.002	0.002	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	D4 stream	-	0.058	0.030	0.020	0.015	0.030	0.020	0.015
50 %		0.082	0.029	0.015	0.010	0.008	0.015	0.010	0.008
75 %		0.041	0.014	0.007	0.005	0.004	0.007	0.005	0.004
90 %		0.016	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D5 pond	-	0.008	0.006	0.005	0.004	0.006	0.005	0.004
50 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
75 %		0.002	0.002	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	D5 stream	-	0.059	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.084	0.030	0.015	0.010	0.008	0.015	0.010	0.008
75 %		0.042	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	R1 pond (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									
None	R1 stream (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R3 stream (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									
None	R4 stream	-	0.397	0.397	0.397	0.397	0.179	0.179	0.094
50 %		0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094
75 %		0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094
90 %		0.397	0.397	0.397	0.397	0.397	0.179	0.179	0.094
Spring cereals, 2x35 g a.s./ha, BBCH 12 (single application)									
None	D1 ditch		0.060	0.032	0.022	0.017	0.032	0.022	0.017
50 %		0.112	0.030	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.056	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.022	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D1 stream	-	0.065	0.035	0.024	0.018	0.035	0.024	0.018
50 %		0.089	0.033	0.017	0.012	0.009	0.017	0.012	0.009
75 %		0.045	0.016	0.009	0.006	0.004	0.009	0.006	0.004
90 %		0.018	0.007	0.003	0.002	0.002	0.003	0.002	0.002
None	D3 ditch	-	0.060	0.032	0.022	0.017	0.032	0.022	0.017
50 %		0.111	0.030	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.055	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.022	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D4 pond	-	0.007	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D4 stream	-	0.062	0.033	0.023	0.017	0.033	0.023	0.017
50 %		0.085	0.031	0.016	0.011	0.009	0.016	0.011	0.009
75 %		0.043	0.016	0.008	0.006	0.004	0.008	0.006	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D5 pond	-	0.007	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D5 stream	-	0.064	0.034	0.023	0.018	0.034	0.023	0.018
50 %		0.088	0.032	0.017	0.012	0.009	0.017	0.012	0.009
75 %		0.044	0.016	0.009	0.006	0.004	0.009	0.006	0.004
90 %		0.018	0.006	0.003	0.002	0.002	0.003	0.002	0.002

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R1 pond (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									
None	R1 stream (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									
None	R3 stream (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									
None	R4 stream	-	0.053	0.028	0.019	0.015	0.028	0.019	0.015
50 %		0.073	0.027	0.014	0.010	0.007	0.014	0.010	0.007
75 %		0.037	0.013	0.007	0.005	0.004	0.007	0.005	0.004
90 %		0.015	0.005	0.003	0.002	0.001	0.003	0.002	0.001
Winter cereals, 2x36 g a.s./ha, BBCH 40									
None	D1 ditch	-	0.054	0.028	0.019	0.014	0.028	0.019	0.014
50 %		0.104	0.027	0.014	0.009	0.007	0.014	0.009	0.007
75 %		0.052	0.013	0.007	0.005	0.004	0.007	0.005	0.004
90 %		0.021	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D1 stream	-	0.061	0.032	0.021	0.016	0.032	0.021	0.016
50 %		0.086	0.031	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.043	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D2 ditch	-	0.052	0.027	0.018	0.014	0.027	0.018	0.014
50 %		0.101	0.026	0.014	0.009	0.007	0.014	0.009	0.007
75 %		0.051	0.013	0.007	0.005	0.003	0.007	0.005	0.003
90 %		0.020	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D2 stream	-	0.062	0.032	0.022	0.016	0.032	0.022	0.016
50 %		0.088	0.031	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.044	0.016	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.018	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D3 ditch	-	0.052	0.027	0.018	0.014	0.027	0.018	0.014
50 %		0.100	0.026	0.013	0.009	0.007	0.013	0.009	0.007
75 %		0.050	0.013	0.007	0.005	0.003	0.007	0.005	0.003
90 %		0.020	0.005	0.003	0.002	0.001	0.003	0.002	0.001

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D4 pond	-	0.010	0.007	0.006	0.005	0.007	0.006	0.005
50 %		0.006	0.005	0.004	0.003	0.002	0.004	0.003	0.002
75 %		0.003	0.003	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	< 0.001	0.001	0.001	< 0.001
None	D4 stream	-	0.056	0.029	0.019	0.015	0.029	0.019	0.015
50 %		0.079	0.028	0.014	0.010	0.007	0.014	0.010	0.007
75 %		0.039	0.014	0.007	0.005	0.004	0.007	0.005	0.004
90 %		0.016	0.006	0.003	0.002	0.001	0.003	0.002	0.001
None	D5 pond	-	0.010	0.007	0.005	0.005	0.007	0.005	0.005
50 %		0.006	0.005	0.003	0.003	0.002	0.003	0.003	0.002
75 %		0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	< 0.001	0.001	0.001	< 0.001
None	D5 stream	-	0.061	0.032	0.022	0.016	0.032	0.022	0.016
50 %		0.087	0.031	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.043	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D6 ditch	-	0.052	0.027	0.018	0.014	0.027	0.018	0.014
50 %		0.100	0.026	0.014	0.009	0.007	0.014	0.009	0.007
75 %		0.050	0.013	0.007	0.005	0.003	0.007	0.005	0.003
90 %		0.020	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	R1 pond	-	0.039	0.038	0.037	0.036	0.018	0.017	0.010
50 %		0.037	0.036	0.035	0.035	0.035	0.016	0.015	0.008
75 %		0.035	0.035	0.034	0.034	0.034	0.015	0.014	0.007
90 %		0.034	0.034	0.034	0.034	0.033	0.014	0.014	0.007
None	R1 stream	-	0.291	0.291	0.291	0.291	0.132	0.132	0.069
50 %		0.291	0.291	0.291	0.291	0.291	0.132	0.132	0.069
75 %		0.291	0.291	0.291	0.291	0.291	0.132	0.132	0.069
90 %		0.291	0.291	0.291	0.291	0.291	0.132	0.132	0.069
None	R3 stream	-	0.623	0.623	0.623	0.623	0.284	0.284	0.149
50 %		0.623	0.623	0.623	0.623	0.623	0.284	0.284	0.149
75 %		0.623	0.623	0.623	0.623	0.623	0.284	0.284	0.149
90 %		0.623	0.623	0.623	0.623	0.623	0.284	0.284	0.149
None	R4 stream	-	1.219	1.219	1.219	1.219	0.555	0.555	0.291
50 %		1.219	1.219	1.219	1.219	1.219	0.555	0.555	0.291
75 %		1.219	1.219	1.219	1.219	1.219	0.555	0.555	0.291
90 %		1.219	1.219	1.219	1.219	1.219	0.555	0.555	0.291

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
<i>Winter cereals, 2x36 g a.s./ha, BBCH 40 (single application)</i>									
None	D1 ditch	-	0.062	0.033	0.023	0.017	0.033	0.023	0.017
50 %		0.115	0.031	0.017	0.011	0.009	0.017	0.011	0.009
75 %		0.058	0.016	0.008	0.006	0.004	0.008	0.006	0.004
90 %		0.023	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D1 stream	-	0.072	0.038	0.026	0.020	0.038	0.026	0.020
50 %		0.098	0.036	0.019	0.013	0.010	0.019	0.013	0.010
75 %		0.049	0.018	0.010	0.007	0.005	0.010	0.007	0.005
90 %		0.020	0.007	0.004	0.003	0.002	0.004	0.003	0.002
None	D2 ditch	-	0.063	0.033	0.023	0.017	0.033	0.023	0.017
50 %		0.116	0.031	0.017	0.011	0.009	0.017	0.011	0.009
75 %		0.058	0.016	0.008	0.006	0.004	0.008	0.006	0.004
90 %		0.023	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D2 stream	-	0.075	0.040	0.027	0.021	0.040	0.027	0.021
50 %		0.102	0.037	0.020	0.014	0.010	0.020	0.014	0.010
75 %		0.051	0.019	0.010	0.007	0.005	0.010	0.007	0.005
90 %		0.020	0.007	0.004	0.003	0.002	0.004	0.003	0.002
None	D3 ditch	-	0.062	0.033	0.022	0.017	0.033	0.022	0.017
50 %		0.114	0.031	0.016	0.011	0.009	0.016	0.011	0.009
75 %		0.057	0.015	0.008	0.006	0.004	0.008	0.006	0.004
90 %		0.023	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D4 pond	-	0.007	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D4 stream	-	0.064	0.034	0.023	0.018	0.034	0.023	0.018
50 %		0.087	0.032	0.017	0.012	0.009	0.017	0.012	0.009
75 %		0.044	0.016	0.008	0.006	0.004	0.008	0.006	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D5 pond	-	0.007	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D5 stream	-	0.067	0.035	0.024	0.018	0.035	0.024	0.018
50 %		0.091	0.033	0.018	0.012	0.009	0.018	0.012	0.009
75 %		0.046	0.017	0.009	0.006	0.005	0.009	0.006	0.005
90 %		0.018	0.007	0.004	0.002	0.002	0.004	0.002	0.002
None	D6 ditch	-	0.062	0.033	0.022	0.017	0.033	0.022	0.017
50 %		0.114	0.031	0.016	0.011	0.009	0.016	0.011	0.009

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
75 %	R1 pond	0.057	0.015	0.008	0.006	0.004	0.008	0.006	0.004
90 %		0.023	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None		-	0.015	0.013	0.013	0.012	0.008	0.007	0.004
50 %		0.013	0.012	0.012	0.011	0.011	0.006	0.005	0.003
75 %		0.011	0.011	0.011	0.010	0.010	0.005	0.005	0.003
90 %		0.010	0.010	0.010	0.010	0.010	0.010	0.004	0.004
None	R1 stream	-	0.275	0.275	0.275	0.275	0.116	0.116	0.059
50 %		0.275	0.275	0.275	0.275	0.275	0.116	0.116	0.059
75 %		0.275	0.275	0.275	0.275	0.275	0.116	0.116	0.059
90 %		0.275	0.275	0.275	0.275	0.275	0.116	0.116	0.059
None	R3 stream	-	0.116	0.116	0.116	0.116	0.053	0.053	0.028
50 %		0.116	0.116	0.116	0.116	0.116	0.053	0.053	0.028
75 %		0.116	0.116	0.116	0.116	0.116	0.053	0.053	0.028
90 %		0.116	0.116	0.116	0.116	0.116	0.053	0.053	0.028
None	R4 stream	-	0.224	0.224	0.224	0.224	0.102	0.102	0.053
50 %		0.224	0.224	0.224	0.224	0.224	0.102	0.102	0.053
75 %		0.224	0.224	0.224	0.224	0.224	0.102	0.102	0.053
90 %		0.224	0.224	0.224	0.224	0.224	0.102	0.102	0.053
Winter cereals, 1x30 g a.s./ha, BBCH 12									
None	D1 ditch	-	0.052	0.037	0.037	0.037	0.037	0.037	0.037
50 %		0.096	0.037	0.037	0.037	0.037	0.037	0.037	0.037
75 %		0.048	0.037	0.037	0.037	0.037	0.037	0.037	0.037
90 %		0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
None	D1 stream	-	0.061	0.033	0.026	0.026	0.033	0.026	0.026
50 %		0.084	0.031	0.026	0.026	0.026	0.026	0.026	0.026
75 %		0.042	0.026	0.026	0.026	0.026	0.026	0.026	0.026
90 %		0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026
None	D2 ditch	-	0.160	0.160	0.160	0.160	0.160	0.160	0.160
50 %		0.160	0.160	0.160	0.160	0.160	0.160	0.160	0.160
75 %		0.160	0.160	0.160	0.160	0.160	0.160	0.160	0.160
90 %		0.160	0.160	0.160	0.160	0.160	0.160	0.160	0.160
None	D2 stream	-	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	D3 ditch	-	0.051	0.027	0.019	0.014	0.027	0.019	0.014
50 %		0.095	0.026	0.014	0.009	0.007	0.014	0.009	0.007
75 %		0.047	0.013	0.007	0.005	0.004	0.007	0.005	0.004
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D4 pond	-	0.006	0.004	0.003	0.003	0.004	0.003	0.003
50 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
75 %		0.002	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	D4 stream	-	0.060	0.032	0.022	0.017	0.032	0.022	0.017
50 %		0.082	0.030	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.041	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.016	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D5 pond	-	0.006	0.004	0.003	0.003	0.004	0.003	0.003
50 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
75 %		0.002	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	D5 stream	-	0.065	0.034	0.023	0.018	0.034	0.023	0.018
50 %		0.089	0.032	0.017	0.012	0.009	0.017	0.012	0.009
75 %		0.044	0.016	0.009	0.006	0.004	0.009	0.006	0.004
90 %		0.018	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D6 ditch	-	0.052	0.044	0.044	0.044	0.044	0.044	0.044
50 %		0.096	0.044	0.044	0.044	0.044	0.044	0.044	0.044
75 %		0.048	0.044	0.044	0.044	0.044	0.044	0.044	0.044
90 %		0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044
None	R1 pond	-	0.010	0.008	0.008	0.007	0.005	0.005	0.003
50 %		0.008	0.007	0.007	0.006	0.006	0.004	0.003	0.002
75 %		0.006	0.006	0.006	0.006	0.006	0.003	0.003	0.002
90 %		0.006	0.005	0.005	0.005	0.005	0.002	0.002	0.001
None	R1 stream	-	0.467	0.467	0.467	0.467	0.209	0.209	0.109
50 %		0.467	0.467	0.467	0.467	0.467	0.209	0.209	0.109
75 %		0.467	0.467	0.467	0.467	0.467	0.209	0.209	0.109
90 %		0.467	0.467	0.467	0.467	0.467	0.209	0.209	0.109
None	R3 stream	-	0.966	0.966	0.966	0.966	0.436	0.436	0.228
50 %		0.966	0.966	0.966	0.966	0.966	0.436	0.436	0.228
75 %		0.966	0.966	0.966	0.966	0.966	0.436	0.436	0.228
90 %		0.966	0.966	0.966	0.966	0.966	0.436	0.436	0.228
None	R4 stream	-	0.198	0.198	0.198	0.198	0.090	0.090	0.047
50 %		0.198	0.198	0.198	0.198	0.198	0.090	0.090	0.047
75 %		0.198	0.198	0.198	0.198	0.198	0.090	0.090	0.047
90 %		0.198	0.198	0.198	0.198	0.198	0.090	0.090	0.047

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
<i>Oilseed rape (winter), 2x60 g a.s./ha, BBCH 31</i>									
None	D2 ditch	-	0.134	0.134	0.134	0.134	0.134	0.134	0.134
50 %		0.168	0.134	0.134	0.134	0.134	0.134	0.134	0.134
75 %		0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134
90 %		0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134
None	D2 stream	-	0.105	0.092	0.092	0.092	0.092	0.092	0.092
50 %		0.148	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	D3 ditch	-	0.086	0.045	0.030	0.023	0.045	0.030	0.023
50 %		0.166	0.043	0.022	0.015	0.011	0.022	0.015	0.011
75 %		0.083	0.022	0.011	0.008	0.006	0.011	0.008	0.006
90 %		0.033	0.009	0.004	0.003	0.002	0.004	0.003	0.002
None	D4 pond	-	0.016	0.011	0.009	0.008	0.011	0.009	0.008
50 %		0.009	0.008	0.006	0.005	0.004	0.006	0.005	0.004
75 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
90 %		0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
None	D4 stream	-	0.087	0.045	0.030	0.023	0.045	0.030	0.023
50 %		0.123	0.043	0.023	0.015	0.011	0.023	0.015	0.011
75 %		0.061	0.022	0.011	0.008	0.006	0.011	0.008	0.006
90 %		0.025	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	D5 pond	-	0.014	0.010	0.008	0.007	0.010	0.008	0.007
50 %		0.008	0.007	0.005	0.004	0.003	0.005	0.004	0.003
75 %		0.004	0.004	0.003	0.002	0.002	0.003	0.002	0.002
90 %		0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D5 stream	-	0.094	0.049	0.033	0.025	0.049	0.033	0.025
50 %		0.133	0.047	0.024	0.016	0.012	0.024	0.016	0.012
75 %		0.067	0.024	0.012	0.008	0.006	0.012	0.008	0.006
90 %		0.027	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	R1 pond	-	0.022	0.018	0.017	0.016	0.012	0.011	0.008
50 %		0.017	0.016	0.014	0.013	0.013	0.008	0.007	0.005
75 %		0.014	0.013	0.012	0.012	0.011	0.006	0.006	0.003
90 %		0.011	0.011	0.011	0.011	0.011	0.005	0.005	0.003
None	R1 stream	-	0.686	0.686	0.686	0.686	0.289	0.289	0.147
50 %		0.686	0.686	0.686	0.686	0.686	0.289	0.289	0.147
75 %		0.686	0.686	0.686	0.686	0.686	0.289	0.289	0.147
90 %		0.686	0.686	0.686	0.686	0.686	0.289	0.289	0.147
None	R3 stream	-	0.404	0.404	0.404	0.404	0.182	0.182	0.095
50 %		0.404	0.404	0.404	0.404	0.404	0.182	0.182	0.095

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
75 %		0.404	0.404	0.404	0.404	0.404	0.182	0.182	0.095
90 %		0.404	0.404	0.404	0.404	0.404	0.182	0.182	0.095
None	R4 stream (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									
Oilseed rape (winter), 2x60 g a.s./ha, BBCH 31 (single application)									
None	D2 ditch	-	0.104	0.076	0.076	0.076	0.076	0.076	0.076
50 %		0.193	0.076	0.076	0.076	0.076	0.076	0.076	0.076
75 %		0.096	0.076	0.076	0.076	0.076	0.076	0.076	0.076
90 %		0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.076
None	D2 stream	-	0.125	0.066	0.050	0.050	0.066	0.050	0.050
50 %		0.171	0.063	0.050	0.050	0.050	0.050	0.050	0.050
75 %		0.086	0.050	0.050	0.050	0.050	0.050	0.050	0.050
90 %		0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
None	D3 ditch	-	0.103	0.055	0.037	0.028	0.055	0.037	0.028
50 %		0.190	0.051	0.027	0.019	0.014	0.027	0.019	0.014
75 %		0.095	0.026	0.014	0.009	0.007	0.014	0.009	0.007
90 %		0.038	0.010	0.005	0.004	0.003	0.005	0.004	0.003
None	D4 pond	-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.007	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D4 stream	-	0.104	0.055	0.038	0.029	0.055	0.038	0.029
50 %		0.142	0.052	0.027	0.019	0.014	0.027	0.019	0.014
75 %		0.071	0.026	0.014	0.009	0.007	0.014	0.009	0.007
90 %		0.028	0.010	0.005	0.004	0.003	0.005	0.004	0.003
None	D5 pond	-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.007	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D5 stream	-	0.111	0.059	0.040	0.031	0.059	0.040	0.031
50 %		0.151	0.055	0.029	0.020	0.015	0.029	0.020	0.015
75 %		0.076	0.028	0.015	0.010	0.008	0.015	0.010	0.008
90 %		0.030	0.011	0.006	0.004	0.003	0.006	0.004	0.003
None	R1 pond	-	0.011	0.008	0.007	0.007	0.008	0.007	0.005
50 %		0.007	0.007	0.006	0.005	0.005	0.004	0.003	0.003
75 %		0.005	0.005	0.005	0.004	0.004	0.003	0.002	0.001
90 %		0.004	0.004	0.004	0.004	0.004	0.002	0.002	0.001

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R1 stream	-	0.231	0.231	0.231	0.231	0.097	0.097	0.050
50 %		0.231	0.231	0.231	0.231	0.231	0.097	0.097	0.050
75 %		0.231	0.231	0.231	0.231	0.231	0.097	0.097	0.050
90 %		0.231	0.231	0.231	0.231	0.231	0.097	0.097	0.050
None	R3 stream	-	0.404	0.404	0.404	0.404	0.182	0.182	0.095
50 %		0.404	0.404	0.404	0.404	0.404	0.182	0.182	0.095
75 %		0.404	0.404	0.404	0.404	0.404	0.182	0.182	0.095
90 %		0.404	0.404	0.404	0.404	0.404	0.182	0.182	0.095
None	R4 stream (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									
Oilseed rape (winter), 1x60 g a.s./ha, BBCH 11									
None	D2 ditch	-	0.104	0.069	0.069	0.069	0.069	0.069	0.069
50 %		0.193	0.069	0.069	0.069	0.069	0.069	0.069	0.069
75 %		0.096	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	D2 stream	-	0.125	0.066	0.045	0.044	0.066	0.045	0.044
50 %		0.171	0.063	0.044	0.044	0.044	0.044	0.044	0.044
75 %		0.086	0.044	0.044	0.044	0.044	0.044	0.044	0.044
90 %		0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044
None	D3 ditch	-	0.104	0.055	0.038	0.029	0.055	0.038	0.029
50 %		0.191	0.052	0.027	0.019	0.014	0.027	0.019	0.014
75 %		0.095	0.026	0.014	0.009	0.007	0.014	0.009	0.007
90 %		0.038	0.010	0.005	0.004	0.003	0.005	0.004	0.003
None	D4 pond	-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.007	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D4 stream	-	0.120	0.064	0.044	0.033	0.064	0.044	0.033
50 %		0.164	0.060	0.032	0.022	0.017	0.032	0.022	0.017
75 %		0.082	0.030	0.016	0.011	0.008	0.016	0.011	0.008
90 %		0.033	0.012	0.006	0.004	0.003	0.006	0.004	0.003
None	D5 pond	-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.007	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D5 stream	-	0.130	0.069	0.047	0.036	0.069	0.047	0.036
50 %		0.177	0.065	0.034	0.023	0.018	0.034	0.023	0.018

