

FINAL REGISTRATION REPORT

Part B

Section 8

Environmental Fate

Detailed summary of the risk assessment

Product code: Acetamipryd 200 SL

Product name(s): -

Chemical active substance:

acetamiprid, 200 g/L

Central Zone

Zonal Rapporteur Member State: Poland

CORE ASSESSMENT

(authorization)

Applicant: Pestila Sp. z o.o. / ProAgri International Sp. z o.o.

Submission date: March 2024

MS Finalisation date: 02.2025; 08.2025; 02.2026

Version history

When	What
March 2024	Submission by Applicant
February 2025	Assessment by zRMS
August 2025	The final Registration Report after the reporting period.
January 2026	Update on Ministry request
February 2026	Assessment Update by zRMS

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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 situation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Pests or Group of pests controlled (additionally: devel- opmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/ synergist per ha	PECgw Conclusion
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. inter- val between applications (days)	kg or L product/ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min/max			
1	Poland	Winter oilseed rape	F	Rape stem weevil (<i>Ceutorhynchus napi</i>) CEUTNA Cabbage stem weevil (<i>Ceutorhynchus pallidactylus</i>) CEUTQU	Foliar spray	BBCH 30-50 Spring, post emergence	1 a) 1 b) 1	N/A	0.25 L/ha a) 0.25 L/ha b) 0.25 L/ha	50 g/ha a) 50 g/ha b) 50 g/ha	200-400 L/ha	N/A	not relevant	
2	Poland	Winter oilseed rape	F	Pollen beetle (<i>Brasicogethes aeneus</i>) MELIAE	Foliar spray	BBCH 50-65 Spring, post emergence	1 a) 1 b) 1	N/A	0.1 – 0.12 L/ha a) 0.12 L/ha b) 0.12 L/ha	20-24 g /ha a) 24 g /ha b) 24 g /ha	200-400 L/ha	N/A	not relevant	
3	Poland	Winter oilseed rape	F	Cabbage seed weevil (<i>Ceutorhynchus obstrictus</i>) CEUTAS Brassica pod midge (<i>Dasineura brassicae</i>) DASYBR	Foliar spray	BBCH 60-69 Spring, post emergence	1 a) 1 b) 1	N/A	0.1 – 0.12 L/ha a) 0.12 L/ha b) 0.12 L/ha	20-24 g /ha a) 24 g /ha b) 24 g /ha	200-400 L/ha	N/A	not relevant	
4	Poland	Potato	F	Colorado beetle (<i>Leptinotarsa decemlineata</i>) LPTNDE	Foliar spray	BBCH 35-75 Spring, post emergence	1 a) 1 b) 1	N/A	0.08-0.12 L/ha a) 0.12 L/ha b) 0.12 L/ha	16-24 g /ha a) 24 g /ha b) 24 g /ha	200-400 L/ha	3 days	not relevant	
5	Poland	Apple	F	Tortix moths (<i>Tortricidae sp</i>) TORTSP	Foliar spray	BBCH 71-84 Spring, post emergence	2 a) 1 b) 2	7 days	0.118 L/10000m ² LWA a) 0.118 L/10000m ² LWA b) 0.236	23.6 g/10000m ² LWA a) 23.6 g/10000m ² LWA	500-900 L/ha	14 days	Max. 2 x 0.125 L/ha (2 x 25 g/ha) 10600 LWA	R

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
									L/10000m ² LWA	b) 47.2 g/10000m ² LWA				
6	Poland	Apple	F	Codling moth (<i>Cydia pomonella</i>) CARPPO	Foliar spray	BBCH 71-84 Spring, post emergence	2 a) 1 b) 2	7 days	0.118 L/10000m ² LWA a) 0.118 L/10000m ² LWA b) 0.236 L/10000m ² LWA	23.6 g/10000m ² LWA a) 23.6 g/10000m ² LWA b) 47.2 g/10000m ² LWA	500-900 L/ha	14 days	Max. 2 x 0.125 L/ha (2 x 25 g/ha) 10600 LWA	R
7	Poland	Apple	F	Apple sawfly (<i>Hoplocampa testudinea</i>) HOPLTE	Foliar spray	BBCH 65-69 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m ² LWA a) 0.073 L/10000m ² LWA b) 0.073 L/10000m ² LWA	14.6 g/10000m ² LWA a) 14.6 g/10000m ² LWA b) 14.6 g/10000m ² LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000 LWA	
8	Poland	Apple	F	Aphids (<i>Aphididae</i>) –APXXSP	Foliar spray	BBCH 56-84 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m ² LWA a) 0.073 L/10000m ² LWA b) 0.073 L/10000m ² LWA	14.6 g/10000m ² LWA a) 14.6 g/10000m ² LWA b) 14.6 g/10000m ² LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000 LWA	
9	Poland	Apple	F	Apple woolly aphid (<i>Eriosoma lanigerum</i>) ERISLA	Foliar spray	BBCH 56-84 Spring, post emergence	1 a) 1 b) 1	N/A	0.118 L/10000m ² LWA a) 0.118 L/10000m ² LWA b) 0.118 L/10000m ² LWA	23.6 g/10000m ² LWA a) 23.6 g/10000m ² LWA b) 23.6 g/10000m ² LWA	500-900 L/ha	14 days	max. 0.18 L/ha (36 g as/ha) 15000 LWA	
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10	PL	Spring oilseed rape,		Pollen beetle (<i>Melipha</i>)	Foliar	BBCH 50-65	1	N/A	0.1 – 0.12 L/ha	20-24 g /ha	200-400	N/A		