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
75 %	R1 pond	0.089	0.032	0.017	0.012	0.009	0.017	0.012	0.009
90 %		0.035	0.013	0.007	0.005	0.004	0.007	0.005	0.004
None		-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.007	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	R1 stream	-	0.092	0.049	0.033	0.025	0.049	0.033	0.025
50 %		0.126	0.046	0.024	0.017	0.013	0.024	0.017	0.013
75 %		0.063	0.023	0.012	0.008	0.006	0.012	0.008	0.006
90 %		0.025	0.009	0.005	0.004	0.004	0.005	0.003	0.003
None	R3 stream	-	0.483	0.483	0.483	0.483	0.220	0.220	0.115
50 %		0.483	0.483	0.483	0.483	0.483	0.220	0.220	0.115
75 %		0.483	0.483	0.483	0.483	0.483	0.220	0.220	0.115
90 %		0.483	0.483	0.483	0.483	0.483	0.220	0.220	0.115
None	R4 stream (winter cereals as surrogate crop)	Not calculated – no mitigation required.							
50 %									
75 %									
90 %									
Oilseed rape (spring), 2x60 g a.s./ha, BBCH 31									
None	D1 ditch	-	0.156	0.081	0.054	0.041	0.081	0.054	0.041
50 %		0.301	0.078	0.040	0.027	0.021	0.040	0.027	0.021
75 %		0.150	0.039	0.020	0.014	0.010	0.020	0.014	0.010
90 %		0.060	0.016	0.008	0.006	0.004	0.008	0.006	0.004
None	D1 stream	-	0.103	0.053	0.036	0.027	0.053	0.036	0.027
50 %		0.146	0.051	0.027	0.018	0.014	0.027	0.018	0.014
75 %		0.073	0.026	0.013	0.009	0.007	0.013	0.009	0.007
90 %		0.029	0.010	0.005	0.004	0.003	0.005	0.004	0.003
None	D3 ditch	-	0.087	0.045	0.030	0.023	0.045	0.030	0.023
50 %		0.167	0.043	0.022	0.015	0.011	0.022	0.015	0.011
75 %		0.083	0.022	0.011	0.008	0.006	0.011	0.008	0.006
90 %		0.033	0.009	0.004	0.003	0.002	0.004	0.003	0.002
None	D4 pond	-	0.017	0.012	0.009	0.008	0.012	0.009	0.008
50 %		0.010	0.008	0.006	0.005	0.004	0.006	0.005	0.004
75 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
90 %		0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
None	D4 stream	-	0.097	0.050	0.034	0.026	0.050	0.034	0.026
50 %		0.137	0.048	0.025	0.017	0.013	0.025	0.017	0.013
75 %		0.068	0.024	0.013	0.008	0.006	0.013	0.008	0.006
90 %		0.027	0.010	0.005	0.003	0.003	0.005	0.003	0.003

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D5 pond	-	0.016	0.011	0.009	0.007	0.011	0.009	0.007
50 %		0.009	0.008	0.005	0.004	0.004	0.005	0.004	0.004
75 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
90 %		0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
None	D5 stream	-	0.102	0.053	0.036	0.027	0.053	0.036	0.027
50 %		0.144	0.051	0.026	0.018	0.013	0.026	0.018	0.013
75 %		0.072	0.025	0.013	0.009	0.007	0.013	0.009	0.007
90 %		0.029	0.010	0.005	0.004	0.003	0.005	0.004	0.003
None	R1 pond	-	0.044	0.040	0.037	0.036	0.023	0.020	0.013
50 %		0.038	0.037	0.035	0.034	0.034	0.017	0.016	0.009
75 %		0.034	0.034	0.033	0.033	0.033	0.014	0.014	0.008
90 %		0.033	0.033	0.033	0.033	0.032	0.013	0.013	0.007
None	R1 stream	-	0.765	0.765	0.765	0.765	0.347	0.347	0.182
50 %		0.765	0.765	0.765	0.765	0.765	0.347	0.347	0.182
75 %		0.765	0.765	0.765	0.765	0.765	0.347	0.347	0.182
90 %		0.765	0.765	0.765	0.765	0.765	0.347	0.347	0.182
None	R3 stream (legumes as surrogate crop)	-	0.643	0.643	0.643	0.643	0.282	0.282	0.146
50 %		0.643	0.643	0.643	0.643	0.643	0.282	0.282	0.146
75 %		0.643	0.643	0.643	0.643	0.643	0.282	0.282	0.146
90 %		0.643	0.643	0.643	0.643	0.643	0.282	0.282	0.146
None	R4 stream (legumes as surrogate crop)	-	1.054	1.054	1.054	1.054	0.470	0.470	0.244
50 %		1.054	1.054	1.054	1.054	1.054	0.470	0.470	0.244
75 %		1.054	1.054	1.054	1.054	1.054	0.470	0.470	0.244
90 %		1.054	1.054	1.054	1.054	1.054	0.470	0.470	0.244
Oilseed rape (spring), 2x60 g a.s./ha, BBCH 31 (single application)									
None	D1 ditch	-	0.104	0.055	0.038	0.029	0.055	0.038	0.029
50 %		0.192	0.052	0.028	0.019	0.014	0.028	0.019	0.014
75 %		0.096	0.026	0.014	0.009	0.007	0.014	0.009	0.007
90 %		0.038	0.010	0.006	0.004	0.003	0.006	0.004	0.003
None	D1 stream	-	0.123	0.065	0.045	0.034	0.065	0.045	0.034
50 %		0.168	0.061	0.033	0.022	0.017	0.033	0.022	0.017
75 %		0.084	0.031	0.016	0.011	0.008	0.016	0.011	0.008
90 %		0.034	0.012	0.007	0.004	0.003	0.007	0.004	0.003
None	D3 ditch	-	0.103	0.055	0.037	0.028	0.055	0.037	0.028
50 %		0.190	0.052	0.027	0.019	0.014	0.027	0.019	0.014
75 %		0.095	0.026	0.014	0.009	0.007	0.014	0.009	0.007
90 %		0.038	0.010	0.005	0.004	0.003	0.005	0.004	0.003

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D4 pond	-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.007	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D4 stream	-	0.114	0.060	0.041	0.031	0.060	0.041	0.031
50 %		0.156	0.057	0.030	0.021	0.016	0.030	0.021	0.016
75 %		0.078	0.028	0.015	0.010	0.008	0.015	0.010	0.008
90 %		0.031	0.011	0.006	0.004	0.003	0.006	0.004	0.003
None	D5 pond	-	0.011	0.008	0.007	0.005	0.008	0.007	0.005
50 %		0.007	0.006	0.004	0.003	0.003	0.004	0.003	0.003
75 %		0.003	0.003	0.002	0.002	0.001	0.002	0.002	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D5 stream	-	0.121	0.064	0.044	0.033	0.064	0.044	0.033
50 %		0.166	0.060	0.032	0.022	0.017	0.032	0.022	0.017
75 %		0.083	0.030	0.016	0.011	0.008	0.016	0.011	0.008
90 %		0.033	0.012	0.006	0.004	0.003	0.006	0.004	0.003
None	R1 pond	-	0.042	0.039	0.038	0.037	0.020	0.019	0.011
50 %		0.038	0.037	0.036	0.035	0.034	0.016	0.016	0.009
75 %		0.035	0.035	0.034	0.033	0.033	0.015	0.014	0.008
90 %		0.033	0.033	0.033	0.033	0.033	0.014	0.013	0.007
None	R1 stream	-	0.765	0.765	0.765	0.765	0.347	0.347	0.182
50 %		0.765	0.765	0.765	0.765	0.765	0.347	0.347	0.182
75 %		0.765	0.765	0.765	0.765	0.765	0.347	0.347	0.182
90 %		0.765	0.765	0.765	0.765	0.765	0.347	0.347	0.182
None	R3 stream (legumes as surrogate crop)	-	0.643	0.643	0.643	0.643	0.282	0.282	0.146
50 %		0.643	0.643	0.643	0.643	0.643	0.282	0.282	0.146
75 %		0.643	0.643	0.643	0.643	0.643	0.282	0.282	0.146
90 %		0.643	0.643	0.643	0.643	0.643	0.282	0.282	0.146
None	R4 stream (legumes as surrogate crop)	-	1.054	1.054	1.054	1.054	0.470	0.470	0.244
50 %		1.054	1.054	1.054	1.054	1.054	0.470	0.470	0.244
75 %		1.054	1.054	1.054	1.054	1.054	0.470	0.470	0.244
90 %		1.054	1.054	1.054	1.054	1.054	0.470	0.470	0.244
Sugar beet, 2x50 g a.s./ha, BBCH 12									
None	D3 ditch	-	0.072	0.037	0.025	0.019	0.037	0.025	0.019
50 %		0.114	0.036	0.019	0.013	0.010	0.019	0.013	0.010
75 %		0.057	0.018	0.009	0.006	0.005	0.009	0.006	0.005
90 %		0.023	0.007	0.004	0.003	0.002	0.004	0.003	0.002

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D4 pond	-	0.014	0.010	0.008	0.007	0.010	0.008	0.007
50 %		0.008	0.007	0.005	0.004	0.003	0.005	0.004	0.003
75 %		0.004	0.004	0.003	0.002	0.002	0.003	0.002	0.002
90 %		0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D4 stream	-	0.077	0.040	0.027	0.020	0.040	0.027	0.020
50 %		0.094	0.039	0.020	0.014	0.010	0.020	0.014	0.010
75 %		0.047	0.019	0.010	0.007	0.005	0.010	0.007	0.005
90 %		0.019	0.008	0.004	0.003	0.002	0.004	0.003	0.002
None	D5 pond (maize as surrogate crop)	-	0.013	0.009	0.007	0.006	0.009	0.007	0.006
50 %		0.007	0.007	0.005	0.004	0.003	0.005	0.004	0.003
75 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
None	D5 stream (maize as surrogate crop)	-	0.087	0.045	0.031	0.023	0.045	0.031	0.023
50 %		0.107	0.044	0.023	0.015	0.012	0.023	0.015	0.012
75 %		0.053	0.022	0.011	0.008	0.006	0.011	0.008	0.006
90 %		0.021	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	R1 pond	-	0.014	0.010	0.008	0.007	0.010	0.008	0.007
50 %		0.008	0.007	0.005	0.005	0.004	0.005	0.004	0.003
75 %		0.005	0.004	0.004	0.003	0.003	0.003	0.002	0.002
90 %		0.003	0.003	0.003	0.003	0.002	0.002	0.001	0.001
None	R1 stream	-	0.091	0.091	0.091	0.091	0.037	0.037	0.018
50 %		0.091	0.091	0.091	0.091	0.091	0.037	0.037	0.018
75 %		0.091	0.091	0.091	0.091	0.091	0.037	0.037	0.018
90 %		0.091	0.091	0.091	0.091	0.091	0.037	0.037	0.018
None	R3 stream	-	0.328	0.328	0.328	0.328	0.150	0.150	0.078
50 %		0.328	0.328	0.328	0.328	0.328	0.150	0.150	0.078
75 %		0.328	0.328	0.328	0.328	0.328	0.150	0.150	0.078
90 %		0.328	0.328	0.328	0.328	0.328	0.150	0.150	0.078
None	R4 stream (maize as surrogate crop)	-	0.884	0.884	0.884	0.884	0.400	0.400	0.209
50 %		0.884	0.884	0.884	0.884	0.884	0.400	0.400	0.209
75 %		0.884	0.884	0.884	0.884	0.884	0.400	0.400	0.209
90 %		0.884	0.884	0.884	0.884	0.884	0.400	0.400	0.209
Sugar beet, 2x50 g a.s./ha, BBCH 12 (single application) ^{a)}									
None	D3 ditch	-	0.086	0.046	0.031	0.024	0.046	0.031	0.024
50 %		0.131	0.043	0.023	0.016	0.012	0.023	0.016	0.012
75 %		0.066	0.021	0.011	0.008	0.006	0.011	0.008	0.006
90 %		0.026	0.009	0.005	0.003	0.002	0.005	0.003	0.002

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D4 pond	-	0.009	0.007	0.005	0.005	0.007	0.005	0.005
50 %		0.005	0.005	0.003	0.003	0.002	0.003	0.003	0.002
75 %		0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	< 0.001	0.001	0.001	< 0.001
None	D4 stream	-	0.090	0.048	0.033	0.025	0.048	0.033	0.025
50 %		0.107	0.045	0.024	0.016	0.012	0.024	0.016	0.012
75 %		0.053	0.023	0.012	0.008	0.006	0.012	0.008	0.006
90 %		0.021	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	D5 pond (maize as surrogate crop)	-	0.009	0.007	0.005	0.005	0.007	0.005	0.005
50 %		0.005	0.005	0.003	0.003	0.002	0.003	0.003	0.002
75 %		0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	< 0.001	0.001	0.001	< 0.001
None	D5 stream (maize as surrogate crop)	-	0.099	0.052	0.036	0.027	0.052	0.036	0.027
50 %		0.117	0.049	0.026	0.018	0.014	0.026	0.018	0.014
75 %		0.059	0.025	0.013	0.009	0.007	0.013	0.009	0.007
90 %		0.023	0.010	0.005	0.004	0.003	0.005	0.004	0.003
None	R1 pond	-	0.009	0.007	0.005	0.005	0.007	0.005	0.005
50 %		0.005	0.005	0.003	0.003	0.002	0.003	0.003	0.002
75 %		0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	0.001	0.001	0.001	< 0.001
None	R1 stream	-	0.076	0.040	0.028	0.022	0.040	0.028	0.021
50 %		0.091	0.038	0.022	0.022	0.022	0.020	0.014	0.011
75 %		0.045	0.022	0.022	0.022	0.022	0.010	0.009	0.005
90 %		0.022	0.022	0.022	0.022	0.022	0.009	0.009	0.004
None	R3 stream	-	0.108	0.057	0.052	0.052	0.057	0.039	0.030
50 %		0.128	0.054	0.052	0.052	0.052	0.029	0.024	0.015
75 %		0.064	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	R4 stream (maize as surrogate crop)	-	0.469	0.469	0.469	0.469	0.213	0.213	0.112
50 %		0.469	0.469	0.469	0.469	0.469	0.213	0.213	0.112
75 %		0.469	0.469	0.469	0.469	0.469	0.213	0.213	0.112
90 %		0.469	0.469	0.469	0.469	0.469	0.213	0.213	0.112
Bulb vegetables (flower bulbs & flower tubers), 1x46 g a.s./ha, BBCH 12									
None	D3 ditch	-	0.079	0.042	0.029	0.022	0.042	0.029	0.022
50 %		0.146	0.040	0.021	0.014	0.011	0.021	0.014	0.011
75 %		0.073	0.020	0.010	0.007	0.005	0.010	0.007	0.005
90 %		0.029	0.008	0.004	0.003	0.002	0.004	0.003	0.002

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D4 pond	-	0.009	0.006	0.005	0.004	0.006	0.005	0.004
50 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
75 %		0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	< 0.001	< 0.001	0.001	< 0.001	< 0.001
None	D4 stream	-	0.082	0.043	0.030	0.023	0.043	0.030	0.023
50 %		0.112	0.041	0.022	0.015	0.011	0.022	0.015	0.011
75 %		0.056	0.020	0.011	0.007	0.006	0.011	0.007	0.006
90 %		0.022	0.008	0.004	0.003	0.002	0.004	0.003	0.002
None	D5 pond (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D5 stream (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D6 ditch (1 st)	-	0.079	0.042	0.029	0.022	0.042	0.029	0.022
50 %		0.146	0.040	0.021	0.014	0.011	0.021	0.014	0.011
75 %		0.073	0.020	0.011	0.007	0.005	0.011	0.007	0.005
90 %		0.029	0.008	0.004	0.003	0.002	0.004	0.003	0.002
None	D6 ditch (2 nd)	-	0.080	0.074	0.074	0.074	0.074	0.074	0.074
50 %		0.147	0.074	0.074	0.074	0.074	0.074	0.074	0.074
75 %		0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074
90 %		0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074
None	R1 pond	-	0.013	0.011	0.010	0.009	0.007	0.006	0.004
50 %		0.010	0.010	0.009	0.008	0.008	0.005	0.004	0.003
75 %		0.008	0.008	0.007	0.007	0.007	0.004	0.003	0.002
90 %		0.007	0.007	0.007	0.007	0.007	0.003	0.003	0.002
None	R1 stream	-	0.251	0.251	0.251	0.251	0.103	0.103	0.052
50 %		0.251	0.251	0.251	0.251	0.251	0.103	0.103	0.052
75 %		0.251	0.251	0.251	0.251	0.251	0.103	0.103	0.052
90 %		0.251	0.251	0.251	0.251	0.251	0.103	0.103	0.052
None	R2 stream	-	0.096	0.096	0.096	0.096	0.049	0.040	0.026
50 %		0.127	0.096	0.096	0.096	0.096	0.040	0.040	0.020
75 %		0.096	0.096	0.096	0.096	0.096	0.040	0.040	0.020
90 %		0.096	0.096	0.096	0.096	0.096	0.040	0.040	0.020

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R3 stream	-	0.099	0.052	0.036	0.027	0.052	0.036	0.027
50 %		0.135	0.049	0.026	0.022	0.022	0.026	0.018	0.014
75 %		0.067	0.025	0.022	0.022	0.022	0.013	0.010	0.007
90 %		0.027	0.022	0.022	0.022	0.022	0.010	0.010	0.005
None	R4 stream	-	0.659	0.659	0.659	0.659	0.299	0.299	0.157
50 %		0.659	0.659	0.659	0.659	0.659	0.299	0.299	0.157
75 %		0.659	0.659	0.659	0.659	0.659	0.299	0.299	0.157
90 %		0.659	0.659	0.659	0.659	0.659	0.299	0.299	0.157
Bulb vegetables (flower bulbs & flower tubers), 2x34 g a.s./ha, BBCH 20									
None	D3 ditch	-	0.049	0.025	0.017	0.013	0.025	0.017	0.013
50 %		0.094	0.024	0.013	0.009	0.006	0.013	0.009	0.006
75 %		0.047	0.012	0.006	0.004	0.003	0.006	0.004	0.003
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D4 pond	-	0.009	0.007	0.005	0.004	0.007	0.005	0.004
50 %		0.005	0.005	0.003	0.003	0.002	0.003	0.003	0.002
75 %		0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	< 0.001	0.001	0.001	< 0.001
None	D4 stream	-	0.051	0.026	0.018	0.013	0.026	0.018	0.013
50 %		0.072	0.025	0.013	0.009	0.007	0.013	0.009	0.007
75 %		0.036	0.013	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.014	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D5 pond (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D5 stream (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D6 ditch (1 st)	-	0.070	0.036	0.024	0.018	0.036	0.024	0.018
50 %		0.135	0.035	0.018	0.012	0.009	0.018	0.012	0.009
75 %		0.067	0.017	0.009	0.006	0.005	0.009	0.006	0.005
90 %		0.027	0.007	0.004	0.002	0.002	0.004	0.002	0.002
None	D6 ditch (2 nd)	-	0.049	0.026	0.017	0.013	0.026	0.017	0.013
50 %		0.095	0.025	0.013	0.009	0.007	0.013	0.009	0.007
75 %		0.047	0.012	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	R1 pond	-	0.034	0.032	0.031	0.031	0.016	0.015	0.009
50 %		0.031	0.031	0.030	0.029	0.029	0.014	0.013	0.007

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
75 %	R1 stream	0.029	0.029	0.029	0.028	0.028	0.012	0.012	0.006
90 %		0.028	0.028	0.028	0.028	0.028	0.012	0.011	0.006
None		-	0.383	0.383	0.383	0.383	0.171	0.171	0.089
50 %		0.383	0.383	0.383	0.383	0.383	0.171	0.171	0.089
75 %		0.383	0.383	0.383	0.383	0.383	0.171	0.171	0.089
90 %		0.383	0.383	0.383	0.383	0.383	0.171	0.171	0.089
None	R2 stream	-	0.134	0.134	0.134	0.134	0.060	0.060	0.031
50 %		0.134	0.134	0.134	0.134	0.134	0.060	0.060	0.031
75 %		0.134	0.134	0.134	0.134	0.134	0.060	0.060	0.031
90 %		0.134	0.134	0.134	0.134	0.134	0.060	0.060	0.031
None	R3 stream	-	0.366	0.366	0.366	0.366	0.166	0.166	0.087
50 %		0.366	0.366	0.366	0.366	0.366	0.166	0.166	0.087
75 %		0.366	0.366	0.366	0.366	0.366	0.166	0.166	0.087
90 %		0.366	0.366	0.366	0.366	0.366	0.166	0.166	0.087
None	R4 stream	-	0.740	0.740	0.740	0.740	0.334	0.334	0.175
50 %		0.740	0.740	0.740	0.740	0.740	0.334	0.334	0.175
75 %		0.740	0.740	0.740	0.740	0.740	0.334	0.334	0.175
90 %		0.740	0.740	0.740	0.740	0.740	0.334	0.334	0.175
Bulb vegetables (flower bulbs & flower tubers),, 2x34 g a.s./ha, BBCH 20 (single application)									
None	D3 ditch	-	0.058	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.108	0.029	0.015	0.011	0.008	0.015	0.011	0.008
75 %		0.054	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.022	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D4 pond	-	0.006	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D4 stream	-	0.060	0.032	0.022	0.016	0.032	0.022	0.016
50 %		0.082	0.030	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.041	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.016	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D5 pond (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D5 stream (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D6 ditch (1 st)	-	0.059	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.109	0.029	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.054	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.022	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D6 ditch (2 nd)	-	0.058	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.107	0.029	0.015	0.011	0.008	0.015	0.011	0.008
75 %		0.053	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.021	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	R1 pond	-	0.029	0.028	0.028	0.027	0.013	0.013	0.007
50 %		0.028	0.027	0.027	0.026	0.026	0.012	0.011	0.006
75 %		0.026	0.026	0.026	0.026	0.026	0.011	0.011	0.006
90 %		0.026	0.025	0.025	0.025	0.025	0.010	0.010	0.005
None	R1 stream	-	0.383	0.383	0.383	0.383	0.171	0.171	0.089
50 %		0.383	0.383	0.383	0.383	0.383	0.171	0.171	0.089
75 %		0.383	0.383	0.383	0.383	0.383	0.171	0.171	0.089
90 %		0.383	0.383	0.383	0.383	0.383	0.171	0.171	0.089
None	R2 stream	-	0.134	0.134	0.134	0.134	0.060	0.060	0.031
50 %		0.134	0.134	0.134	0.134	0.134	0.060	0.060	0.031
75 %		0.134	0.134	0.134	0.134	0.134	0.060	0.060	0.031
90 %		0.134	0.134	0.134	0.134	0.134	0.060	0.060	0.031
None	R3 stream	-	0.366	0.366	0.366	0.366	0.166	0.166	0.087
50 %		0.366	0.366	0.366	0.366	0.366	0.166	0.166	0.087
75 %		0.366	0.366	0.366	0.366	0.366	0.166	0.166	0.087
90 %		0.366	0.366	0.366	0.366	0.366	0.166	0.166	0.087
None	R4 stream	-	0.740	0.740	0.740	0.740	0.334	0.334	0.175
50 %		0.740	0.740	0.740	0.740	0.740	0.334	0.334	0.175
75 %		0.740	0.740	0.740	0.740	0.740	0.334	0.334	0.175
90 %		0.740	0.740	0.740	0.740	0.740	0.334	0.334	0.175
Bulb vegetables (flower bulbs & flower tubers), 2x34 g a.s./ha, BBCH 12									
None	D3 ditch	-	0.049	0.025	0.017	0.013	0.025	0.017	0.013
50 %		0.094	0.024	0.013	0.009	0.006	0.013	0.009	0.006
75 %		0.047	0.012	0.006	0.004	0.003	0.006	0.004	0.003
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D4 pond	-	0.010	0.007	0.005	0.004	0.007	0.005	0.004
50 %		0.006	0.005	0.003	0.003	0.002	0.003	0.003	0.002
75 %		0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	<0.001	0.001	0.001	<0.001

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D4 stream	-	0.051	0.026	0.018	0.013	0.026	0.018	0.013
50 %		0.072	0.025	0.013	0.009	0.007	0.013	0.009	0.007
75 %		0.036	0.013	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.014	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D5 pond (legumes as surrogate crop)	Not calculated — no mitigation needed.							
50 %									
75 %									
90 %									
None	D5 stream (legumes as surrogate crop)	Not calculated — no mitigation needed.							
50 %									
75 %									
90 %									
None	D6 ditch (1 st)	-	0.050	0.026	0.018	0.013	0.026	0.018	0.013
50 %		0.097	0.025	0.013	0.009	0.007	0.013	0.009	0.007
75 %		0.048	0.013	0.007	0.004	0.003	0.007	0.004	0.003
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D6 ditch (2 nd)	-	0.492	0.492	0.492	0.492	0.492	0.492	0.492
50 %		0.492	0.492	0.492	0.492	0.492	0.492	0.492	0.492
75 %		0.492	0.492	0.492	0.492	0.492	0.492	0.492	0.492
90 %		0.492	0.492	0.492	0.492	0.492	0.492	0.492	0.492
None	R1 pond	-	0.027	0.025	0.024	0.023	0.014	0.012	0.008
50 %		0.024	0.023	0.022	0.021	0.021	0.011	0.010	0.006
75 %		0.021	0.021	0.020	0.020	0.020	0.009	0.009	0.005
90 %		0.020	0.020	0.020	0.019	0.019	0.008	0.008	0.004
None	R1 stream	-	0.441	0.441	0.441	0.441	0.200	0.200	0.104
50 %		0.441	0.441	0.441	0.441	0.441	0.200	0.200	0.104
75 %		0.441	0.441	0.441	0.441	0.441	0.200	0.200	0.104
90 %		0.441	0.441	0.441	0.441	0.441	0.200	0.200	0.104
None	R2 stream	-	0.068	0.068	0.068	0.068	0.030	0.028	0.015
50 %		0.081	0.068	0.068	0.068	0.068	0.028	0.028	0.014
75 %		0.068	0.068	0.068	0.068	0.068	0.028	0.028	0.014
90 %		0.068	0.068	0.068	0.068	0.068	0.028	0.028	0.014
None	R3 stream	-	0.075	0.075	0.075	0.075	0.034	0.034	0.018
50 %		0.087	0.075	0.075	0.075	0.075	0.034	0.034	0.018
75 %		0.075	0.075	0.075	0.075	0.075	0.034	0.034	0.018
90 %		0.075	0.075	0.075	0.075	0.075	0.034	0.034	0.018

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R4 stream		0.738	0.738	0.738	0.738	0.335	0.335	0.176
50 %		0.738	0.738	0.738	0.738	0.738	0.335	0.335	0.176
75 %		0.738	0.738	0.738	0.738	0.738	0.335	0.335	0.176
90 %		0.738	0.738	0.738	0.738	0.738	0.335	0.335	0.176
Bulb vegetables (flower bulbs & flower tubers), 1 x34 g a.s./ha, BBCH 12 (single application)									
None	D3 ditch	-	0.058	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.108	0.029	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.054	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.022	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D4 pond	-	0.006	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D4 stream	-	0.060	0.032	0.022	0.017	0.032	0.022	0.017
50 %		0.083	0.030	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.041	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D5 pond (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D5 stream (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D6 ditch (1 st)	-	0.059	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.108	0.029	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.054	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.022	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D6 ditch (2 nd)	-	0.059	0.048	0.048	0.048	0.048	0.048	0.048
50 %		0.109	0.048	0.048	0.048	0.048	0.048	0.048	0.048
75 %		0.054	0.048	0.048	0.048	0.048	0.048	0.048	0.048
90 %		0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048
None	R1 pond	-	0.009	0.008	0.007	0.007	0.005	0.005	0.003
50 %		0.007	0.007	0.006	0.006	0.006	0.004	0.003	0.002
75 %		0.006	0.006	0.005	0.005	0.005	0.003	0.003	0.001
90 %		0.005	0.005	0.005	0.005	0.005	0.002	0.002	0.001

PEC_{sw} ($\mu\text{g/L}$)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R1 stream		0.181	0.181	0.181	0.181	0.074	0.074	0.038
50 %		0.181	0.181	0.181	0.181	0.181	0.074	0.074	0.038
75 %		0.181	0.181	0.181	0.181	0.181	0.074	0.074	0.038
90 %		0.181	0.181	0.181	0.181	0.181	0.074	0.074	0.038
None	R2 stream		0.069	0.068	0.068	0.068	0.036	0.028	0.019
50 %		0.094	0.068	0.068	0.068	0.068	0.028	0.028	0.014
75 %		0.068	0.068	0.068	0.068	0.068	0.028	0.028	0.014
90 %		0.068	0.068	0.068	0.068	0.068	0.028	0.028	0.014
None	R3 stream		0.073	0.039	0.026	0.020	0.039	0.026	0.020
50 %		0.100	0.036	0.019	0.016	0.016	0.019	0.013	0.010
75 %		0.050	0.018	0.016	0.016	0.016	0.010	0.007	0.005
90 %		0.020	0.016	0.016	0.016	0.016	0.007	0.007	0.004
None	R4 stream		0.479	0.479	0.479	0.479	0.218	0.218	0.114
50 %		0.479	0.479	0.479	0.479	0.479	0.218	0.218	0.114
75 %		0.479	0.479	0.479	0.479	0.479	0.218	0.218	0.114
90 %		0.479	0.479	0.479	0.479	0.479	0.218	0.218	0.114
<i>Leafy vegetables (floriculture & perennial nursery crops), 1x46 g a.s./ha, BBCH 12</i>									
None	D3 ditch	-	0.079	0.042	0.029	0.022	0.042	0.029	0.022
50 %		0.146	0.040	0.021	0.014	0.011	0.021	0.014	0.011
75 %		0.073	0.020	0.010	0.007	0.005	0.010	0.007	0.005
90 %		0.029	0.008	0.004	0.003	0.002	0.004	0.003	0.002
None	D4 pond	-	0.009	0.006	0.005	0.004	0.006	0.005	0.004
50 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
75 %		0.003	0.002	0.002	0.001	0.001	0.002	0.001	0.001
90 %		0.001	0.001	0.001	0.001	< 0.001	0.001	0.001	< 0.001
None	D4 stream	-	0.086	0.046	0.031	0.024	0.046	0.031	0.024
50 %		0.118	0.043	0.023	0.016	0.012	0.023	0.016	0.012
75 %		0.059	0.022	0.011	0.008	0.006	0.011	0.008	0.006
90 %		0.024	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	D5 pond (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D5 stream (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D6 ditch	-	0.078	0.041	0.028	0.021	0.041	0.028	0.021
50 %		0.143	0.039	0.021	0.014	0.011	0.021	0.014	0.011
75 %		0.072	0.019	0.010	0.007	0.005	0.010	0.007	0.005
90 %		0.029	0.008	0.004	0.003	0.002	0.004	0.003	0.002
None	R1 pond	-	0.009	0.006	0.005	0.004	0.006	0.005	0.004
50 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
75 %		0.003	0.002	0.002	0.002	0.002	0.002	0.001	0.001
90 %		0.002	0.001	0.001	0.001	0.001	0.001	0.001	< 0.001
None	R1 stream	-	0.070	0.037	0.025	0.020	0.037	0.025	0.019
50 %		0.096	0.035	0.020	0.020	0.020	0.019	0.013	0.010
75 %		0.048	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	R2 stream	-	0.093	0.083	0.083	0.083	0.049	0.034	0.026
50 %		0.127	0.083	0.083	0.083	0.083	0.034	0.034	0.017
75 %		0.083	0.083	0.083	0.083	0.083	0.034	0.034	0.017
90 %		0.083	0.083	0.083	0.083	0.083	0.034	0.034	0.017
None	R3 stream	-	0.099	0.052	0.036	0.035	0.052	0.036	0.027
50 %		0.135	0.049	0.035	0.035	0.035	0.026	0.018	0.014
75 %		0.067	0.035	0.035	0.035	0.035	0.016	0.016	0.008
90 %		0.035	0.035	0.035	0.035	0.035	0.016	0.016	0.008
None	R4 stream	-	0.655	0.655	0.655	0.655	0.298	0.298	0.156
50 %		0.655	0.655	0.655	0.655	0.655	0.298	0.298	0.156
75 %		0.655	0.655	0.655	0.655	0.655	0.298	0.298	0.156
90 %		0.655	0.655	0.655	0.655	0.655	0.298	0.298	0.156
Leafy vegetables (floriculture & perennial nursery crops), 2x34 g a.s./ha, BBCH 12									
None	D3 ditch	-	0.049	0.025	0.017	0.013	0.025	0.017	0.013
50 %		0.094	0.024	0.013	0.009	0.006	0.013	0.009	0.006
75 %		0.047	0.012	0.006	0.004	0.003	0.006	0.004	0.003
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	D4 pond	-	0.008	0.006	0.005	0.004	0.006	0.005	0.004
50 %		0.005	0.004	0.003	0.002	0.002	0.003	0.002	0.002
75 %		0.002	0.002	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	D4 stream	-	0.053	0.028	0.019	0.014	0.028	0.019	0.014
50 %		0.075	0.027	0.014	0.009	0.007	0.014	0.009	0.007
75 %		0.038	0.013	0.007	0.005	0.004	0.007	0.005	0.004
90 %		0.015	0.005	0.003	0.002	0.001	0.003	0.002	0.001

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D5 pond (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D5 stream (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D6 ditch	-	0.048	0.025	0.017	0.013	0.025	0.017	0.013
50 %		0.093	0.024	0.013	0.008	0.006	0.013	0.008	0.006
75 %		0.046	0.012	0.006	0.004	0.003	0.006	0.004	0.003
90 %		0.019	0.005	0.003	0.002	0.001	0.003	0.002	0.001
None	R1 pond	-	0.014	0.012	0.011	0.010	0.008	0.007	0.005
50 %		0.011	0.010	0.009	0.009	0.008	0.005	0.005	0.003
75 %		0.009	0.008	0.008	0.008	0.007	0.004	0.004	0.002
90 %		0.007	0.007	0.007	0.007	0.007	0.003	0.003	0.002
None	R1 stream	-	0.151	0.151	0.151	0.151	0.068	0.068	0.036
50 %		0.151	0.151	0.151	0.151	0.151	0.068	0.068	0.036
75 %		0.151	0.151	0.151	0.151	0.151	0.068	0.068	0.036
90 %		0.151	0.151	0.151	0.151	0.151	0.068	0.068	0.036
None	R2 stream	-	0.072	0.072	0.072	0.072	0.032	0.032	0.017
50 %		0.081	0.072	0.072	0.072	0.072	0.032	0.032	0.017
75 %		0.072	0.072	0.072	0.072	0.072	0.032	0.032	0.017
90 %		0.072	0.072	0.072	0.072	0.072	0.032	0.032	0.017
None	R3 stream	-	0.116	0.116	0.116	0.116	0.053	0.053	0.028
50 %		0.116	0.116	0.116	0.116	0.116	0.053	0.053	0.028
75 %		0.116	0.116	0.116	0.116	0.116	0.053	0.053	0.028
90 %		0.116	0.116	0.116	0.116	0.116	0.053	0.053	0.028
None	R4 stream	-	0.630	0.630	0.630	0.630	0.286	0.286	0.150
50 %		0.630	0.630	0.630	0.630	0.630	0.286	0.286	0.150
75 %		0.630	0.630	0.630	0.630	0.630	0.286	0.286	0.150
90 %		0.630	0.630	0.630	0.630	0.630	0.286	0.286	0.150
Leafy vegetables (floriculture & perennial nursery crops), 2x34 g a.s./ha, BBCH 12 (single application)									
None	D3 ditch	-	0.058	0.031	0.021	0.016	0.031	0.021	0.016
50 %		0.108	0.029	0.016	0.011	0.008	0.016	0.011	0.008
75 %		0.054	0.015	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.022	0.006	0.003	0.002	0.002	0.003	0.002	0.002

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D4 pond	-	0.006	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	D4 stream	-	0.064	0.034	0.023	0.018	0.034	0.023	0.018
50 %		0.087	0.032	0.017	0.012	0.009	0.017	0.012	0.009
75 %		0.044	0.016	0.008	0.006	0.004	0.008	0.006	0.004
90 %		0.017	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	D5 pond (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D5 stream (legumes as surrogate crop)	Not calculated – no mitigation needed.							
50 %									
75 %									
90 %									
None	D6 ditch	-	0.057	0.030	0.021	0.016	0.030	0.021	0.016
50 %		0.106	0.029	0.015	0.010	0.008	0.015	0.010	0.008
75 %		0.053	0.014	0.008	0.005	0.004	0.008	0.005	0.004
90 %		0.021	0.006	0.003	0.002	0.002	0.003	0.002	0.002
None	R1 pond	-	0.006	0.005	0.004	0.003	0.005	0.004	0.003
50 %		0.004	0.003	0.002	0.002	0.002	0.002	0.002	0.002
75 %		0.002	0.002	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	-	0.052	0.028	0.019	0.015	0.028	0.019	0.014
50 %		0.071	0.026	0.015	0.015	0.015	0.014	0.009	0.007
75 %		0.036	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	0.003
None	R2 stream	-	0.069	0.059	0.059	0.059	0.036	0.025	0.019
50 %		0.094	0.059	0.059	0.059	0.059	0.024	0.024	0.012
75 %		0.059	0.059	0.059	0.059	0.059	0.024	0.024	0.012
90 %		0.059	0.059	0.059	0.059	0.059	0.024	0.024	0.012
None	R3 stream	-	0.073	0.039	0.026	0.025	0.039	0.026	0.020
50 %		0.100	0.036	0.025	0.025	0.025	0.019	0.013	0.010
75 %		0.050	0.025	0.025	0.025	0.025	0.011	0.011	0.006
90 %		0.025	0.025	0.025	0.025	0.025	0.011	0.011	0.006
None	R4 stream	-	0.475	0.475	0.475	0.475	0.216	0.216	0.113
50 %		0.475	0.475	0.475	0.475	0.475	0.216	0.216	0.113
75 %		0.475	0.475	0.475	0.475	0.475	0.216	0.216	0.113

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
90 %		0.475	0.475	0.475	0.475	0.475	0.216	0.216	0.113
<i>Pome fruit (tree nursery crops), 1x46 g a.s./ha, early application, BBCH 12</i>									
None	D3 ditch	-	2.807	1.724	0.776	0.394	1.724	0.776	0.394
50 %		1.786	1.403	0.862	0.388	0.197	0.862	0.388	0.197
75 %		0.893	0.702	0.431	0.194	0.099	0.431	0.194	0.099
90 %		0.357	0.281	0.172	0.078	0.039	0.172	0.078	0.039
None	D4 pond	-	0.244	0.134	0.071	0.043	0.134	0.071	0.043
50 %		0.109	0.122	0.067	0.035	0.022	0.067	0.035	0.022
75 %		0.054	0.061	0.034	0.018	0.011	0.034	0.018	0.011
90 %		0.022	0.024	0.013	0.007	0.004	0.013	0.007	0.004
None	D4 stream	-	2.958	1.816	0.817	0.415	1.816	0.817	0.415
50 %		1.721	1.479	0.908	0.409	0.208	0.908	0.409	0.208
75 %		0.861	0.739	0.454	0.204	0.104	0.454	0.204	0.104
90 %		0.344	0.296	0.182	0.082	0.042	0.182	0.082	0.042
None	D5 pond	-	0.244	0.134	0.071	0.043	0.134	0.071	0.043
50 %		0.109	0.122	0.067	0.035	0.022	0.067	0.035	0.022
75 %		0.054	0.061	0.034	0.018	0.011	0.034	0.018	0.011
90 %		0.022	0.024	0.013	0.007	0.004	0.013	0.007	0.004
None	D5 stream	-	3.045	1.869	0.841	0.427	1.869	0.841	0.427
50 %		1.772	1.522	0.935	0.421	0.214	0.935	0.421	0.214
75 %		0.886	0.761	0.467	0.210	0.107	0.467	0.210	0.107
90 %		0.354	0.305	0.187	0.084	0.043	0.187	0.084	0.043
None	R1 pond	-	0.244	0.134	0.071	0.043	0.134	0.071	0.043
50 %		0.109	0.122	0.067	0.035	0.022	0.067	0.035	0.022
75 %		0.054	0.061	0.034	0.018	0.011	0.034	0.018	0.011
90 %		0.022	0.024	0.013	0.007	0.004	0.013	0.007	0.004
None	R1 stream	-	2.483	1.524	0.686	0.348	1.524	0.686	0.348
50 %		1.444	1.241	0.762	0.343	0.174	0.762	0.343	0.174
75 %		0.722	0.620	0.381	0.171	0.087	0.381	0.171	0.087
90 %		0.289	0.248	0.152	0.069	0.035	0.152	0.069	0.035
None	R2 stream	-	3.289	2.019	0.908	0.462	2.019	0.908	0.462
50 %		1.913	1.644	1.009	0.454	0.231	1.009	0.454	0.231
75 %		0.957	0.822	0.505	0.227	0.115	0.505	0.227	0.115
90 %		0.383	0.329	0.202	0.091	0.046	0.202	0.091	0.046