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		Turnip rape		<i>gethes aeneus</i>) ME-LIAE	spray	Spring, post emergence	a) 1 b) 1		a) 0.12 L/ha b) 0.12 L/ha	a) 24 g /ha b) 24 g /ha	L/ha			
11	PL	Spring oilseed rape, Turnip rape	F	Rape stem weevil (<i>Ceutorhynchus napi</i>) –CEUTNA Cabbage stem weevils (<i>Ceutorhynchus palli-dactylus</i>) – CEUTQU	Foliar spray	BBCH 30-50 Spring, post emergence	1 a) 1 b) 1	N/A	0.25 L/ha a) 0.25 L/ha b) 0.25 L/ha	50 g/ha a) 50 g/ha b) 50 g/ha	200-400 L/ha	N/A		
12	PL	Spring oilseed rape, Turnip rape	F	Brassica pod midge (<i>Dasyneura brassicae</i>)- DASYBR Cabbage seed weevil (<i>Ceutorhynchus ob-strictus</i>) – CEUTAS	Foliar spray	BBCH 59-71 Spring, post emergence	1 a) 1 b) 1	N/A	0.3 /ha a) 0.3 l/ha b) 0.3 l/ha	60 g/ha a) 60 g/ha b) 60 g/ha	200-400 L/ha	N/A		
13	PL	Flax- fiber production	F	Cabbage thrips (<i>Thripsangusticeps</i>) - THRIAN; Flax thrips (<i>Thrips lini</i>) - THRILI	Foliar spray	After reaching thresholds or after warning service appeal BBCH 30-61	1 a) 1 b) 1	N/A	0.3 l/ha a) 0.3 l/ha b) 0.3 l/ha	60 g/ha a) 60 g/ha b) 60 g/ha	200-400 L/ha	N/A		
14	PL	Common hemp - fiber production	F	Aphids (<i>Aphididae</i>) –APXXSP; Thrips (<i>Thysanoptera</i>) - 1THYSO	Foliar spray	After reaching thresholds or after warning service appeal BBCH 39-59	1 a) 1 b) 1	N/A	0.3 l/ha a) 0.3 l/ha b) 0.3 l/ha	60 g/ha a) 60 g/ha b) 60 g/ha	200-400 L/ha	N/A		
15	PL	Wild apple	F	Aphids (<i>Aphididae</i>) –APXXSP	Foliar spray	BBCH 56-84 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m ² LWA a) 0.073 L/10000m ² LWA b) 0.073 L/10000m ² LWA	14.6 g/10000m ² LWA a) 14.6 g/10000m ² LWA b) 14.6	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000 LWA	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
										g/10000m ² LWA				
16	PL	Wild apple	F	Codling moth (<i>Cydia pomonella</i>) - CARPPO	Foliar spray	BBCH 71-84 Spring, post emergence	2 a) 1 b) 2	7 days	0.118 L/10000m ² LWA a) 0.118 L/10000m ² LWA b) 0.236 L/10000m ² LWA	23.6 g/10000m ² LWA a) 23.6 g/10000m ² LWA b) 47.2 g/10000m ² LWA	500-900 L/ha	14 days	Max. 2 x 0.125 L/ha (2 x 25 g/ha) 10600 LWA	R
17	PL	Wild apple	F	Pear leaf blister moth (<i>Leucoptera scitella</i>) -LEUCSC	Foliar spray	BBCH 57-69 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m ² LWA a) 0.073 L/10000m ² LWA b) 0.073 L/10000m ² LWA	14.6 g/10000m ² LWA a) 14.6 g/10000m ² LWA b) 14.6 g/10000m ² LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000 LWA	
18	PL	Wild apple	F	Apple fruit sawfly (<i>Hoplocampa testudinea</i>) - HOPLTE	Foliar spray	BBCH 65-69 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m ² LWA a) 0.073 L/10000m ² LWA b) 0.073 L/10000m ² LWA	14.6 g/10000m ² LWA a) 14.6 g/10000m ² LWA b) 14.6 g/10000m ² LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000 LWA	
19	PL	Wild apple	F	Apple leaf midge (<i>Dasineura mali</i>) - DASYMA	Foliar spray	BBCH 59-73 Spring, post emergence	2 a) 1 b) 2	7 days	0.083 L/10000m ² LWA a) 0.083 L/10000m ² LWA b) 1.66 L/10000m ² LWA	16.6 g/10000m ² LWA a) 16.6 g/10000m ² LWA b) 33.2 g/10000m ² LWA	500-900 L/ha	14 days	Max. 2 x 0.11 L/ha (2 x 22 g/ha) 13000 LWA	R
20	PL	Wild apple	F	Bracken clock (<i>Phyllopertha horticola</i>) - PHPHHO	Foliar spray	BBCH 59-73 Spring, post emergence	1 a) 1	N/A	0.073 L/10000m ² LWA a) 0.073	14.6 g/10000m ² LWA a) 14.6	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000 LWA	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
							b) 1		L/10000m ² LWA b) 0.073 L/10000m ² LWA	g/10000m ² LWA b) 14.6 g/10000m ² LWA				
21	PL	Pear, Chinese pear	F	Aphids (<i>Aphididae</i>) –APXXSP	Foliar spray	BBCH 56-84 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m ² LWA a) 0.073 L/10000m ² LWA b) 0.073 L/10000m ² LWA	14.6 g/10000m ² LWA a) 14.6 g/10000m ² LWA b) 14.6 g/10000m ² LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000 LWA	
22	PL	Pear, Chinese pear	F	Tortix moths (<i>Tortricidae sp</i>) TORTSP	Foliar spray	BBCH 71-84 Spring, post emergence	2 a) 1 b) 2	7 days	0.118 L/10000m ² LWA a) 0.118 L/10000m ² LWA b) 0.236 L/10000m ² LWA	23.6 g/10000m ² LWA a) 23.6 g/10000m ² LWA b) 47.2 g/10000m ² LWA	500-900 L/ha	14 days	Max. 2 x 0.125 L/ha (2 x 25 g/ha) 10600 LWA	R
23	PL	Pear, Chinese pear	F	Codling moth (<i>Cydia pomonella</i>) CARPPO	Foliar spray	BBCH 71-84 Spring, post emergence	2 a) 1 b) 2	7 days	0.118 L/10000m ² LWA a) 0.118 L/10000m ² LWA b) 0.236 L/10000m ² LWA	23.6 g/10000m ² LWA a) 23.6 g/10000m ² LWA b) 47.2 g/10000m ² LWA	500-900 L/ha	14 days	Max. 2 x 0.125 L/ha (2 x 25 g/ha) 10600 LWA	R
24	PL	Pear, Chinese pear	F	Cherry slug saw- fly (<i>Caliroa limacina</i>) - ERICLI	Foliar spray	BBCH 71-84 Spring, post emergence	1 a) 1 b) 1	N/A	0.118 L/10000m ² LWA a) 0.118 L/10000m ² LWA b) 0.118 L/10000m ² LWA	23.6 g/10000m ² LWA a) 23.6 g/10000m ² LWA b) 23.6 g/10000m ² LWA	500-900 L/ha	14 days	max. 1 x 0.135 L/ha (27 g as/ha) 11500LWA	R