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R3 stream	-	3.512	2.156	0.970	0.493	2.156	0.970	0.493
50 %		2.043	1.755	1.078	0.485	0.247	1.078	0.485	0.247
75 %		1.022	0.878	0.539	0.243	0.123	0.539	0.243	0.123
90 %		0.409	0.351	0.216	0.097	0.049	0.216	0.097	0.049
None	R4 stream	-	2.497	1.533	0.690	0.350	1.533	0.690	0.350
50 %		1.453	1.248	0.767	0.345	0.175	0.767	0.345	0.175
75 %		0.727	0.624	0.383	0.172	0.088	0.383	0.172	0.088
90 %		0.290	0.250	0.153	0.069	0.035	0.153	0.069	0.035
Pome fruit (tree nursery crops), 1x46 g a.s./ha, late application, up to BBCH 91 (Aug)									
None	D3 ditch	-	1.146	0.512	0.259	0.158	0.512	0.259	0.158
50 %		0.849	0.573	0.256	0.129	0.079	0.256	0.129	0.079
75 %		0.424	0.286	0.128	0.065	0.039	0.128	0.065	0.039
90 %		0.170	0.115	0.051	0.026	0.016	0.051	0.026	0.016
None	D4 pond	-	0.087	0.048	0.031	0.022	0.048	0.031	0.022
50 %		0.038	0.043	0.024	0.015	0.011	0.024	0.015	0.011
75 %		0.019	0.022	0.012	0.008	0.005	0.012	0.008	0.005
90 %		0.008	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	D4 stream	-	1.293	0.578	0.292	0.178	0.578	0.292	0.178
50 %		0.829	0.647	0.289	0.146	0.089	0.289	0.146	0.089
75 %		0.414	0.323	0.144	0.073	0.045	0.144	0.073	0.045
90 %		0.166	0.129	0.058	0.029	0.018	0.058	0.029	0.018
None	D5 pond	-	0.087	0.048	0.031	0.022	0.048	0.031	0.022
50 %		0.038	0.043	0.024	0.015	0.011	0.024	0.015	0.011
75 %		0.019	0.022	0.012	0.008	0.005	0.012	0.008	0.005
90 %		0.008	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	D5 stream	-	1.429	0.639	0.322	0.197	0.639	0.322	0.197
50 %		0.916	0.714	0.319	0.161	0.099	0.319	0.161	0.099
75 %		0.458	0.357	0.160	0.081	0.049	0.160	0.081	0.049
90 %		0.183	0.143	0.064	0.032	0.020	0.064	0.032	0.020
None	R1 pond	-	0.087	0.048	0.031	0.022	0.048	0.031	0.022
50 %		0.038	0.043	0.024	0.015	0.011	0.024	0.015	0.011
75 %		0.019	0.022	0.012	0.008	0.005	0.012	0.008	0.005
90 %		0.008	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	R1 stream	-	1.013	0.453	0.229	0.140	0.453	0.229	0.140
50 %		0.649	0.507	0.226	0.114	0.070	0.226	0.114	0.070
75 %		0.325	0.253	0.113	0.057	0.035	0.113	0.057	0.035
90 %		0.130	0.101	0.045	0.023	0.014	0.045	0.023	0.014

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R2 stream	-	1.358	0.607	0.306	0.187	0.607	0.306	0.187
50 %		0.870	0.679	0.303	0.153	0.094	0.303	0.153	0.094
75 %		0.435	0.340	0.152	0.077	0.047	0.152	0.077	0.047
90 %		0.174	0.136	0.061	0.031	0.019	0.061	0.031	0.019
None	R3 stream	-	1.428	0.638	0.367	0.367	0.638	0.322	0.197
50 %		0.915	0.714	0.367	0.367	0.367	0.319	0.166	0.098
75 %		0.457	0.367	0.367	0.367	0.367	0.166	0.166	0.087
90 %		0.367	0.367	0.367	0.367	0.367	0.166	0.166	0.087
None	R4 stream	-	1.013	0.453	0.229	0.188	0.453	0.229	0.140
50 %		0.649	0.506	0.226	0.188	0.188	0.226	0.114	0.070
75 %		0.324	0.253	0.188	0.188	0.188	0.113	0.085	0.045
90 %		0.188	0.188	0.188	0.188	0.188	0.085	0.085	0.045
Pome fruit (tree nursery crops), 2x34 g a.s./ha, early application, BBCH 12									
None	D3 ditch	-	1.752	1.035	0.568	0.268	1.035	0.568	0.268
50 %		1.136	0.876	0.518	0.284	0.134	0.518	0.284	0.134
75 %		0.568	0.438	0.259	0.142	0.067	0.259	0.142	0.067
90 %		0.227	0.175	0.104	0.057	0.027	0.104	0.057	0.027
None	D4 pond	-	0.242	0.137	0.072	0.041	0.137	0.072	0.041
50 %		0.108	0.121	0.069	0.036	0.021	0.069	0.036	0.021
75 %		0.054	0.060	0.034	0.018	0.010	0.034	0.018	0.010
90 %		0.021	0.024	0.014	0.007	0.004	0.014	0.007	0.004
None	D4 stream	-	1.951	1.152	0.633	0.298	1.152	0.633	0.298
50 %		1.149	0.976	0.576	0.316	0.149	0.576	0.316	0.149
75 %		0.574	0.488	0.288	0.158	0.075	0.288	0.158	0.075
90 %		0.230	0.195	0.115	0.063	0.030	0.115	0.063	0.030
None	D5 pond	-	0.280	0.159	0.083	0.048	0.159	0.083	0.048
50 %		0.125	0.140	0.079	0.042	0.024	0.079	0.042	0.024
75 %		0.062	0.070	0.040	0.021	0.012	0.040	0.021	0.012
90 %		0.025	0.028	0.016	0.008	0.005	0.016	0.008	0.005
None	D5 stream	-	2.067	1.221	0.671	0.316	1.221	0.671	0.316
50 %		1.218	1.034	0.611	0.335	0.158	0.611	0.335	0.158
75 %		0.609	0.517	0.305	0.168	0.079	0.305	0.168	0.079
90 %		0.244	0.207	0.122	0.067	0.032	0.122	0.067	0.032
None	R1 pond	-	0.291	0.165	0.087	0.050	0.165	0.087	0.050
50 %		0.130	0.146	0.083	0.043	0.025	0.083	0.043	0.025
75 %		0.065	0.073	0.041	0.022	0.012	0.041	0.022	0.012
90 %		0.026	0.029	0.016	0.009	0.005	0.016	0.009	0.005

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R1 stream	-	1.547	0.914	0.502	0.237	0.914	0.502	0.237
50 %		0.911	0.774	0.457	0.251	0.118	0.457	0.251	0.118
75 %		0.456	0.387	0.229	0.125	0.059	0.229	0.125	0.059
90 %		0.182	0.155	0.091	0.050	0.024	0.091	0.050	0.024
None	R2 stream	-	2.053	1.213	0.666	0.314	1.213	0.666	0.314
50 %		1.209	1.026	0.606	0.333	0.157	0.606	0.333	0.157
75 %		0.604	0.513	0.303	0.166	0.078	0.303	0.166	0.078
90 %		0.242	0.205	0.121	0.067	0.031	0.121	0.067	0.031
None	R3 stream		2.189	1.293	0.710	0.335	1.293	0.710	0.335
50 %		1.289	1.095	0.647	0.355	0.179	0.647	0.355	0.167
75 %		0.645	0.547	0.323	0.179	0.179	0.323	0.178	0.084
90 %		0.258	0.219	0.179	0.179	0.179	0.129	0.081	0.042
None	R4 stream	-	1.556	0.919	0.505	0.279	0.919	0.505	0.238
50 %		0.917	0.778	0.460	0.279	0.279	0.460	0.252	0.119
75 %		0.458	0.389	0.279	0.279	0.279	0.230	0.126	0.060
90 %		0.279	0.279	0.279	0.279	0.279	0.116	0.116	0.059
Pome fruit (tree nursery crops), 2x34 g a.s./ha, early application, BBCH 12 (single application)									
None	D3 ditch	-	2.075	1.274	0.573	0.291	1.274	0.573	0.291
50 %		1.320	1.037	0.637	0.287	0.146	0.637	0.287	0.146
75 %		0.660	0.519	0.319	0.143	0.073	0.319	0.143	0.073
90 %		0.264	0.207	0.127	0.057	0.029	0.127	0.057	0.029
None	D4 pond	-	0.181	0.099	0.052	0.032	0.099	0.052	0.032
50 %		0.080	0.090	0.050	0.026	0.016	0.050	0.026	0.016
75 %		0.040	0.045	0.025	0.013	0.008	0.025	0.013	0.008
90 %		0.016	0.018	0.010	0.005	0.003	0.010	0.005	0.003
None	D4 stream	-	2.186	1.342	0.604	0.307	1.342	0.604	0.307
50 %		1.272	1.093	0.671	0.302	0.154	0.671	0.302	0.154
75 %		0.636	0.546	0.336	0.151	0.077	0.336	0.151	0.077
90 %		0.254	0.219	0.134	0.060	0.031	0.134	0.060	0.031
None	D5 pond	-	0.181	0.099	0.052	0.032	0.099	0.052	0.032
50 %		0.080	0.090	0.050	0.026	0.016	0.050	0.026	0.016
75 %		0.040	0.045	0.025	0.013	0.008	0.025	0.013	0.008
90 %		0.016	0.018	0.010	0.005	0.003	0.010	0.005	0.003
None	D5 stream	-	2.250	1.382	0.622	0.316	1.382	0.622	0.316
50 %		1.309	1.125	0.691	0.311	0.158	0.691	0.311	0.158
75 %		0.655	0.562	0.346	0.155	0.079	0.346	0.155	0.079
90 %		0.262	0.225	0.138	0.062	0.032	0.138	0.062	0.032

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	R1 pond	-	0.181	0.099	0.052	0.032	0.099	0.052	0.032
50 %		0.080	0.090	0.050	0.026	0.016	0.050	0.026	0.016
75 %		0.040	0.045	0.025	0.013	0.008	0.025	0.013	0.008
90 %		0.016	0.018	0.010	0.005	0.003	0.010	0.005	0.003
None	R1 stream	-	1.834	1.126	0.507	0.258	1.126	0.507	0.258
50 %		1.067	0.917	0.563	0.253	0.129	0.563	0.253	0.129
75 %		0.534	0.458	0.282	0.127	0.064	0.282	0.127	0.064
90 %		0.214	0.183	0.113	0.051	0.026	0.113	0.051	0.026
None	R2 stream	-	2.430	1.492	0.671	0.341	1.492	0.671	0.341
50 %		1.414	1.215	0.746	0.336	0.171	0.746	0.336	0.171
75 %		0.707	0.607	0.373	0.168	0.085	0.373	0.168	0.085
90 %		0.283	0.243	0.149	0.067	0.034	0.149	0.067	0.034
None	R3 stream	-	2.595	1.594	0.717	0.364	1.594	0.717	0.364
50 %		1.510	1.298	0.797	0.358	0.182	0.797	0.358	0.182
75 %		0.755	0.649	0.399	0.179	0.091	0.399	0.179	0.091
90 %		0.302	0.260	0.159	0.072	0.036	0.159	0.072	0.036
None	R4 stream	-	1.845	1.133	0.510	0.259	1.133	0.510	0.259
50 %		1.074	0.923	0.567	0.255	0.130	0.567	0.255	0.130
75 %		0.537	0.461	0.283	0.127	0.073	0.283	0.127	0.065
90 %		0.215	0.185	0.113	0.073	0.073	0.113	0.051	0.026
Pome fruit (tree nursery crops), 2x34 g a.s./ha, late application, up to BBCH 91 (Aug)									
None	D3 ditch	-	0.793	0.381	0.187	0.108	0.381	0.187	0.108
50 %		0.570	0.397	0.191	0.093	0.054	0.191	0.093	0.054
75 %		0.285	0.198	0.095	0.047	0.027	0.095	0.047	0.027
90 %		0.114	0.079	0.038	0.019	0.011	0.038	0.019	0.011
None	D4 pond	-	0.092	0.050	0.031	0.021	0.050	0.031	0.021
50 %		0.040	0.046	0.025	0.015	0.010	0.025	0.015	0.010
75 %		0.020	0.023	0.013	0.008	0.005	0.013	0.008	0.005
90 %		0.008	0.009	0.005	0.003	0.002	0.005	0.003	0.002
None	D4 stream	-	0.780	0.375	0.183	0.106	0.375	0.183	0.106
50 %		0.490	0.390	0.187	0.092	0.053	0.187	0.092	0.053
75 %		0.245	0.195	0.094	0.046	0.027	0.094	0.046	0.027
90 %		0.098	0.078	0.037	0.018	0.011	0.037	0.018	0.011
None	D5 pond	-	0.097	0.053	0.032	0.022	0.053	0.032	0.022
50 %		0.043	0.049	0.027	0.016	0.011	0.027	0.016	0.011
75 %		0.021	0.024	0.013	0.008	0.006	0.013	0.008	0.006
90 %		0.008	0.010	0.005	0.003	0.002	0.005	0.003	0.002

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D5 stream	-	0.862	0.414	0.203	0.118	0.414	0.203	0.118
50 %		0.542	0.431	0.207	0.101	0.059	0.207	0.101	0.059
75 %		0.271	0.216	0.104	0.051	0.029	0.104	0.051	0.029
90 %		0.108	0.086	0.041	0.020	0.012	0.041	0.020	0.012
None	R1 pond	-	0.080	0.044	0.026	0.018	0.044	0.026	0.018
50 %		0.035	0.040	0.022	0.013	0.009	0.022	0.013	0.009
75 %		0.017	0.020	0.011	0.007	0.005	0.011	0.007	0.005
90 %		0.007	0.008	0.004	0.003	0.002	0.004	0.003	0.002
None	R1 stream	-	0.611	0.294	0.144	0.083	0.294	0.144	0.083
50 %		0.384	0.306	0.147	0.072	0.042	0.147	0.072	0.042
75 %		0.192	0.153	0.073	0.036	0.021	0.073	0.036	0.021
90 %		0.077	0.061	0.029	0.014	0.008	0.029	0.014	0.008
None	R2 stream	-	0.819	0.394	0.193	0.112	0.394	0.193	0.112
50 %		0.515	0.410	0.197	0.096	0.056	0.197	0.096	0.056
75 %		0.258	0.205	0.098	0.048	0.028	0.098	0.048	0.028
90 %		0.103	0.082	0.039	0.019	0.011	0.039	0.019	0.011
None	R3 stream	-	0.862	0.415	0.209	0.209	0.414	0.203	0.118
50 %		0.542	0.431	0.209	0.209	0.209	0.207	0.102	0.059
75 %		0.271	0.216	0.209	0.209	0.209	0.104	0.094	0.049
90 %		0.209	0.209	0.209	0.209	0.209	0.094	0.094	0.049
None	R4 stream		0.611	0.294	0.144	0.137	0.294	0.144	0.083
50 %		0.384	0.306	0.147	0.137	0.137	0.147	0.072	0.042
75 %		0.192	0.153	0.137	0.137	0.137	0.073	0.062	0.033
90 %		0.137	0.137	0.137	0.137	0.137	0.062	0.062	0.033
Pome fruit (tree nursery crops), 2x34 g a.s./ha, late application, up to BBCH 91 (Aug) (single application)									
None	D3 ditch	-	0.847	0.378	0.191	0.117	0.378	0.191	0.117
50 %		0.627	0.423	0.189	0.096	0.058	0.189	0.096	0.058
75 %		0.314	0.212	0.095	0.048	0.029	0.095	0.048	0.029
90 %		0.125	0.085	0.038	0.019	0.012	0.038	0.019	0.012
None	D4 pond	-	0.064	0.036	0.023	0.016	0.036	0.023	0.016
50 %		0.028	0.032	0.018	0.011	0.008	0.018	0.011	0.008
75 %		0.014	0.016	0.009	0.006	0.004	0.009	0.006	0.004
90 %		0.006	0.006	0.004	0.002	0.002	0.004	0.002	0.002
None	D4 stream	-	0.956	0.427	0.216	0.132	0.427	0.216	0.132
50 %		0.613	0.478	0.214	0.108	0.066	0.214	0.108	0.066
75 %		0.306	0.239	0.107	0.054	0.033	0.107	0.054	0.033
90 %		0.123	0.096	0.043	0.022	0.013	0.043	0.022	0.013

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid							
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10	10 (VFSmod)	20
	No spray buffer (m)	Edge of field	5	10	15	20	10	15	20
None	D5 pond	-	0.064	0.036	0.023	0.016	0.036	0.023	0.016
50 %		0.028	0.032	0.018	0.011	0.008	0.018	0.011	0.008
75 %		0.014	0.016	0.009	0.006	0.004	0.009	0.006	0.004
90 %		0.006	0.006	0.004	0.002	0.002	0.004	0.002	0.002
None	D5 stream	-	1.056	0.472	0.238	0.146	0.472	0.238	0.146
50 %		0.677	0.528	0.236	0.119	0.073	0.236	0.119	0.073
75 %		0.338	0.264	0.118	0.060	0.036	0.118	0.060	0.036
90 %		0.135	0.106	0.047	0.024	0.015	0.047	0.024	0.015
None	R1 pond	-	0.064	0.035	0.023	0.016	0.035	0.023	0.016
50 %		0.028	0.032	0.018	0.011	0.008	0.018	0.011	0.008
75 %		0.014	0.016	0.009	0.006	0.004	0.009	0.006	0.004
90 %		0.006	0.006	0.004	0.002	0.002	0.004	0.002	0.002
None	R1 stream	-	0.749	0.335	0.169	0.103	0.335	0.169	0.103
50 %		0.480	0.375	0.167	0.084	0.052	0.167	0.084	0.052
75 %		0.240	0.187	0.084	0.042	0.026	0.084	0.042	0.026
90 %		0.096	0.075	0.033	0.017	0.010	0.033	0.017	0.010
None	R2 stream	-	1.004	0.449	0.227	0.138	0.449	0.227	0.138
50 %		0.643	0.502	0.224	0.113	0.069	0.224	0.113	0.069
75 %		0.322	0.251	0.112	0.057	0.035	0.112	0.057	0.035
90 %		0.129	0.100	0.045	0.023	0.014	0.045	0.023	0.014
None	R3 stream	-	1.056	0.472	0.262	0.262	0.472	0.238	0.146
50 %		0.676	0.528	0.262	0.262	0.262	0.236	0.119	0.073
75 %		0.338	0.264	0.262	0.262	0.262	0.119	0.119	0.062
90 %		0.262	0.262	0.262	0.262	0.262	0.119	0.119	0.062
None	R4 stream	-	0.749	0.335	0.169	0.137	0.335	0.169	0.103
50 %		0.480	0.375	0.167	0.137	0.137	0.167	0.084	0.052
75 %		0.240	0.187	0.137	0.137	0.137	0.084	0.062	0.033
90 %		0.137	0.137	0.137	0.137	0.137	0.062	0.062	0.033

a) Single application to sugar beets was not included in the original submission. Though Step 4 is actually not required, results for single application were added since Step 4 is necessary for the twofold application.

PEC_{sw/sed} – Metabolites of acetamiprid

Table 8.9-7: FOCUS Step 1-2 PEC_{sw} and PEC_{sed} for IM-1-2 following single / multiple application(s) of acetamiprid on various crops

Application pattern	Number of applications	Step	Region	Season	IM-1-2		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Maize 1x60 g a.s./ha BBCH 51	1	1	-	-	13.853	13.748	7.473
		2	N EU	Oct – Feb	0.397	0.392	0.213
				Mar – May	0.204	0.201	0.109
				Jun – Sep	0.204	0.201	0.109
		2	S EU	Oct – Feb	0.333	0.329	0.179
				Mar – May	0.333	0.329	0.179
				Jun – Sep	0.268	0.265	0.144
		2	S EU	Oct – Feb	0.333	0.329	0.179
				Mar – May	0.333	0.329	0.179
				Jun – Sep	0.268	0.265	0.144
Pome fruit (late) 1x80 g a.s./ha BBCH 71	1	1	-	-	18.971	18.794	10.215
		2	N EU	Oct – Feb	1.176	1.155	0.628
				Mar – May	0.817	0.798	0.434
				Jun – Sep	0.817	0.798	0.434
		2	S EU	Oct – Feb	1.056	1.036	0.563
				Mar – May	1.056	1.036	0.563
				Jun – Sep	0.936	0.917	0.498
		2	S EU	Oct – Feb	1.056	1.036	0.563
				Mar – May	1.056	1.036	0.563
				Jun – Sep	0.936	0.917	0.498
Pome fruit (early) 2x25 g a.s./ha BBCH 62	2	1	-	-	12.182	12.048	6.548
		2	N EU	Oct – Feb	0.778	0.760	0.413
				Mar – May	0.662	0.644	0.350
				Jun – Sep	0.662	0.644	0.350
		2	S EU	Oct – Feb	0.739	0.721	0.392
				Mar – May	0.739	0.721	0.392
				Jun – Sep	0.700	0.683	0.371
		2	S EU	Oct – Feb	0.739	0.721	0.392
				Mar – May	0.739	0.721	0.392
				Jun – Sep	0.700	0.683	0.371
Pome fruit (early) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	12.182	12.048	6.548
		2	N EU	Oct – Feb	0.522	0.511	0.278
				Mar – May	0.410	0.400	0.217
				Jun – Sep	0.410	0.400	0.217
		2	S EU	Oct – Feb	0.485	0.474	0.257
				Mar – May	0.485	0.474	0.257
				Jun – Sep	0.447	0.437	0.237
		2	S EU	Oct – Feb	0.485	0.474	0.257
				Mar – May	0.485	0.474	0.257
				Jun – Sep	0.447	0.437	0.237
Pome fruit (late) 2x25 g a.s./ha BBCH 62	2	1	-	-	11.857	11.746	6.385
		2	N EU	Oct – Feb	0.471	0.462	0.251
				Mar – May	0.355	0.346	0.188
				Jun – Sep	0.355	0.346	0.188
		2	S EU	Oct – Feb	0.433	0.423	0.230
				Mar – May	0.433	0.423	0.230
				Jun – Sep	0.394	0.385	0.209
		2	S EU	Oct – Feb	0.433	0.423	0.230
				Mar – May	0.433	0.423	0.230
				Jun – Sep	0.394	0.385	0.209
Pome fruit (late) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	11.857	11.746	6.385
		2	N EU	Oct – Feb	0.368	0.361	0.196
				Mar – May	0.255	0.249	0.136
				Jun – Sep	0.255	0.249	0.136
		2	S EU	Oct – Feb	0.330	0.324	0.176
				Mar – May	0.330	0.324	0.176
				Jun – Sep	0.293	0.287	0.156
		2	S EU	Oct – Feb	0.330	0.324	0.176
				Mar – May	0.330	0.324	0.176
				Jun – Sep	0.293	0.287	0.156