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
25	PL	Pear, Chinese pear	F	Pear leaf midge (<i>Dasineura pyri</i>) - DASYPY	Foliar spray	BBCH 71-84 Spring, post emergence	2 a) 1 b) 2	7 days	0.118 L/10000m2 LWA a) 0.118 L/10000m2 LWA b) 0.236 L/10000m2 LWA	23.6 g/10000m2 LWA a) 23.6 g/10000m2 LWA b) 47.2 g/10000m2 LWA	500-900 L/ha	14 days	Max. 2 x 0.125 L/ha (2 x 25 g/ha) 10600 LWA	
26	PL	Pear, Chinese pear	F	Apple bud weevil (<i>Anthonomus piri</i>) - ANTHPY	Foliar spray	BBCH 51-59 Spring, post emergence	1 a) 1 b) 1	N/A	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 0.083 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 16.6 g/10000m2 LWA	500-900 L/ha	14 days	max. 0.125 L/ha (25 g as/ha) 15000LWA	R
27	PL	Pear, Chinese pear		Pear psylla (<i>Cacopsylla pyri</i>) - PSYLP1; Pear sucker (<i>Cacopsylla pyri- suga</i>) - PSYLPY; Pear psyllid (<i>Cacopsylla pyricola</i>) - PSYLP2	Foliar spray	BBCH 51-71 Spring, post emergence	2 a) 1 b) 2	7 days	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 1.66 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 33.2 g/10000m2 LWA	500-900 L/ha	14 days	Max. 2 x 0.11 L/ha (2 x 22 g/ha) 13000 LWA	R
28	PL	Quince, Medlar	F	Aphids (<i>Aphididae</i>) –APXXSP	Foliar spray	BBCH 56-84 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m2 LWA a) 0.073 L/10000m2 LWA b) 0.073 L/10000m2 LWA	14.6 g/10000m2 LWA a) 14.6 g/10000m2 LWA b) 14.6 g/10000m2 LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000LWA	
29	PL	Quince, Medlar	F	Codling moth (<i>Cydia pomonella</i>) CARPPO	Foliar spray	BBCH 71-84 Spring, post emergence	2 a) 1 b) 2	7 days	0.118 L/10000m2 LWA a) 23.6	23.6 g/10000m2 LWA a) 23.6	500-900 L/ha	14 days	Max. 2 x 0.125 L/ha (2 x 25 g/ha)	R