Application pattern	Number of applications	Step	Region	Season	IM-1-2		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Potato 1x36 g a.s./ha BBCH 12	1	1	-	-	8.312	8.249	4.484
		2	N EU	Oct – Feb	0.700	0.694	0.377
				Mar – May	0.307	0.304	0.165
				Jun – Sep	0.307	0.304	0.165
		2	S EU	Oct – Feb	0.569	0.564	0.307
				Mar – May	0.569	0.564	0.307
				Jun – Sep	0.438	0.434	0.236
Spring cereals 2x35 g a.s./ha BBCH 40	2	1	-	-	16.162	16.039	8.718
		2	N EU	Oct – Feb	0.306	0.302	0.164
				Mar – May	0.169	0.166	0.090
				Jun – Sep	0.169	0.166	0.090
		2	S EU	Oct – Feb	0.261	0.257	0.140
				Mar – May	0.261	0.257	0.140
				Jun – Sep	0.215	0.212	0.115
Spring cereals 2x35 g a.s./ha BBCH 40 (single application)	1	1	-	-	16.162	16.039	8.718
		2	N EU	Oct – Feb	0.269	0.266	0.145
				Mar – May	0.134	0.132	0.072
				Jun – Sep	0.134	0.132	0.072
		2	S EU	Oct – Feb	0.224	0.221	0.120
				Mar – May	0.224	0.221	0.120
				Jun – Sep	0.179	0.177	0.096
Spring cereals 2x35 g a.s./ha BBCH 12	2	1	-	-	16.162	16.039	8.718
		2	N EU	Oct – Feb	0.826	0.818	0.445
				Mar – May	0.377	0.373	0.203
				Jun – Sep	0.377	0.373	0.203
		2	S EU	Oct – Feb	0.676	0.670	0.364
				Mar – May	0.676	0.670	0.364
				Jun – Sep	0.527	0.521	0.283
Spring cereals 2x35 g a.s./ha BBCH 12 (single application)	1	1	-	-	16.162	16.039	8.718
		2	N EU	Oct – Feb	0.793	0.786	0.427
				Mar – May	0.344	0.340	0.185
				Jun – Sep	0.344	0.340	0.185
		2	S EU	Oct – Feb	0.643	0.638	0.347
				Mar – May	0.643	0.638	0.347
				Jun – Sep	0.494	0.489	0.266
Winter cereals 2x36 g a.s./ha BBCH 40	2	1	-	-	16.624	16.497	8.967
		2	N EU	Oct – Feb	0.315	0.311	0.169
				Mar – May	0.174	0.171	0.093
				Jun – Sep	0.174	0.171	0.093
		2	S EU	Oct – Feb	0.268	0.264	0.144
				Mar – May	0.268	0.264	0.144
				Jun – Sep	0.221	0.218	0.118

Application pattern	Number of applications	Step	Region	Season	IM-1-2		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Winter cereals 2x36 g a.s./ha BBCH 40 (single application)	1	1	-	-	16.624	16.497	8.967
		2	N EU	Oct – Feb	0.277	0.274	0.149
				Mar – May	0.138	0.136	0.074
				Jun – Sep	0.138	0.136	0.074
		2	S EU	Oct – Feb	0.230	0.228	0.124
				Mar – May	0.230	0.228	0.124
				Jun – Sep	0.184	0.182	0.099
Winter cereals 1x30 g a.s./ha BBCH 12	1	1	-	-	6.927	6.874	3.736
		2	N EU	Oct – Feb	0.680	0.674	0.366
				Mar – May	0.295	0.292	0.159
				Jun – Sep	0.295	0.292	0.159
		2	S EU	Oct – Feb	0.551	0.547	0.297
				Mar – May	0.551	0.547	0.297
				Jun – Sep	0.423	0.419	0.228
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31	2	1	-	-	27.707	27.496	14.945
		2	N EU	Oct – Feb	0.540	0.533	0.290
				Mar – May	0.296	0.291	0.158
				Jun – Sep	0.296	0.291	0.158
		2	S EU	Oct – Feb	0.459	0.452	0.246
				Mar – May	0.459	0.452	0.246
				Jun – Sep	0.377	0.372	0.202
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	27.707	27.496	14.945
		2	N EU	Oct – Feb	0.461	0.456	0.248
				Mar – May	0.230	0.227	0.123
				Jun – Sep	0.230	0.227	0.123
		2	S EU	Oct – Feb	0.384	0.380	0.206
				Mar – May	0.384	0.380	0.206
				Jun – Sep	0.307	0.303	0.165
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11	1	1	-	-	13.853	13.748	7.473
		2	N EU	Oct – Feb	0.846	0.838	0.456
				Mar – May	0.384	0.380	0.206
				Jun – Sep	0.384	0.380	0.206
		2	S EU	Oct – Feb	0.692	0.685	0.373
				Mar – May	0.692	0.685	0.373
				Jun – Sep	0.538	0.532	0.289
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31	2	1	-	-	27.707	27.496	14.945
		2	N EU	Oct – Feb	0.540	0.533	0.290
				Mar – May	0.296	0.291	0.158
				Jun – Sep	0.296	0.291	0.158
		2	S EU	Oct – Feb	0.459	0.452	0.246
				Mar – May	0.459	0.452	0.246
				Jun – Sep	0.377	0.372	0.202

Application pattern	Number of applications	Step	Region	Season	IM-1-2		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	27.707	27.496	14.945
		2	N EU	Oct – Feb	0.461	0.456	0.248
				Mar – May	0.230	0.227	0.123
				Jun – Sep	0.230	0.227	0.123
		2	S EU	Oct – Feb	0.384	0.380	0.206
				Mar – May	0.384	0.380	0.206
				Jun – Sep	0.307	0.303	0.165
Sugar beet 2x50 g a.s./ha BBCH 12	2	1	-	-	23.089	22.913	12.455
		2	N EU	Oct – Feb	1.013	1.004	0.546
				Mar – May	0.472	0.467	0.254
				Jun – Sep	0.472	0.467	0.254
		2	S EU	Oct – Feb	0.833	0.825	0.448
				Mar – May	0.833	0.825	0.448
				Jun – Sep	0.653	0.646	0.351
Sugar beet 2x50 g a.s./ha BBCH 12 (single application)	1	1	-	-	23.089	22.913	12.455
		2	N EU	Oct – Feb	0.919	0.911	0.495
				Mar – May	0.406	0.401	0.218
				Jun – Sep	0.406	0.401	0.218
		2	S EU	Oct – Feb	0.748	0.741	0.403
				Mar – May	0.748	0.741	0.403
				Jun – Sep	0.577	0.571	0.310
Bulb vegetables (flower bulbs and flower tubers) 1x46 g a.s./ha BBCH 12	1	1	-	-	10.621	10.540	5.729
		2	N EU	Oct – Feb	0.944	0.936	0.509
				Mar – May	0.412	0.408	0.222
				Jun – Sep	0.412	0.408	0.222
		2	S EU	Oct – Feb	0.767	0.760	0.413
				Mar – May	0.767	0.760	0.413
				Jun – Sep	0.590	0.584	0.317
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20	2	1	-	-	15.700	15.581	8.469
		2	N EU	Oct – Feb	0.651	0.644	0.350
				Mar – May	0.306	0.302	0.164
				Jun – Sep	0.306	0.302	0.164
		2	S EU	Oct – Feb	0.536	0.530	0.288
				Mar – May	0.536	0.530	0.288
				Jun – Sep	0.421	0.416	0.226
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20 (single application)	1	1	-	-	15.700	15.581	8.469
		2	N EU	Oct – Feb	0.588	0.583	0.317
				Mar – May	0.261	0.258	0.140
				Jun – Sep	0.261	0.258	0.140
		2	S EU	Oct – Feb	0.479	0.475	0.258
				Mar – May	0.479	0.475	0.258
				Jun – Sep	0.370	0.367	0.199

Application pattern	Number of applications	Step	Region	Season	IM-1-2		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 12	2	1	-	-	15.700	15.581	8.469
		2	N EU	Oct – Feb	0.766	0.759	0.412
				Mar – May	0.352	0.348	0.189
				Jun – Sep	0.352	0.348	0.189
		2	S EU	Oct – Feb	0.628	0.622	0.338
				Mar – May	0.628	0.622	0.338
				Jun – Sep	0.490	0.485	0.263
		1	N EU	Oct – Feb	0.698	0.692	0.376
				Mar – May	0.305	0.302	0.164
				Jun – Sep	0.305	0.302	0.164
			S EU	Oct – Feb	0.567	0.562	0.305
				Mar – May	0.567	0.562	0.305
				Jun – Sep	0.436	0.432	0.235
Leafy vegetables (floriculture, perennial nursery crops) 1x46 g a.s./ha BBCH 12	1	1	-	-	10.621	10.540	5.729
		2	N EU	Oct – Feb	0.796	0.789	0.429
				Mar – May	0.353	0.350	0.190
				Jun – Sep	0.353	0.350	0.190
		2	S EU	Oct – Feb	0.649	0.643	0.349
				Mar – May	0.649	0.643	0.349
				Jun – Sep	0.501	0.496	0.270
		2	N EU	Oct – Feb	0.651	0.644	0.350
				Mar – May	0.306	0.302	0.164
				Jun – Sep	0.306	0.302	0.164
			S EU	Oct – Feb	0.536	0.530	0.288
				Mar – May	0.536	0.530	0.288
				Jun – Sep	0.421	0.416	0.226
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12	2	1	-	-	15.700	15.581	8.469
		2	N EU	Oct – Feb	0.588	0.583	0.317
				Mar – May	0.261	0.258	0.140
				Jun – Sep	0.261	0.258	0.140
		2	S EU	Oct – Feb	0.479	0.475	0.258
				Mar – May	0.479	0.475	0.258
				Jun – Sep	0.370	0.367	0.199
		1	N EU	Oct – Feb	1.403	1.380	0.750
				Mar – May	0.931	0.911	0.495
				Jun – Sep	0.931	0.911	0.495
			S EU	Oct – Feb	1.246	1.223	0.665
				Mar – May	1.246	1.223	0.665
				Jun – Sep	1.088	1.067	0.580
Pome fruit (early) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	11.207	11.084	6.024
		2	N EU	Oct – Feb	1.403	1.380	0.750
				Mar – May	0.931	0.911	0.495
				Jun – Sep	0.931	0.911	0.495
		2	S EU	Oct – Feb	1.246	1.223	0.665
				Mar – May	1.246	1.223	0.665
				Jun – Sep	1.088	1.067	0.580
		2	N EU	Oct – Feb	0.588	0.583	0.317
				Mar – May	0.261	0.258	0.140
				Jun – Sep	0.261	0.258	0.140
			S EU	Oct – Feb	0.479	0.475	0.258
				Mar – May	0.479	0.475	0.258
				Jun – Sep	0.370	0.367	0.199

Application pattern	Number of applications	Step	Region	Season	IM-1-2		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Pome fruit (late) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	10.908	10.807	5.874
		2	N EU	Oct – Feb	1.119	1.104	0.600
				Mar – May	0.647	0.635	0.345
				Jun – Sep	0.647	0.635	0.345
		2	S EU	Oct – Feb	0.962	0.947	0.515
				Mar – May	0.962	0.947	0.515
				Jun – Sep	0.804	0.791	0.430
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	16.567	16.385	8.905
		2	N EU	Oct – Feb	1.408	1.380	0.750
				Mar – May	1.040	1.015	0.552
				Jun – Sep	1.040	1.015	0.552
		2	S EU	Oct – Feb	1.285	1.259	0.684
				Mar – May	1.285	1.259	0.684
				Jun – Sep	1.163	1.137	0.618
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	16.567	16.385	8.905
		2	N EU	Oct – Feb	1.037	1.020	0.554
				Mar – May	0.688	0.673	0.366
				Jun – Sep	0.688	0.673	0.366
		2	S EU	Oct – Feb	0.921	0.904	0.491
				Mar – May	0.921	0.904	0.491
				Jun – Sep	0.805	0.789	0.429
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	16.126	15.975	8.683
		2	N EU	Oct – Feb	0.991	0.975	0.530
				Mar – May	0.623	0.610	0.332
				Jun – Sep	0.623	0.610	0.332
		2	S EU	Oct – Feb	0.868	0.854	0.464
				Mar – May	0.868	0.854	0.464
				Jun – Sep	0.745	0.732	0.398
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	16.126	15.975	8.683
		2	N EU	Oct – Feb	0.827	0.816	0.443
				Mar – May	0.478	0.469	0.255
				Jun – Sep	0.478	0.469	0.255
		2	S EU	Oct – Feb	0.711	0.700	0.381
				Mar – May	0.711	0.700	0.381
				Jun – Sep	0.594	0.585	0.318

N EU / S EU = Northern/ Southern Europe.

^a two-time as required by ecotox.

Table 8.9-8: FOCUS Step 1-2 PEC_{SW} and PEC_{SED} for IM-1-4 following single / multiple application(s) of acetamiprid on various crops

Application pattern	Number of applications	Step	Region	Season	IM-1-4		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Maize 1x60 g a.s./ha BBCH 51	1	1	-	-	17.873	17.687	30.442
		2	N EU	Oct – Feb	1.297	1.271	2.187
				Mar – May	0.683	0.662	1.138
				Jun – Sep	0.683	0.662	1.138
		2	S EU	Oct – Feb	1.092	1.068	1.838
				Mar – May	1.092	1.068	1.838
				Jun – Sep	0.888	0.865	1.488
		2	S EU	Oct – Feb	1.092	1.068	1.838
				Mar – May	1.092	1.068	1.838
				Jun – Sep	0.888	0.865	1.488
Pome fruit (late) 1x80 g a.s./ha BBCH 71	1	1	-	-	25.810	25.191	43.343
		2	N EU	Oct – Feb	3.988	3.835	6.596
				Mar – May	2.842	2.697	4.637
				Jun – Sep	2.842	2.697	4.637
		2	S EU	Oct – Feb	3.606	3.455	5.943
				Mar – May	3.606	3.455	5.943
				Jun – Sep	3.224	3.076	5.290
		2	S EU	Oct – Feb	3.606	3.455	5.943
				Mar – May	3.606	3.455	5.943
				Jun – Sep	3.224	3.076	5.290
Pome fruit (early) 2x25 g a.s./ha BBCH 62	2	1	-	-	17.416	16.789	28.877
		2	N EU	Oct – Feb	3.041	2.893	4.975
				Mar – May	2.478	2.334	4.012
				Jun – Sep	2.478	2.334	4.012
		2	S EU	Oct – Feb	2.854	2.707	4.654
				Mar – May	2.854	2.707	4.654
				Jun – Sep	2.666	2.521	4.333
		2	S EU	Oct – Feb	2.854	2.707	4.654
				Mar – May	2.854	2.707	4.654
				Jun – Sep	2.666	2.521	4.333
Pome fruit (early) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	17.416	16.789	28.877
		2	N EU	Oct – Feb	1.803	1.717	2.953
				Mar – May	1.444	1.362	2.341
				Jun – Sep	1.444	1.362	2.341
		2	S EU	Oct – Feb	1.683	1.599	2.749
				Mar – May	1.683	1.599	2.749
				Jun – Sep	1.564	1.480	2.545
		2	S EU	Oct – Feb	1.683	1.599	2.749
				Mar – May	1.683	1.599	2.749
				Jun – Sep	1.564	1.480	2.545
Pome fruit (late) 2x25 g a.s./ha BBCH 62	2	1	-	-	16.131	15.744	27.089
		2	N EU	Oct – Feb	1.938	1.864	3.206
				Mar – May	1.374	1.305	2.243
				Jun – Sep	1.374	1.305	2.243
		2	S EU	Oct – Feb	1.750	1.677	2.885
				Mar – May	1.750	1.677	2.885
				Jun – Sep	1.562	1.491	2.564
		2	S EU	Oct – Feb	1.750	1.677	2.885
				Mar – May	1.750	1.677	2.885
				Jun – Sep	1.562	1.491	2.564
Pome fruit (late) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	16.131	15.744	27.089
		2	N EU	Oct – Feb	1.246	1.198	2.061
				Mar – May	0.888	0.843	1.449
				Jun – Sep	0.888	0.843	1.449
		2	S EU	Oct – Feb	1.127	1.080	1.857
				Mar – May	1.127	1.080	1.857
				Jun – Sep	1.008	0.961	1.653
		2	S EU	Oct – Feb	1.127	1.080	1.857
				Mar – May	1.127	1.080	1.857
				Jun – Sep	1.008	0.961	1.653

Application pattern	Number of applications	Step	Region	Season	IM-1-4		
					Maximum PEC _{Sw} [µg/L]	21 d TWA PEC _{Sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Potato 1x36 g a.s./ha BBCH 12	1	1	-	-	10.724	10.612	18.265
		2	N EU	Oct – Feb	2.252	2.226	3.831
				Mar – May	0.999	0.982	1.690
				Jun – Sep	0.999	0.982	1.690
		2	S EU	Oct – Feb	1.835	1.811	3.117
				Mar – May	1.835	1.811	3.117
				Jun – Sep	1.417	1.397	2.404
Spring cereals 2x35 g a.s./ha BBCH 40	2	1	-	-	20.852	20.635	35.515
		2	N EU	Oct – Feb	1.369	1.342	2.310
				Mar – May	0.716	0.694	1.194
				Jun – Sep	0.716	0.694	1.194
		2	S EU	Oct – Feb	1.151	1.126	1.938
				Mar – May	1.151	1.126	1.938
				Jun – Sep	0.934	0.910	1.566
Spring cereals 2x35 g a.s./ha BBCH 40 (single application)	1	1	-	-	20.852	20.635	35.515
		2	N EU	Oct – Feb	0.876	0.860	1.480
				Mar – May	0.446	0.433	0.745
				Jun – Sep	0.446	0.433	0.745
		2	S EU	Oct – Feb	0.733	0.718	1.235
				Mar – May	0.733	0.718	1.235
				Jun – Sep	0.589	0.576	0.990
Spring cereals 2x35 g a.s./ha BBCH 12	2	1	-	-	20.852	20.635	35.515
		2	N EU	Oct – Feb	3.145	3.106	5.345
				Mar – May	1.426	1.399	2.406
				Jun – Sep	1.426	1.399	2.406
		2	S EU	Oct – Feb	2.572	2.537	4.366
				Mar – May	2.572	2.537	4.366
				Jun – Sep	1.999	1.968	3.386
Spring cereals 2x35 g a.s./ha BBCH 12 (single application)	1	1	-	-	20.852	20.635	35.515
		2	N EU	Oct – Feb	2.548	2.520	4.337
				Mar – May	1.115	1.097	1.888
				Jun – Sep	1.115	1.097	1.888
		2	S EU	Oct – Feb	2.070	2.046	3.521
				Mar – May	2.070	2.046	3.521
				Jun – Sep	1.592	1.571	2.704
Winter cereals 2x36 g a.s./ha BBCH 40	2	1	-	-	21.448	21.224	36.530
		2	N EU	Oct – Feb	1.408	1.381	2.376
				Mar – May	0.737	0.714	1.228
				Jun – Sep	0.737	0.714	1.228
		2	S EU	Oct – Feb	1.184	1.158	1.993
				Mar – May	1.184	1.158	1.993
				Jun – Sep	0.961	0.936	1.611

Application pattern	Number of applications	Step	Region	Season	IM-1-4		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Winter cereals 2x36 g a.s./ha BBCH 40 (single application)	1	1	-	-	21.448	21.224	36.530
		2	N EU	Oct – Feb	0.901	0.885	1.522
				Mar – May	0.459	0.446	0.767
				Jun – Sep	0.459	0.446	0.767
		2	S EU	Oct – Feb	0.754	0.738	1.270
				Mar – May	0.754	0.738	1.270
				Jun – Sep	0.606	0.592	1.019
Winter cereals 1x30 g a.s./ha BBCH 12	1	1	-	-	8.937	8.843	15.221
		2	N EU	Oct – Feb	2.184	2.160	3.717
				Mar – May	0.956	0.940	1.618
				Jun – Sep	0.956	0.940	1.618
		2	S EU	Oct – Feb	1.774	1.753	3.018
				Mar – May	1.774	1.753	3.018
				Jun – Sep	1.365	1.347	2.318
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31	2	1	-	-	35.746	35.374	60.883
		2	N EU	Oct – Feb	2.450	2.404	4.136
				Mar – May	1.269	1.231	2.118
				Jun – Sep	1.269	1.231	2.118
		2	S EU	Oct – Feb	2.057	2.013	3.464
				Mar – May	2.057	2.013	3.464
				Jun – Sep	1.663	1.622	2.791
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	35.746	35.374	60.883
		2	N EU	Oct – Feb	1.502	1.474	2.537
				Mar – May	0.765	0.743	1.278
				Jun – Sep	0.765	0.743	1.278
		2	S EU	Oct – Feb	1.256	1.231	2.117
				Mar – May	1.256	1.231	2.117
				Jun – Sep	1.010	0.987	1.698
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11	1	1	-	-	17.873	17.687	30.442
		2	N EU	Oct – Feb	2.730	2.694	4.636
				Mar – May	1.256	1.231	2.117
				Jun – Sep	1.256	1.231	2.117
		2	S EU	Oct – Feb	2.239	2.206	3.796
				Mar – May	2.239	2.206	3.796
				Jun – Sep	1.747	1.718	2.957
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31	2	1	-	-	35.746	35.374	60.883
		2	N EU	Oct – Feb	2.450	2.404	4.136
				Mar – May	1.269	1.231	2.118
				Jun – Sep	1.269	1.231	2.118
		2	S EU	Oct – Feb	2.057	2.013	3.464
				Mar – May	2.057	2.013	3.464
				Jun – Sep	1.663	1.622	2.791