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
									a) 0.118 L/10000m2 LWA b) 0.236 L/10000m2 LWA	g/10000m2 LWA b) 47.2 g/10000m2 LWA			10600 LWA	
30	PL	Plum	F	Aphids (<i>Aphididae</i>) –APXXSP	Foliar spray	BBCH 56-84 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m2 LWA a) 0.073 L/10000m2 LWA b) 0.073 L/10000m2 LWA	14.6 g/10000m2 LWA a) 14.6 g/10000m2 LWA b) 14.6 g/10000m2 LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000LWA	
31	PL	Plum	F	Plum fruit sawfly (<i>Hoplocampa minu- ta</i>) -HOPLMI; Plum sawfly (<i>Hop- locampa flava</i>) - HOPLFL	Foliar spray	BBCH 69-84	1 a) 1 b) 1	N/A	0.073 L/10000m2 LWA a) 0.073 L/10000m2 LWA b) 0.073 L/10000m2 LWA	14.6 g/10000m2 LWA a) 14.6 g/10000m2 LWA b) 14.6 g/10000m2 LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000LWA	
32	PL	/Plum	F	Plum fruit moth (<i>Laspeyresia fune- brana</i>) - LASPFU	Foliar spray	BBCH 71-81 Spring, post emergence	2 a) 1 b) 2	7 days	0.118 L/10000m2 LWA a) 0.118 L/10000m2 LWA b) 0.236 L/10000m2 LWA	23.6 g/10000m2 LWA a) 23.6 g/10000m2 LWA b) 47.2 g/10000m2 LWA	500-900 L/ha	14 days	Max. 2 x 0.125 L/ha (2 x 25 g/ha) 10600 LWA	R
33	PL	Plum	F	European brown scale (<i>Parthenoleca- nium corni</i>) - LECA- CO	Foliar spray	BBCH 56-59	1 a) 1 b) 1	N/A	0.073 L/10000m2 LWA a) 0.073 L/10000m2	14.6 g/10000m2 LWA a) 14.6 g/10000m2	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000LWA	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
									LWA b) 0.073 L/10000m2 LWA	LWA b) 14.6 g/10000m2 LWA				
34	PL	Plum	F	Apple brown tortrix (<i>Pandemis heparana</i>) -PANDHE; Reticulated tortrix (<i>Adoxophyes orana</i>) -CAPURE; European leaf roller (<i>Archips rosana</i>) - CACORO; Whelk (<i>Tortricidae</i>) - 1TORTF; and other leaf caterpillars	Foliar spray	BBCH 51-73	2 a) 1 b) 2	7 days	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 1.66 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 33.2 g/10000m2 LWA	500-900 L/ha	14 days	Max. 2 x 0.11 L/ha (2 x 22 g/ha) 13000 LWA	R
35	PL	Peach, Nectarine, apricot	F	Aphids (<i>Aphididae</i>) –APXXSP	Foliar spray	BBCH 56-84 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m2 LWA a) 0.073 L/10000m2 LWA b) 0.073 L/10000m2 LWA	14.6 g/10000m2 LWA a) 14.6 g/10000m2 LWA b) 14.6 g/10000m2 LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000LWA	
36	PL	Peach, Nectarine, apricot	F	Apple brown tortrix (<i>Pandemis heparana</i>) -PANDHE; Reticulated tortrix (<i>Adoxophyes orana</i>) -CAPURE; European leaf roller (<i>Archips rosana</i>) - CACORO; Whelk (<i>Tortricidae</i>) - 1TORTF; and other leafcaterpillars	Foliar spray	BBCH 51-65	2 a) 1 b) 2	7 days	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 1.66 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 33.2 g/10000m2 LWA	500-900 L/ha	14 days	Max. 2 x 0.11 L/ha (2 x 22 g/ha) 13000 LWA	R