Application pattern	Number of applications	Step	Region	Season	IM-1-4		
					Maximum PEC _{Sw} [µg/L]	21 d TWA PEC _{Sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	35.746	35.374	60.883
		2	N EU	Oct – Feb	1.502	1.474	2.537
				Mar – May	0.765	0.743	1.278
				Jun – Sep	0.765	0.743	1.278
		2	S EU	Oct – Feb	1.256	1.231	2.117
				Mar – May	1.256	1.231	2.117
				Jun – Sep	1.010	0.987	1.698
Sugar beet 2x50 g a.s./ha BBCH 12	2	1	-	-	29.788	29.478	50.736
		2	N EU	Oct – Feb	4.776	4.717	8.118
				Mar – May	2.151	2.112	3.634
				Jun – Sep	2.151	2.112	3.634
		2	S EU	Oct – Feb	3.901	3.849	6.623
				Mar – May	3.901	3.849	6.623
				Jun – Sep	3.026	2.980	5.129
Sugar beet 2x50 g a.s./ha BBCH 12 (single application)	1	1	-	-	29.788	29.478	50.736
		2	N EU	Oct – Feb	2.957	2.922	5.029
				Mar – May	1.320	1.296	2.231
				Jun – Sep	1.320	1.296	2.231
		2	S EU	Oct – Feb	2.411	2.380	4.097
				Mar – May	2.411	2.380	4.097
				Jun – Sep	1.866	1.838	3.164
Bulb vegetables (flower bulbs and flower tubers) 1x46 g a.s./ha BBCH 12	1	1	-	-	13.703	13.560	23.339
		2	N EU	Oct – Feb	3.035	3.000	5.163
				Mar – May	1.340	1.317	2.267
				Jun – Sep	1.340	1.317	2.267
		2	S EU	Oct – Feb	2.470	2.439	4.198
				Mar – May	2.470	2.439	4.198
				Jun – Sep	1.905	1.878	3.232
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20	2	1	-	-	20.256	20.045	34.500
		2	N EU	Oct – Feb	3.062	3.023	5.203
				Mar – May	1.389	1.362	2.344
				Jun – Sep	1.389	1.362	2.344
		2	S EU	Oct – Feb	2.504	2.469	4.250
				Mar – May	2.504	2.469	4.250
				Jun – Sep	1.946	1.916	3.297

Application pattern	Number of applications	Step	Region	Season	IM-1-4		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20 (single application)	1	1	-	-	20.256	20.045	34.500
		2	N EU	Oct – Feb	1.895	1.872	3.222
				Mar – May	0.851	0.836	1.438
				Jun – Sep	0.851	0.836	1.438
		2	S EU	Oct – Feb	1.547	1.527	2.627
				Mar – May	1.547	1.527	2.627
				Jun – Sep	1.199	1.181	2.032
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 12	2	1	-	-	20.256	20.045	34.500
		2	N EU	Oct – Feb	3.619	3.577	6.156
				Mar – May	1.612	1.584	2.725
				Jun – Sep	1.612	1.584	2.725
		2	S EU	Oct – Feb	2.950	2.912	5.012
				Mar – May	2.950	2.912	5.012
				Jun – Sep	2.281	2.248	3.869
Bulb vegetables (flower bulbs and flower tubers) 1x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	20.256	20.045	34.500
		2	N EU	Oct – Feb	2.243	2.217	3.816
				Mar – May	0.990	0.974	1.676
				Jun – Sep	0.990	0.974	1.676
		2	S EU	Oct – Feb	1.825	1.803	3.103
				Mar – May	1.825	1.803	3.103
				Jun – Sep	1.408	1.388	2.389
Leafy vegetables (floriculture, perennial nursery crops) 1x46 g a.s./ha BBCH 12	1	1	-	-	13.703	13.560	23.339
		2	N EU	Oct – Feb	2.564	2.533	4.359
				Mar – May	1.151	1.130	1.945
				Jun – Sep	1.151	1.130	1.945
		2	S EU	Oct – Feb	2.093	2.065	3.554
				Mar – May	2.093	2.065	3.554
				Jun – Sep	1.622	1.598	2.750
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12	2	1	-	-	20.256	20.045	34.500
		2	N EU	Oct – Feb	3.062	3.023	5.203
				Mar – May	1.389	1.362	2.344
				Jun – Sep	1.389	1.362	2.344
		2	S EU	Oct – Feb	2.504	2.469	4.250
				Mar – May	2.504	2.469	4.250
				Jun – Sep	1.946	1.916	3.297
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	20.256	20.045	34.500
		2	N EU	Oct – Feb	1.895	1.872	3.222
				Mar – May	0.851	0.836	1.438
				Jun – Sep	0.851	0.836	1.438
		2	S EU	Oct – Feb	1.547	1.527	2.627
				Mar – May	1.547	1.527	2.627
				Jun – Sep	1.199	1.181	2.032

Application pattern	Number of applications	Step	Region	Season	IM-1-4		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Pome fruit (early) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	16.023	15.446	26.567
		2	N EU	Oct – Feb	4.729	4.562	7.847
				Mar – May	3.223	3.066	5.272
				Jun – Sep	3.223	3.066	5.272
		2	S EU	Oct – Feb	4.227	4.063	6.989
				Mar – May	4.227	4.063	6.989
				Jun – Sep	3.725	3.565	6.130
Pome fruit (late) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	14.841	14.485	24.922
		2	N EU	Oct – Feb	3.706	3.607	6.206
				Mar – May	2.199	2.112	3.632
				Jun – Sep	2.199	2.112	3.632
		2	S EU	Oct – Feb	3.204	3.109	5.348
				Mar – May	3.204	3.109	5.348
				Jun – Sep	2.701	2.610	4.490
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	23.686	22.833	39.273
		2	N EU	Oct – Feb	5.835	5.621	9.668
				Mar – May	4.050	3.849	6.618
				Jun – Sep	4.050	3.849	6.618
		2	S EU	Oct – Feb	5.240	5.030	8.651
				Mar – May	5.240	5.030	8.651
				Jun – Sep	4.645	4.440	7.635
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	23.686	22.833	39.273
		2	N EU	Oct – Feb	3.496	3.372	5.800
				Mar – May	2.382	2.266	3.897
				Jun – Sep	2.382	2.266	3.897
		2	S EU	Oct – Feb	3.124	3.003	5.166
				Mar – May	3.124	3.003	5.166
				Jun – Sep	2.753	2.635	4.531
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	21.938	21.412	36.841
		2	N EU	Oct – Feb	4.333	4.220	7.261
				Mar – May	2.549	2.449	4.211
				Jun – Sep	2.549	2.449	4.211
		2	S EU	Oct – Feb	3.738	3.630	6.244
				Mar – May	3.738	3.630	6.244
				Jun – Sep	3.144	3.039	5.228
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	21.938	21.412	36.841
		2	N EU	Oct – Feb	2.739	2.666	4.587
				Mar – May	1.625	1.561	2.684
				Jun – Sep	1.625	1.561	2.684
		2	S EU	Oct – Feb	2.368	2.298	3.953
				Mar – May	2.368	2.298	3.953
				Jun – Sep	1.997	1.929	3.319

N EU / S EU = Northern/ Southern Europe.

^a two-time as required by ecotox.

Table 8.9-9: FOCUS Step 1-2 PEC_{SW} and PEC_{SED} for IC-0 following single / multiple application(s) of acetamiprid on various crops

Application pattern	Number of applications	Step	Region	Season	IC-0		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Maize 1x60 g a.s./ha BBCH 51	1	1	-	-	5.074	5.021	6.166
		2	N EU	Oct – Feb	0.231	0.225	0.276
				Mar – May	0.155	0.149	0.183
				Jun – Sep	0.155	0.149	0.183
		2	S EU	Oct – Feb	0.206	0.200	0.245
				Mar – May	0.206	0.200	0.245
				Jun – Sep	0.180	0.174	0.214
		2	S EU	Oct – Feb	0.206	0.200	0.245
				Mar – May	0.206	0.200	0.245
				Jun – Sep	0.180	0.174	0.214
Pome fruit (late) 1x80 g a.s./ha BBCH 71	1	1	-	-	7.485	7.313	8.977
		2	N EU	Oct – Feb	1.025	0.982	1.205
				Mar – May	0.882	0.840	1.030
				Jun – Sep	0.882	0.840	1.030
		2	S EU	Oct – Feb	0.977	0.934	1.146
				Mar – May	0.977	0.934	1.146
				Jun – Sep	0.929	0.887	1.088
		2	S EU	Oct – Feb	0.977	0.934	1.146
				Mar – May	0.977	0.934	1.146
				Jun – Sep	0.929	0.887	1.088
Pome fruit (early) 2x25 g a.s./ha BBCH 62	2	1	-	-	5.146	4.972	6.101
		2	N EU	Oct – Feb	0.876	0.833	1.022
				Mar – May	0.841	0.791	0.964
				Jun – Sep	0.841	0.791	0.964
		2	S EU	Oct – Feb	0.860	0.817	1.003
				Mar – May	0.860	0.817	1.003
				Jun – Sep	0.844	0.802	0.983
		2	S EU	Oct – Feb	0.860	0.817	1.003
				Mar – May	0.860	0.817	1.003
				Jun – Sep	0.844	0.802	0.983
Pome fruit (early) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	5.146	4.972	6.101
		2	N EU	Oct – Feb	0.531	0.506	0.621
				Mar – May	0.507	0.464	0.567
				Jun – Sep	0.507	0.464	0.567
		2	S EU	Oct – Feb	0.516	0.492	0.603
				Mar – May	0.516	0.492	0.603
				Jun – Sep	0.507	0.476	0.585
		2	S EU	Oct – Feb	0.516	0.492	0.603
				Mar – May	0.516	0.492	0.603
				Jun – Sep	0.507	0.476	0.585
Pome fruit (late) 2x25 g a.s./ha BBCH 62	2	1	-	-	4.678	4.570	5.610
		2	N EU	Oct – Feb	0.458	0.438	0.537
				Mar – May	0.410	0.390	0.478
				Jun – Sep	0.410	0.390	0.478
		2	S EU	Oct – Feb	0.442	0.422	0.517
				Mar – May	0.442	0.422	0.517
				Jun – Sep	0.426	0.406	0.498
		2	S EU	Oct – Feb	0.442	0.422	0.517
				Mar – May	0.442	0.422	0.517
				Jun – Sep	0.426	0.406	0.498
Pome fruit (late) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	4.678	4.570	5.610
		2	N EU	Oct – Feb	0.320	0.307	0.376
				Mar – May	0.276	0.262	0.322
				Jun – Sep	0.276	0.262	0.322
		2	S EU	Oct – Feb	0.305	0.292	0.358
				Mar – May	0.305	0.292	0.358
				Jun – Sep	0.290	0.277	0.340
		2	S EU	Oct – Feb	0.305	0.292	0.358
				Mar – May	0.305	0.292	0.358
				Jun – Sep	0.290	0.277	0.340

Application pattern	Number of applications	Step	Region	Season	IC-0		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Potato 1x36 g a.s./ha BBCH 12	1	1	-	-	3.044	3.013	3.699
		2	N EU	Oct – Feb	0.323	0.317	0.390
				Mar – May	0.166	0.162	0.199
				Jun – Sep	0.166	0.162	0.199
		2	S EU	Oct – Feb	0.271	0.266	0.326
				Mar – May	0.271	0.266	0.326
				Jun – Sep	0.218	0.214	0.263
Spring cereals 2x35 g a.s./ha BBCH 40	2	1	-	-	5.919	5.858	7.193
		2	N EU	Oct – Feb	0.199	0.193	0.237
				Mar – May	0.144	0.138	0.169
				Jun – Sep	0.144	0.138	0.169
		2	S EU	Oct – Feb	0.181	0.175	0.214
				Mar – May	0.181	0.175	0.214
				Jun – Sep	0.162	0.156	0.192
Spring cereals 2x35 g a.s./ha BBCH 40 (single application)	1	1	-	-	5.919	5.858	7.193
		2	N EU	Oct – Feb	0.150	0.146	0.179
				Mar – May	0.096	0.093	0.114
				Jun – Sep	0.096	0.093	0.114
		2	S EU	Oct – Feb	0.132	0.128	0.157
				Mar – May	0.132	0.128	0.157
				Jun – Sep	0.114	0.110	0.136
Spring cereals 2x35 g a.s./ha BBCH 12	2	1	-	-	5.919	5.858	7.193
		2	N EU	Oct – Feb	0.404	0.396	0.486
				Mar – May	0.225	0.218	0.268
				Jun – Sep	0.225	0.218	0.268
		2	S EU	Oct – Feb	0.344	0.337	0.413
				Mar – May	0.344	0.337	0.413
				Jun – Sep	0.284	0.278	0.341
Spring cereals 2x35 g a.s./ha BBCH 12 (single application)	1	1	-	-	5.919	5.858	7.193
		2	N EU	Oct – Feb	0.358	0.353	0.433
				Mar – May	0.180	0.176	0.216
				Jun – Sep	0.180	0.176	0.216
		2	S EU	Oct – Feb	0.299	0.294	0.361
				Mar – May	0.299	0.294	0.361
				Jun – Sep	0.239	0.235	0.288
Winter cereals 2x36 g a.s./ha BBCH 40	2	1	-	-	6.088	6.025	7.399
		2	N EU	Oct – Feb	0.205	0.199	0.244
				Mar – May	0.148	0.142	0.174
				Jun – Sep	0.148	0.142	0.174
		2	S EU	Oct – Feb	0.186	0.180	0.221
				Mar – May	0.186	0.180	0.221
				Jun – Sep	0.167	0.161	0.197

Application pattern	Number of applications	Step	Region	Season	IC-0		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Winter cereals 2x36 g a.s./ha BBCH 40 (single application)	1	1	-	-	6.088	6.025	7.399
		2	N EU	Oct – Feb	0.154	0.150	0.184
				Mar – May	0.099	0.095	0.117
				Jun – Sep	0.099	0.095	0.117
		2	S EU	Oct – Feb	0.136	0.132	0.162
				Mar – May	0.136	0.132	0.162
				Jun – Sep	0.117	0.114	0.139
Winter cereals 1x30 g a.s./ha BBCH 12	1	1	-	-	2.537	2.511	3.083
		2	N EU	Oct – Feb	0.307	0.303	0.372
				Mar – May	0.154	0.150	0.185
				Jun – Sep	0.154	0.150	0.185
		2	S EU	Oct – Feb	0.256	0.252	0.309
				Mar – May	0.256	0.252	0.309
				Jun – Sep	0.205	0.201	0.247
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31	2	1	-	-	10.147	10.042	12.332
		2	N EU	Oct – Feb	0.351	0.340	0.417
				Mar – May	0.250	0.240	0.294
				Jun – Sep	0.250	0.240	0.294
		2	S EU	Oct – Feb	0.317	0.307	0.376
				Mar – May	0.317	0.307	0.376
				Jun – Sep	0.283	0.273	0.335
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	10.147	10.042	12.332
		2	N EU	Oct – Feb	0.257	0.250	0.307
				Mar – May	0.165	0.159	0.195
				Jun – Sep	0.165	0.159	0.195
		2	S EU	Oct – Feb	0.226	0.220	0.270
				Mar – May	0.226	0.220	0.270
				Jun – Sep	0.195	0.189	0.232
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11	1	1	-	-	5.074	5.021	6.166
		2	N EU	Oct – Feb	0.410	0.402	0.494
				Mar – May	0.226	0.220	0.270
				Jun – Sep	0.226	0.220	0.270
		2	S EU	Oct – Feb	0.349	0.341	0.419
				Mar – May	0.349	0.341	0.419
				Jun – Sep	0.287	0.281	0.344
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31	2	1	-	-	10.147	10.042	12.332
		2	N EU	Oct – Feb	0.351	0.340	0.417
				Mar – May	0.250	0.240	0.294
				Jun – Sep	0.250	0.240	0.294
		2	S EU	Oct – Feb	0.317	0.307	0.376
				Mar – May	0.317	0.307	0.376
				Jun – Sep	0.283	0.273	0.335

Application pattern	Number of applications	Step	Region	Season	IC-0		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	10.147	10.042	12.332
		2	N EU	Oct – Feb	0.257	0.250	0.307
				Mar – May	0.165	0.159	0.195
				Jun – Sep	0.165	0.159	0.195
		2	S EU	Oct – Feb	0.226	0.220	0.270
				Mar – May	0.226	0.220	0.270
				Jun – Sep	0.195	0.189	0.232
Sugar beet 2x50 g a.s./ha BBCH 12	2	1	-	-	8.456	8.369	10.276
		2	N EU	Oct – Feb	0.526	0.515	0.633
				Mar – May	0.302	0.293	0.359
				Jun – Sep	0.302	0.293	0.359
		2	S EU	Oct – Feb	0.451	0.441	0.541
				Mar – May	0.451	0.441	0.541
				Jun – Sep	0.376	0.367	0.450
Sugar beet 2x50 g a.s./ha BBCH 12 (single application)	1	1	-	-	8.456	8.369	10.276
		2	N EU	Oct – Feb	0.427	0.420	0.515
				Mar – May	0.222	0.217	0.266
				Jun – Sep	0.222	0.217	0.266
		2	S EU	Oct – Feb	0.359	0.352	0.432
				Mar – May	0.359	0.352	0.432
				Jun – Sep	0.291	0.285	0.349
Bulb vegetables (flower bulbs and flower tubers) 1x46 g a.s./ha BBCH 12	1	1	-	-	3.890	3.850	4.727
		2	N EU	Oct – Feb	0.432	0.425	0.522
				Mar – May	0.220	0.215	0.264
				Jun – Sep	0.220	0.215	0.264
		2	S EU	Oct – Feb	0.361	0.355	0.436
				Mar – May	0.361	0.355	0.436
				Jun – Sep	0.291	0.285	0.350
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20	2	1	-	-	5.750	5.691	6.988
		2	N EU	Oct – Feb	0.342	0.335	0.411
				Mar – May	0.199	0.193	0.236
				Jun – Sep	0.199	0.193	0.236
		2	S EU	Oct – Feb	0.294	0.287	0.353
				Mar – May	0.294	0.287	0.353
				Jun – Sep	0.246	0.240	0.295
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20 (single application)	1	1	-	-	5.750	5.691	6.988
		2	N EU	Oct – Feb	0.276	0.271	0.333
				Mar – May	0.146	0.142	0.174
				Jun – Sep	0.146	0.142	0.174
		2	S EU	Oct – Feb	0.232	0.228	0.280
				Mar – May	0.232	0.228	0.280
				Jun – Sep	0.189	0.185	0.227

Application pattern	Number of applications	Step	Region	Season	IC-0		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 12	2	1	-	-	5.750	5.691	6.988
		2	N EU	Oct – Feb	0.389	0.382	0.469
				Mar – May	0.218	0.212	0.260
				Jun – Sep	0.218	0.212	0.260
		2	S EU	Oct – Feb	0.332	0.325	0.399
				Mar – May	0.332	0.325	0.399
Jun – Sep	0.275			0.268	0.329		
Bulb vegetables (flower bulbs and flower tubers) 1 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	5.750	5.691	6.988
		2	N EU	Oct – Feb	0.319	0.314	0.386
				Mar – May	0.163	0.159	0.195
				Jun – Sep	0.163	0.159	0.195
		2	S EU	Oct – Feb	0.267	0.262	0.322
				Mar – May	0.267	0.262	0.322
Jun – Sep	0.215			0.211	0.259		
Leafy vegetables (floriculture, perennial nursery crops) 1x46 g a.s./ha BBCH 12	1	1	-	-	3.890	3.850	4.727
		2	N EU	Oct – Feb	0.373	0.367	0.450
				Mar – May	0.197	0.192	0.235
				Jun – Sep	0.197	0.192	0.235
		2	S EU	Oct – Feb	0.314	0.308	0.379
				Mar – May	0.314	0.308	0.379
Jun – Sep	0.256			0.250	0.307		
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12	2	1	-	-	5.750	5.691	6.988
		2	N EU	Oct – Feb	0.342	0.335	0.411
				Mar – May	0.199	0.193	0.236
				Jun – Sep	0.199	0.193	0.236
		2	S EU	Oct – Feb	0.294	0.287	0.353
				Mar – May	0.294	0.287	0.353
Jun – Sep	0.246			0.240	0.295		
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	5.750	5.691	6.988
		2	N EU	Oct – Feb	0.276	0.271	0.333
				Mar – May	0.146	0.142	0.174
				Jun – Sep	0.146	0.142	0.174
		2	S EU	Oct – Feb	0.232	0.228	0.280
				Mar – May	0.232	0.228	0.280
Jun – Sep	0.189			0.185	0.227		
Pome fruit (early) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	4.735	4.574	5.613
		2	N EU	Oct – Feb	1.153	1.106	1.358
				Mar – May	0.965	0.920	1.129
				Jun – Sep	0.965	0.920	1.129
		2	S EU	Oct – Feb	1.090	1.044	1.281
				Mar – May	1.090	1.044	1.281
Jun – Sep	1.027			0.982	1.205		

Application pattern	Number of applications	Step	Region	Season	IC-0		
					Maximum PEC _{Sw} [µg/L]	21 d TWA PEC _{Sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Pome fruit (late) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	4.304	4.205	5.162
		2	N EU	Oct – Feb	0.765	0.739	0.907
				Mar – May	0.577	0.553	0.678
				Jun – Sep	0.577	0.553	0.678
		2	S EU	Oct – Feb	0.703	0.677	0.831
				Mar – May	0.703	0.677	0.831
				Jun – Sep	0.640	0.615	0.755
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	6.999	6.761	8.298
		2	N EU	Oct – Feb	1.337	1.278	1.568
				Mar – May	1.184	1.127	1.382
				Jun – Sep	1.184	1.127	1.382
		2	S EU	Oct – Feb	1.286	1.228	1.506
				Mar – May	1.286	1.228	1.506
				Jun – Sep	1.235	1.177	1.444
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	6.999	6.761	8.298
		2	N EU	Oct – Feb	0.852	0.818	1.004
				Mar – May	0.713	0.680	0.834
				Jun – Sep	0.713	0.680	0.834
		2	S EU	Oct – Feb	0.806	0.772	0.947
				Mar – May	0.806	0.772	0.947
				Jun – Sep	0.759	0.726	0.891
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	6.363	6.216	7.630
		2	N EU	Oct – Feb	0.769	0.740	0.908
				Mar – May	0.616	0.588	0.722
				Jun – Sep	0.616	0.588	0.722
		2	S EU	Oct – Feb	0.718	0.689	0.846
				Mar – May	0.718	0.689	0.846
				Jun – Sep	0.667	0.639	0.784
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	6.363	6.216	7.630
		2	N EU	Oct – Feb	0.566	0.547	0.671
				Mar – May	0.427	0.409	0.501
				Jun – Sep	0.427	0.409	0.501
		2	S EU	Oct – Feb	0.519	0.501	0.614
				Mar – May	0.519	0.501	0.614
				Jun – Sep	0.473	0.455	0.558

N EU / S EU = Northern/ Southern Europe.

^a two-time as required by ecotox.

Table 8.9-10: FOCUS Step 1-2 PEC_{SW} and PEC_{SED} for IM-1-5 following single / multiple application(s) of acetamiprid on various crops

Application pattern	Number of applications	Step	Region	Season	IM-1-5		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Maize 1x60 g a.s./ha BBCH 51	1	1	-	-	2.474	2.456	8.039
		2	N EU	Oct – Feb	0.308	0.305	0.999
				Mar – May	0.123	0.122	0.400
				Jun – Sep	0.123	0.122	0.400
		2	S EU	Oct – Feb	0.246	0.244	0.799
				Mar – May	0.246	0.244	0.799
				Jun – Sep	0.185	0.183	0.600
Pome fruit (late) 1x80 g a.s./ha BBCH 71	1	1	-	-	3.298	3.274	10.719
		2	N EU	Oct – Feb	0.574	0.570	1.865
				Mar – May	0.230	0.228	0.746
				Jun – Sep	0.230	0.228	0.746
		2	S EU	Oct – Feb	0.459	0.456	1.492
				Mar – May	0.459	0.456	1.492
				Jun – Sep	0.344	0.342	1.119
Pome fruit (early & late) 2x25 g a.s./ha BBCH 62	2	1	-	-	2.061	2.046	6.699
		2	N EU	Oct – Feb	0.357	0.354	1.159
				Mar – May	0.143	0.142	0.464
				Jun – Sep	0.143	0.142	0.464
		2	S EU	Oct – Feb	0.285	0.283	0.928
				Mar – May	0.285	0.283	0.928
				Jun – Sep	0.214	0.213	0.696
Pome fruit (early & late) 2x25 g a.s./ha BBCH 62 (single application)	1	1	-	-	2.061	2.046	6.699
		2	N EU	Oct – Feb	0.179	0.178	0.583
				Mar – May	0.072	0.071	0.233
				Jun – Sep	0.072	0.071	0.233
		2	S EU	Oct – Feb	0.144	0.142	0.466
				Mar – May	0.144	0.142	0.466
				Jun – Sep	0.108	0.107	0.350
Potato 1x36 g a.s./ha BBCH 12	1	1	-	-	1.484	1.473	4.824
		2	N EU	Oct – Feb	0.627	0.623	2.039
				Mar – May	0.251	0.249	0.815
				Jun – Sep	0.251	0.249	0.815
		2	S EU	Oct – Feb	0.502	0.498	1.631
				Mar – May	0.502	0.498	1.631
				Jun – Sep	0.376	0.374	1.223
Spring cereals 2x35 g a.s./ha BBCH 40	2	1	-	-	2.886	2.865	9.379
		2	N EU	Oct – Feb	0.428	0.424	1.389
				Mar – May	0.171	0.170	0.556
				Jun – Sep	0.171	0.170	0.556
		2	S EU	Oct – Feb	0.342	0.340	1.111
				Mar – May	0.342	0.340	1.111
				Jun – Sep	0.257	0.255	0.834

Application pattern	Number of applications	Step	Region	Season	IM-1-5		
					Maximum PEC _{Sw} [µg/L]	21 d TWA PEC _{Sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Spring cereals 2x35 g a.s./ha BBCH 40 (single application)	1	1	-	-	2.886	2.865	9.379
		2	N EU	Oct – Feb	0.215	0.214	0.700
				Mar – May	0.086	0.086	0.280
				Jun – Sep	0.086	0.086	0.280
		2	S EU	Oct – Feb	0.172	0.171	0.560
				Mar – May	0.172	0.171	0.560
				Jun – Sep	0.129	0.128	0.420
Spring cereals 2x35 g a.s./ha BBCH 12	2	1	-	-	2.886	2.865	9.379
		2	N EU	Oct – Feb	1.405	1.395	4.567
				Mar – May	0.562	0.558	1.827
				Jun – Sep	0.562	0.558	1.827
		2	S EU	Oct – Feb	1.124	1.116	3.654
				Mar – May	1.124	1.116	3.654
				Jun – Sep	0.843	0.837	2.740
Spring cereals 2x35 g a.s./ha BBCH 12 (single application)	1	1	-	-	2.886	2.865	9.379
		2	N EU	Oct – Feb	0.717	0.712	2.332
				Mar – May	0.287	0.285	0.933
				Jun – Sep	0.287	0.285	0.933
		2	S EU	Oct – Feb	0.574	0.570	1.865
				Mar – May	0.574	0.570	1.865
				Jun – Sep	0.431	0.427	1.399
Winter cereals 2x36 g a.s./ha BBCH 40	2	1	-	-	2.968	2.947	9.647
		2	N EU	Oct – Feb	0.440	0.437	1.429
				Mar – May	0.176	0.175	0.572
				Jun – Sep	0.176	0.175	0.572
		2	S EU	Oct – Feb	0.352	0.349	1.143
				Mar – May	0.352	0.349	1.143
				Jun – Sep	0.264	0.262	0.857
Winter cereals 2x36 g a.s./ha BBCH 40 (single application)	1	1	-	-	2.968	2.947	9.647
		2	N EU	Oct – Feb	0.221	0.220	0.720
				Mar – May	0.089	0.088	0.288
				Jun – Sep	0.089	0.088	0.288
		2	S EU	Oct – Feb	0.177	0.176	0.576
				Mar – May	0.177	0.176	0.576
				Jun – Sep	0.133	0.132	0.432
Winter cereals 1x30 g a.s./ha BBCH 12	1	1	-	-	1.237	1.228	4.020
		2	N EU	Oct – Feb	0.615	0.611	1.999
				Mar – May	0.246	0.244	0.799
				Jun – Sep	0.246	0.244	0.799
		2	S EU	Oct – Feb	0.492	0.488	1.599
				Mar – May	0.492	0.488	1.599
				Jun – Sep	0.369	0.366	1.199

Application pattern	Number of applications	Step	Region	Season	IM-1-5		
					Maximum PEC _{sw} [µg/L]	21 d TWA PEC _{sw} [µg/L] ^a	Maximum PEC _{sed} [µg/L]
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31	2	1	-	-	4.947	4.911	16.078
		2	N EU	Oct – Feb	0.734	0.729	2.387
				Mar – May	0.294	0.292	0.955
				Jun – Sep	0.294	0.292	0.955
		2	S EU	Oct – Feb	0.588	0.583	1.909
				Mar – May	0.588	0.583	1.909
				Jun – Sep	0.441	0.437	1.432
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	4.947	4.911	16.078
		2	N EU	Oct – Feb	0.369	0.366	1.199
				Mar – May	0.148	0.147	0.480
				Jun – Sep	0.148	0.147	0.480
		2	S EU	Oct – Feb	0.295	0.293	0.959
				Mar – May	0.295	0.293	0.959
				Jun – Sep	0.221	0.220	0.720
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11	1	1	-	-	2.474	2.456	8.039
		2	N EU	Oct – Feb	0.738	0.733	2.398
				Mar – May	0.295	0.293	0.959
				Jun – Sep	0.295	0.293	0.959
		2	S EU	Oct – Feb	0.590	0.586	1.919
				Mar – May	0.590	0.586	1.919
				Jun – Sep	0.443	0.440	1.439
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31	2	1	-	-	4.947	4.911	16.078
		2	N EU	Oct – Feb	0.734	0.729	2.387
				Mar – May	0.294	0.292	0.955
				Jun – Sep	0.294	0.292	0.955
		2	S EU	Oct – Feb	0.588	0.583	1.909
				Mar – May	0.588	0.583	1.909
				Jun – Sep	0.441	0.437	1.432
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31 (single application)	1	1	-	-	4.947	4.911	16.078
		2	N EU	Oct – Feb	0.369	0.366	1.199
				Mar – May	0.148	0.147	0.480
				Jun – Sep	0.148	0.147	0.480
		2	S EU	Oct – Feb	0.295	0.293	0.959
				Mar – May	0.295	0.293	0.959
				Jun – Sep	0.221	0.220	0.720
Sugar beet 2x50 g a.s./ha BBCH 12	2	1	-	-	4.123	4.093	13.399
		2	N EU	Oct – Feb	1.632	1.620	5.304
				Mar – May	0.653	0.648	2.121
				Jun – Sep	0.653	0.648	2.121
		2	S EU	Oct – Feb	1.306	1.296	4.243
				Mar – May	1.306	1.296	4.243
				Jun – Sep	0.979	0.972	3.182

Application pattern	Number of applications	Step	Region	Season	IM-1-5		
					Maximum PEC _{Sw} [µg/L]	21 d TWA PEC _{Sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
Sugar beet 2x50 g a.s./ha BBCH 12 (single application)	1	1	-	-	4.123	4.093	13.399
		2	N EU	Oct – Feb	0.820	0.814	2.665
				Mar – May	0.328	0.326	1.066
				Jun – Sep	0.328	0.326	1.066
		2	S EU	Oct – Feb	0.656	0.651	2.132
				Mar – May	0.656	0.651	2.132
				Jun – Sep	0.492	0.488	1.599
Bulb vegetables (flower bulbs and flower tubers) 1x46 g a.s./ha BBCH 12	1	1	-	-	1.896	1.883	6.163
		2	N EU	Oct – Feb	0.849	0.843	2.758
				Mar – May	0.339	0.337	1.103
				Jun – Sep	0.339	0.337	1.103
		2	S EU	Oct – Feb	0.679	0.674	2.206
				Mar – May	0.679	0.674	2.206
				Jun – Sep	0.509	0.506	1.655
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20	2	1	-	-	2.803	2.783	9.111
		2	N EU	Oct – Feb	1.040	1.033	3.381
				Mar – May	0.416	0.413	1.352
				Jun – Sep	0.416	0.413	1.352
		2	S EU	Oct – Feb	0.832	0.826	2.705
				Mar – May	0.832	0.826	2.705
				Jun – Sep	0.624	0.620	2.029
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20 (single application)	1	1	-	-	2.803	2.783	9.111
		2	N EU	Oct – Feb	0.523	0.519	1.699
				Mar – May	0.209	0.208	0.680
				Jun – Sep	0.209	0.208	0.680
		2	S EU	Oct – Feb	0.418	0.415	1.359
				Mar – May	0.418	0.415	1.359
				Jun – Sep	0.314	0.311	1.019
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 12	2	1	-	-	2.803	2.783	9.111
		2	N EU	Oct – Feb	1.248	1.239	4.057
				Mar – May	0.499	0.496	1.623
				Jun – Sep	0.499	0.496	1.623
		2	S EU	Oct – Feb	0.999	0.992	3.246
				Mar – May	0.999	0.992	3.246
				Jun – Sep	0.749	0.744	2.434
Bulb vegetables (flower bulbs and flower tubers) 1x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	2.803	2.783	9.111
		2	N EU	Oct – Feb	0.627	0.623	2.039
				Mar – May	0.251	0.249	0.815
				Jun – Sep	0.251	0.249	0.815
		2	S EU	Oct – Feb	0.502	0.498	1.631
				Mar – May	0.502	0.498	1.631
				Jun – Sep	0.376	0.374	1.223
Leafy vegetables (floriculture, perennial nursery crops) 1x46 g a.s./ha BBCH 12	1	1	-	-	1.896	1.883	6.163
		2	N EU	Oct – Feb	0.707	0.702	2.298
				Mar – May	0.283	0.281	0.919
				Jun – Sep	0.283	0.281	0.919
		2	S EU	Oct – Feb	0.566	0.562	1.839
				Mar – May	0.566	0.562	1.839

Application pattern	Number of applications	Step	Region	Season	IM-1-5		
					Maximum PEC _{Sw} [µg/L]	21 d TWA PEC _{Sw} [µg/L] ^a	Maximum PEC _{SED} [µg/L]
				Jun – Sep	0.424	0.421	1.379
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12	2	1	-	-	2.803	2.783	9.111
		2	N EU	Oct – Feb	1.040	1.033	3.381
				Mar – May	0.416	0.413	1.352
				Jun – Sep	0.416	0.413	1.352
		2	S EU	Oct – Feb	0.832	0.826	2.705
				Mar – May	0.832	0.826	2.705
				Jun – Sep	0.624	0.620	2.029
Leafy vegetables (floriculture, perennial nursery crops) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	2.803	2.783	9.111
		2	N EU	Oct – Feb	0.523	0.519	1.699
				Mar – May	0.209	0.208	0.680
				Jun – Sep	0.209	0.208	0.680
		2	S EU	Oct – Feb	0.418	0.415	1.359
				Mar – May	0.418	0.415	1.359
				Jun – Sep	0.314	0.311	1.019
Pome fruit (early & late) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	1.896	1.883	6.163
		2	N EU	Oct – Feb	0.754	0.749	2.452
				Mar – May	0.302	0.300	0.981
				Jun – Sep	0.302	0.300	0.981
		2	S EU	Oct – Feb	0.604	0.599	1.961
				Mar – May	0.604	0.599	1.961
				Jun – Sep	0.453	0.449	1.471
Pome fruit (early & late) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	2.803	2.783	9.111
		2	N EU	Oct – Feb	1.110	1.102	3.606
				Mar – May	0.444	0.441	1.443
				Jun – Sep	0.444	0.441	1.443
		2	S EU	Oct – Feb	0.888	0.881	2.885
				Mar – May	0.888	0.881	2.885
				Jun – Sep	0.666	0.661	2.164
Pome fruit (early & late) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	2.803	2.783	9.111
		2	N EU	Oct – Feb	0.558	0.554	1.812
				Mar – May	0.223	0.221	0.725
				Jun – Sep	0.223	0.221	0.725
		2	S EU	Oct – Feb	0.446	0.443	1.450
				Mar – May	0.446	0.443	1.450
				Jun – Sep	0.335	0.332	1.087

N EU / S EU = Northern/ Southern Europe.

^a two-time as required by ecotox.

Table 8.9-11: FOCUS Step 1-2 PEC_{SW} and PEC_{SED} for IB-1-1 following single / multiple application(s) of acetamiprid on various crops

Application pattern	Number of applications	Step ^a	Region	Season	IB-1-1 ^a		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^b	Maximum PEC _{SED} [µg/L]
Maize 1x60 g a.s./ha BBCH 51	1	1	-	-	6.588	6.540	0.000
Pome fruit (late) 1x80 g a.s./ha BBCH 71	1	1	-	-	9.892	9.820	0.000
Pome fruit (early) 2x25 g a.s./ha BBCH 62	2	1	-	-	6.902	6.852	0.000
Pome fruit (late) 2x25 g a.s./ha BBCH 62	2	1	-	-	6.182	6.138	0.000
Potato 1x36 g a.s./ha BBCH 12	1	1	-	-	3.953	3.924	0.000
Spring cereals 2x35 g a.s./ha BBCH 40	2	1	-	-	7.686	7.630	0.000
Spring cereals 2x35 g a.s./ha 1 st appl.: BBCH 12 2 nd appl.: BBCH 40	2	1	-	-	7.686	7.630	0.000
Winter cereals 2x36 g a.s./ha BBCH 40	2	1	-	-	7.905	7.848	0.000
Winter cereals 1x30 g a.s./ha BBCH 12	1	1	-	-	3.294	3.270	0.000
Oilseed rape (winter) 2x60 g a.s./ha BBCH 31	2	1	-	-	13.175	13.080	0.000
Oilseed rape (winter) 1x60 g a.s./ha BBCH 11	1	1	-	-	6.588	6.540	0.000
Oilseed rape (spring) 2x60 g a.s./ha BBCH 31	2	1	-	-	13.175	13.080	0.000
Sugar beet 2x50 g a.s./ha BBCH 12	2	1	-	-	10.980	10.900	0.000
Bulb vegetables (flower bulbs and flower tubers) 1x46 g a.s./ha BBCH 12	1	1	-	-	5.051	5.014	0.000
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 20	2	1	-	-	7.466	7.412	0.000
Bulb vegetables (flower bulbs and flower tubers) 2x34 g a.s./ha BBCH 12	2	1	-	-	7.466	7.412	0.000
Leafy vegetables (floricul- ture, perennial nursery crops) 1x46 g a.s./ha BBCH 12	1	1	-	-	5.051	5.014	0.000

Application pattern	Number of applications	Step ^a	Region	Season	IB-1-1 ^a		
					Maximum PEC _{SW} [µg/L]	21 d TWA PEC _{SW} [µg/L] ^b	Maximum PEC _{SED} [µg/L]
Leafy vegetables (floricul- ture, perennial nursery crops) 2x34 g a.s./ha BBCH 12	2	1	-	-	7.466	7.412	0.000
Pome fruit (early) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	6.350	6.304	0.000
Pome fruit (late) (tree nursery) 1x46 g a.s./ha BBCH 12	1	1	-	-	5.688	5.647	0.000
Pome fruit (early) (tree nursery) 2x34 g a.s./ha BBCH 12	2	1	-	-	9.387	9.319	0.000
Pome fruit (late) (tree nursery) 2x34 g a.s./ha BBCH 12 (single application)	1	1	-	-	8.408	8.347	0.000

^a Calculations for IB-1-1 were performed only at STEP 1 as STEP 2 calculations are not required for the ecotox risk assessment.

^b two-time as required by ecotox.

zRMS comments:

Input parameters presented in Tables 8.9-3 and considered by the Applicant in surface water modelling for acetamiprid and its metabolites are in line with EU agreed endpoints reported in EFSA Journal 2016;14(11):4610.,

At Step 3 PUF value of 0 was assumed for acetamiprid and it is in line with current recommendations.

Step 4 simulations were performed according to recommendations of the FOCUS work group on landscape and mitigation factors and were validated by the zRMS for convenience of the concerned Member States that consider FOCUS simulations as Step 4 at the national level.

The surface water exposure was independently validated by the zRMS in additional modelling using the same parameters. Obtained results for acetamiprid and its metabolites were in good agreement with values calculated by the Applicant.

It is noted that in surface water modelling for application to:

- apples (uses No. 4, 6, 9, 11, 13, 15) calculations were performed for higher application rate (1 x 80 g a.s./ha) as it covers intended application rate of 60 g a.s./ha no additional calculations are necessary
- winter cereals (use No. 40) calculations were performed for higher application rate (1 x 30 g a.s./ha) as it covers intended application rate of 29 g a.s./ha no additional calculations are necessary.
- winter oilseed rape (uses No. 44, 52, 59, 61, 65) calculations were performed for higher application rate (1 x 60 g a.s./ha) as it covers intended application rate of 48 g a.s./ha no additional calculations are necessary.
- winter oilseed rape (uses No. 45 and 60) calculations were performed for higher application rate (1 x 60 g a.s./ha) as it covers intended application rate of 40 g a.s./ha no additional calculation are necessary.

Moreover it is noted that for single application to spring cereals (use No. 24, 28 and 31) with application rate of 35 g a.s./ha at BBCH stage of 20-29 no surface water modelling was performed. Instead, the Applicant presented the results of single application to spring cereals at BBCH stage of 12-29. The zRMS performed additional calculations for single application to spring cereals for BBCH stage of 20-29 and obtained the same PEC_{sw} and PEC_{sed} results as calculated by the Applicant for BBCH stage of 12-29. Therefore, results presented by the Applicant are sufficient and acceptable.

Since for application to flower bulbs and flower tubers (use No. 87) only single application is presented in the GAP table, results of double application to flower bulbs and flower tuber are struck through as not necessary for the risk assessment.

Overall, surface water exposure reported in Tables 8.9-4 to 8.9-11 may be used in the aquatic risk assessment.

Please note that additional surface water modelling may be required by the concerned Member States that do not accept simulations performed according to FOCUS recommendations.

8.9.2.2 PEC_{SW}/SED of ADM.00150.I.2.A / LEAXO

The PEC_{SW} of the formulation were calculated based on the FOCUS spray drift values of the SWASH drift calculator for a water body of 30 cm depth and 1 m width (FOCUS ‘ditch’), and the density of the formulation of 1.1361 g/mL. Since formulations quickly disperse after application, only PEC_{SW} following a single application is considered.

Table 8.9-12: PEC_{SW} for ADM.00150.I.2.A / LEAXO

Crop	Application rate	Non-sprayed buffer distance	Nozzle reduction	PEC _{SW} (µg/L)
Corn (field crops)	0.3 L/ha = 0.341 kg/ha	1	-	2.190
			50%	1.095
			75%	0.547
			90%	0.219
		3	-	0.927
			50%	0.464
			75%	0.232
			90%	0.093
		5	-	0.593
			50%	0.297
			75%	0.148
			90%	0.059
		10	-	0.315
			50%	0.157
			75%	0.079
			90%	0.031
		15	-	0.219
			50%	0.110
			75%	0.055
			90%	0.022
		20	-	0.164
			50%	0.082
			75%	0.041
			90%	0.016
Apple (pome fruit, early)	0.125 L/ha = 0.142 kg/ha	3	-	12.364
			50%	6.182
			75%	3.091
			90%	1.236
		5	-	8.778
			50%	4.389
			75%	2.194
			90%	0.878
		10	-	5.390
			50%	2.695
			75%	1.348
			90%	0.539
		15	-	2.425
			50%	1.213
			75%	0.606
			90%	0.243
		20	-	1.233
			50%	0.616

Crop	Application rate	Non-sprayed buffer distance	Nozzle reduction	PEC _{sw} (µg/L)
Apple (pome fruit, late)	0.4 L/ha = 0.454 kg/ha	3	75%	0.308
			90%	0.123
		3	-	19.907
			50%	9.953
			75%	4.977
			90%	1.991
		5	-	11.380
			50%	5.690
			75%	2.845
			90%	1.138
		10	-	5.085
			50%	2.543
			75%	1.271
			90%	0.509
		15	-	2.568
			50%	1.284
			75%	0.642
			90%	0.257
		20	-	1.569
			50%	0.785
			75%	0.392
			90%	0.157
Potato (field crops)	0.18 L/ha = 0.204 kg/ha	1	-	1.314
			50%	0.657
			75%	0.328
			90%	0.131
		3	-	0.556
			50%	0.278
			75%	0.139
			90%	0.056
		5	-	0.356
			50%	0.178
			75%	0.089
			90%	0.036
		10	-	0.189
			50%	0.094
			75%	0.047
			90%	0.019
		15	-	0.132
			50%	0.066
			75%	0.033
			90%	0.013
		20	-	0.098
			50%	0.049
			75%	0.025
			90%	0.010
Spring cereals (field crops)	0.175 L/ha = 0.199 kg/ha	1	-	1.277
			50%	0.639
			75%	0.319
			90%	0.128

Crop	Application rate	Non-sprayed buffer distance	Nozzle reduction	PEC _{sw} (µg/L)
		3	-	0.541
			50%	0.270
			75%	0.135
			90%	0.054
		5	-	0.346
			50%	0.173
			75%	0.087
			90%	0.035
		10	-	0.184
			50%	0.092
			75%	0.046
			90%	0.018
		15	-	0.128
			50%	0.064
			75%	0.032
			90%	0.013
		20	-	0.095
			50%	0.048
			75%	0.024
			90%	0.010
Winter cereals (field crops)	0.15 L/ha = 0.170 kg/ha	1	-	1.095
			50%	0.547
			75%	0.274
			90%	0.109
		3	-	0.464
			50%	0.232
			75%	0.116
			90%	0.046
		5	-	0.297
			50%	0.148
			75%	0.074
			90%	0.030
		10	-	0.157
			50%	0.079
			75%	0.039
			90%	0.016
		15	-	0.110
			50%	0.055
			75%	0.027
			90%	0.011
		20	-	0.082
			50%	0.041
			75%	0.020
			90%	0.008
Winter cereals (field crops)	0.18 L/ha = 0.204 kg/ha	1	-	1.314
			50%	0.657
			75%	0.328
			90%	0.131
		3	-	0.556
			50%	0.278

Crop	Application rate	Non-sprayed buffer distance	Nozzle reduction	PEC _{sw} (µg/L)
			75%	0.139
			90%	0.056
		5	-	0.356
			50%	0.178
			75%	0.089
			90%	0.036
		10	-	0.189
			50%	0.094
			75%	0.047
			90%	0.019
		15	-	0.132
			50%	0.066
			75%	0.033
			90%	0.013
		20	-	0.098
			50%	0.049
			75%	0.025
			90%	0.010
Winter and spring oilseed rape (field crops)	0.3 L/ha = 0.341 kg/ha	1	-	2.190
			50%	1.095
			75%	0.547
			90%	0.219
		3	-	0.927
			50%	0.464
			75%	0.232
			90%	0.093
		5	-	0.593
			50%	0.297
			75%	0.148
			90%	0.059
		10	-	0.315
			50%	0.157
			75%	0.079
			90%	0.031
		15	-	0.219
			50%	0.110
			75%	0.055
			90%	0.022
		20	-	0.164
			50%	0.082
			75%	0.041
			90%	0.016
Sugar beet (field crops)	0.25 L/ha = 0.284 kg/ha	1	-	1.825
			50%	0.912
			75%	0.456
			90%	0.182
		3	-	0.773
			50%	0.386
			75%	0.193
			90%	0.077

Crop	Application rate	Non-sprayed buffer distance	Nozzle reduction	PEC _{sw} (µg/L)
		5	-	0.495
			50%	0.247
			75%	0.124
			90%	0.049
		10	-	0.262
			50%	0.131
			75%	0.066
			90%	0.026
		15	-	0.183
			50%	0.091
			75%	0.046
			90%	0.018
		20	-	0.136
			50%	0.068
			75%	0.034
			90%	0.014
Flower bulbs, flower tubers, floriculture and perennial nursery crops (field crops)	0.17 L/ha = 0.193 kg/ha	1	-	1.241
			50%	0.620
			75%	0.310
			90%	0.124
		3	-	0.525
			50%	0.263
			75%	0.131
			90%	0.053
		5	-	0.336
			50%	0.168
			75%	0.084
			90%	0.034
		10	-	0.178
			50%	0.089
			75%	0.045
			90%	0.018
		15	-	0.124
			50%	0.062
			75%	0.031
			90%	0.012
		20	-	0.093
			50%	0.046
			75%	0.023
			90%	0.009
Flower bulbs, flower tubers, floriculture and perennial nursery crops (field crops)	0.23 L/ha = 0.261 kg/ha	1	-	1.679
			50%	0.839
			75%	0.420
			90%	0.168
		3	-	0.711
			50%	0.355
			75%	0.178
			90%	0.071
		5	-	0.455
			50%	0.228

Crop	Application rate	Non-sprayed buffer distance	Nozzle reduction	PEC _{sw} (µg/L)
			75%	0.114
			90%	0.046
		10	-	0.241
			50%	0.121
			75%	0.060
			90%	0.024
		15	-	0.168
			50%	0.084
			75%	0.042
			90%	0.017
		20	-	0.125
			50%	0.063
			75%	0.031
			90%	0.013
Tree nursery crops (pome fruit, early)	0.17 L/ha = 0.193 kg/ha	3	-	16.829
			50%	8.414
			75%	4.207
			90%	1.683
		5	-	11.947
			50%	5.974
			75%	2.987
			90%	1.195
		10	-	7.337
			50%	3.668
			75%	1.834
			90%	0.734
		15	-	3.301
			50%	1.650
			75%	0.825
			90%	0.330
		20	-	1.678
			50%	0.839
			75%	0.419
			90%	0.168
Tree nursery crops (pome fruit, early)	0.23 L/ha = 0.261 kg/ha	3	-	22.768
			50%	11.384
			75%	5.692
			90%	2.277
		5	-	16.164
			50%	8.082
			75%	4.041
			90%	1.616
		10	-	9.926
			50%	4.963
			75%	2.482
			90%	0.993
		15	-	4.466
			50%	2.233
			75%	1.116
			90%	0.447

Crop	Application rate	Non-sprayed buffer distance	Nozzle reduction	PEC _{sw} (µg/L)
		20	-	2.270
			50%	1.135
			75%	0.567
			90%	0.227

a) The application rate of the formulation was calculated based on a density of 1136.1 g/mL and the maximum single application rate for each crop.

zRMS comments:

The surface water exposure to the formulated product was validated by the zRMS using the Spray Drift Calculator. Obtained results were in agreement with Applicant's values presented in Table 8.9-12.

Please note, however, that the aquatic risk assessment has been based on exposure calculated for the active compound and for this reason PEC_{sw} values for ADM.00150.I.2.A are deemed not necessary.

8.10 Fate and behaviour in air (KCP 9.3, KCP 9.3.1)

Table 8.10-1 Summary of atmospheric degradation and behaviour

Compound	Acetamiprid
Direct photolysis in air	No data required
Quantum yield of direct phototransformation	-
Photochemical oxidative degradation in air	Overall rate constant: 76.435 cm ³ x molecule ⁻¹ x sec ⁻¹ DT ₅₀ : 0.140 days (derived by the Atkinson model (version 1.70) assuming a OH (12 h) concentration of 1.5 x 10 ⁶ OH/cm ³)
Volatilisation	From plant surface: < 1% after 24 h From soil surface: negligible after 24 h Vapour pressure (Pa): 1.73 x 10 ⁻⁷ (50°C); The vapour pressure is expected to be less than 1 x 10 ⁻⁶ Pa at 25°C. Henry's Law Constant (Pa m ³ /mol): < 5.3 x 10 ⁻⁸ (25°C)
Metabolites	No data

The vapour pressure at 20°C of the active substance acetamiprid is < 10⁻⁵ Pa. Hence, the active substance acetamiprid is regarded as non-volatile. Its volatilisation from plant and soil surfaces is regarded to be very low. Additionally, it is rapidly degraded in air (DT₅₀ = 0.14 days). Therefore, exposure of adjacent surface waters and terrestrial ecosystems by the active substance acetamiprid due to volatilization with subsequent deposition does not have to be considered.

zRMS comments:

Provided above information is in line with EU agreed data reported in EFSA Journal 2016;14(11):4610.

Taking into account the low vapour pressure (<10⁻⁵ Pa) and DT₅₀ in air (<2 days), acetamiprid is not expected to be subject to volatilisation and the long- or short-range transport. Taking this into account, contamination of the atmosphere with acetamiprid from the intended uses of ADM.00150.I.2.A is considered to be negligible.

Appendix 1 Lists of data considered in support of the evaluation

List of data submitted by the applicant and relied on

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
KCP 9.2.4/01*	Xiao, H.	2023	Acetamiprid—Predicted Environmental Concentrations in Groundwater Following Application to Various Crops in Central Europe RIFCON GmbH, Hirschberg, Germany Unpublished report R2180058-01 ADAMA Report Number 000111969 Non-GLP	N	ADAMA
KCP 9.2.4/01*	Wiedemann, G.	2024	Acetamiprid - Predicted Environmental Concentrations in Groundwater Following Application to Various Crops in Central Europe RIFCON GmbH, Hirschberg, Germany Unpublished report R2390013-08 ADAMA Report Number 000118540 Non GLP	N	ADAMA
KCP 9.2.5/01	Xiao, H.	2023	Acetamiprid - Predicted Environmental Concentrations in Surface Water and Sediment at Steps 1-2 Following Application to Various Crops in Central Europe RIFCON GmbH, Hirschberg, Germany Unpublished report R2180058-02 ADAMA Report Number 000111967 Non GLP	N	ADAMA
KCP 9.2.5/02*	Xiao, H.	2023	Acetamiprid—Predicted Environmental Concentrations in Surface Water and Sediment at Steps 3-4 Following Application to Various Crops in Central Europe RIFCON GmbH, Hirschberg, Germany Unpublished report R2180058-03 ADAMA Report Number 000111968 Non-GLP	N	ADAMA
KCP 9.2.5/02*	Wiedemann, G.	2024	Acetamiprid - Predicted Environmental Concentrations in Surface Water and Sediment at Steps 3-4 Following Application to Various Crops in Central Europe RIFCON GmbH, Hirschberg, Germany Unpublished report R2390013-09 ADAMA Report Number 000118539 Non GLP	N	ADAMA

* A new report was issued which contains the original calculations (if still applicable) and the new calculations prepared as requested by zRMS.

List of data submitted or referred to by the applicant and relied on, but already evaluated at EU peer review

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner #
CA 7.1.1.1/01, 7.1.2.1.1/02, 7.1.2.1.2/03	Morgenroth, U.	1997	¹⁴ C-NI-25: Metabolism in One Soil Incubated under Aerobic Conditions Report/file: RCC Project 373994 Amended final report Nippon Soda Doc No. RD-09624N GLP Not published	N	Nippon Soda
CA 7.1.1.1/02	Feung, C.S.	1998	Acetamiprid (NI-25): Metabolism in Collombey Soil Report/file: RPAC Report N° EC-97-406 Nippon Soda Doc No. RD-09961 Non-GLP Not published	N	Nippon Soda
CA 7.1.1.1/03, 7.1.2.1.1/03, 7.1.2.1.2/04	Burr, C.M.	1997	[¹⁴ C]-NI-25: Rate of Aerobic Degradation in Three Soil Types at 20°C and One Soil Type at 10°C Report/file: RPAL Study Report 11256 Nippon Soda Doc No. RD-09962 GLP Not published	N	Nippon Soda
CA 7.1.1.1/04, 7.1.2.1.1/04, 7.1.2.1.2/05	Simmonds, M.B.	2002	[¹⁴ C]-Acetamiprid: Rate of Degradation in Three Calcareous Soils at 20°C Aventis CropScience SA., report C019428 Nippon Soda Doc No. RD-00168 GLP Not published	N	Nippon Soda
CA 7.1.1.2/01, 7.1.2.1.3/02	Burr, C.M., Doble, M.L	1997	[¹⁴ C]-NI-25: Anaerobic Soil Degradation Report/file: RPAL Study Report 11444 Nippon Soda Doc No. RD-09860 GLP Not published	N	Nippon Soda
CA 7.1.1.3/01	Mislankar, S.G.	1998	Acetamiprid (NI-25) Soil Photolysis Report/file: RPAC Study N° EC-97-359 Nippon Soda Doc No. RD-09833 GLP Not published	N	Nippon Soda
CA 7.1.2.1.1/01, 7.1.2.1.2/02	Jarvis, T. & Hilton, M	2014	Re-calculation of laboratory aerobic degradation rates of acetamiprid and its metabolites, according to FOCUS (2006, 2011) guidance Exponent International Ltd., UK Nippon-Soda Report No.: RD-02913	N	Nippon Soda

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner #
			Non-GLP Not published		
CA 7.1.2.1.2/01	Jewkes, Y.	2014	Rate of Degradation of [¹⁴ C]-IM-1-5 in Three Soils at 20°C Nippon-Soda Report No.: RD-02811 GLP Not published	N	Nippon Soda
CA 7.1.2.1.2/06	Lowden, P., Oddy, A.M., Jones, M.K.	1997	NI-25: Rate of Degradation of the Acid Metabolite, [¹⁴ C]-IC-0 in Three Soils Report/file: RPAL Study Report 11257 Nippon Soda Doc No. RD-9963 GLP Not published	N	Nippon Soda
CA 7.1.2.1.3/01	Jarvis, T. & Mon- tesano, V	2014a	Re-calculation of laboratory anaerobic degradation rate of acetamiprid according to FOCUS (2006, 2011) guidance Exponent International Ltd., UK Nippon-Soda Report No.: RD-02910 Non-GLP Not published	N	Nippon Soda
CA 7.1.2.2.1	Wicks, R.J.	1999	Acetamiprid : Field Soil Dissipation Study in Europe RPA Study 11258, Doc 202052 Nippon Soda Doc No. RD-9997 GLP Not published	N	Nippon Soda
CA 7.1.2.2.1/01	Jarvis, T. & Hilton, M	2014	Re-calculation of acetamiprid field dissipation rates from Wicks (1999) according to FOCUS (2006, 2011) guidance Exponent International Ltd., UK Nippon-Soda Report No.: RD-02912 Non-GLP Not published	N	Nippon Soda
CA 7.1.2.2.1/02	Kellner, T.	2012a	Soil Dissipation study with Acetamiprid and its Soil Metabolite IM-1-5, in or on Soil in Spain in 2010-2011 Eurofins Agrosience Services Nippon Soda Co. Ltd Report No.: RD-02404 GLP Not published	N	Nippon Soda
CA 7.1.2.2.1/03	Kellner, T.	2012b	Soil Dissipation study with Acetamiprid and its Soil Metabolite IM-1-5, in or on Soil in Southern France in 2010-2011 Eurofins Agrosience Services Nippon Soda Co. Ltd Report No.: RD-02405 GLP	N	Nippon Soda

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner #
			Not published		
CA 7.1.2.2.1/04	Kellner, T.	2012c	Soil Dissipation study with Acetamiprid and its Soil Metabolite IM-1-5, in or on Soil in Northern France in 2010-2011 Eurofins Agrosience Services Nippon Soda Co. Ltd Report No.: RD-02406 GLP Not published	N	Nippon Soda
CA 7.1.2.2.1/05	Finger, N.	2013	Soil Dissipation study with Acetamiprid and its Soil Metabolite IM-1-5, in or on Soil in Hungary in 2011-2012 Eurofins Agrosience Services Nippon Soda Co. Ltd Report No.: RD-02599 GLP Not published	N	Nippon Soda
CA 7.1.2.2.1/06	Jarvis, T. & Montesano, V.	2014b	Calculation of Acetamiprid soil DT ₅₀ values from new field dissipation studies in 2010 and 2011 using FOCUS kinetics Non-GLP Not published	N	Nippon Soda
CA 7.1.3.1.2/01	Sugiyama, H.	2010	Adsorption / desorption study of IM-1-5 on soils Nippon Soda Co. Ltd. (NSM), Japan Report No. NSM10-013 Document No. RD-02101 GLP Not published	N	Nippon Soda
CA 7.1.3.1.2/02	Mamouni, A.	1997	Adsorption/Desorption of IM-1-4 on Five Soils Report/file:RCC Project 383826 Nippon Soda Doc No. RD-09567N GLP Not published	N	Nippon Soda
CA 7.1.3.1.2/03	Liu, A.C.	1997	6-Chloronicotinic Acid (Acetamiprid Metabolite) Soil Adsorption/Desorption Study Report/file: RPAC Study N° EC-97-370 Nippon Soda Doc No. RD-9973 GLP Not published	N	Nippon Soda
CA 7.1.3.1.2/04	Mackenzie E. & Price O.	2003	[¹⁴ C]-IM-1-2 : Adsorption to and Desorption from Four Soils and One Sediment BayerCropScience SA, report C030079 Nippon Soda Doc No. RD-03056	N	Nippon Soda

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner #
			GLP Not published		
CA 7.2.1.2/01	Hausmann, S., & Class, T.	1998	Aqueous Photodegradation of [¹⁴ C]-Acetamiprid at pH 7 and Determination of Quantum Yield Report/file: PTRL Europe Study N° P 196 G, RPA Study N°96-82 Nippon Soda Doc No. RD-00403 GLP Not published	N	Nippon Soda
CA 7.2.2.2/01	Möndel, M.	2014	[Pyridine-2,6- ¹⁴ C]-Acetamiprid: Aerobic Degradation in Natural Water RLP Agrosience, Germany Nippon-Soda Report No.: RD- 02800 GLP Not published	N	Nippon Soda
CA 7.2.2.3/01	Jarvis, T. & Montesano, V.	2014c	Recalculation of acetamiprid sediment water kinetics according to FOCUS (2006, 2011) guidance Exponent International Ltd., UK Nippon-Soda Report No.: RD-02911 Non-GLP Not published	N	Nippon Soda
CA 7.2.2.3/02	McMillan-Staff, S.L., & Austin, D.J.	1997	[¹⁴ C]-NI-25: Degradation in Two Water/Sediment Systems. Report/file: RPAL Study 11263 Nippon Soda Doc No. RD-9968 GLP Not published	N	Nippon Soda

List of data submitted by the applicant and not relied on

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
There were no data submitted by the Applicant and not relied on.					

List of data relied on not submitted by the applicant but necessary for evaluation

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner
There were no studies relied on and not submitted by the Applicant.					

Appendix 2 Detailed evaluation of the new Annex II studies

No additional information is provided.

Appendix 3 Additional information provided by the applicant (e.g. detailed modelling data)

No additional information is provided.