37	PL	Sour cherry, sweet cherry	F	Aphids (<i>Aphididae</i>) –APXXSP	Foliar spray	BBCH 56-84 Spring, post emergence	1 a) 1	N/A	0.073 L/10000m2 LWA a) 14.6	14.6 g/10000m2 LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000LWA	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
							b) 1		a) 0.073 L/10000m2 LWA b) 0.073 L/10000m2 LWA	g/10000m2 LWA b) 14.6 g/10000m2 LWA				
38	PL	Sour cherry, sweet cherry	F	Cherry fruit moth (<i>Argyresthia ephippella</i>) - ARGYEP	Foliar spray	BBCH 51-59	1 a) 1 b) 1	N/A	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 0.083 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 16.6 g/10000m2 LWA	500-900 L/ha	14 days	max. 0.125 L/ha (25 g as/ha) 15000LWA	R
39	PL	Sour cherry, sweet cherry	F	Cherry-stone weevil (<i>Anthonomus rectirostris</i>) - ANTHRE	Foliar spray	BBCH 57-65 Spring, post emergence	1 a) 1 b) 1	N/A	0.073 L/10000m2 LWA a) 0.073 L/10000m2 LWA b) 0.073 L/10000m2 LWA	14.6 g/10000m2 LWA a) 14.6 g/10000m2 LWA b) 14.6 g/10000m2 LWA	500-900 L/ha	14 days	max. 0.11 L/ha (22 g as/ha) 15000LWA	
40	PL	Sweet Cherry Sour Cherry	F	Apple brown tortrix (<i>Pandemis heparana</i>) - PANDHE; Reticulated tortrix (<i>Adoxophyes orana</i>) - CAPURE; European leaf roller (<i>Archips rosana</i>) - CACORO; Whelk (<i>Tortricidae</i>) - 1TORTF; and other leafcaterpillars	Foliar spray	BBCH 51-65	2 a) 1 b) 2	7 days	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 1.66 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 33.2 g/10000m2 LWA	500-900 L/ha	14 days	Max. 2 x 0.11 L/ha (2 x 22 g/ha) 13000 LWA	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
41	PL	Tomato	G	Glasshouse white-fly (<i>Trialeurodes vaporariorum</i>) – TRIAVA; Common cotton thrips (<i>Thrips tabaci</i>) – THRITB; Western grass thrips (<i>Frankliniella occidentalis</i>) - FRANOC; Leaf miner (<i>Phytomyza sp.</i>) -PHYYSPP; Aphids (<i>Aphididae</i>) – APXXSP; Lygus bug (<i>Lygus sp.</i>) - LYGUSP; Flea beetle (<i>Psylliodes</i>) - 1PSYIG	Foliar spray	BBCH 20-89	1	N/A	0.30 L/ha	60g/ha	300-750 L/ha	3 days	not relevant	
42		Aubergine			Foliar spray	BBCH 20-89	1	N/A	0.30 L/ha	60g/ha	300-750 L/ha	3 days	not relevant	
43		Pepper			Foliar spray	BBCH 20-89	1	N/A	0.30 L/ha	60g/ha	300-750 L/ha	3 days	not relevant	
44	PL	Walnuts	F	Aphids (<i>Aphididae</i>) – APXXSP	Foliar spray	BBCH 51-65	2 a) 1 b) 2	10 days	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 1.66 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 33.2 g/10000m2 LWA	500-900 L/ha	14 days	Max. 2 x 0.11 L/ha (2 x 22 g/ha) 13000 LWA	R
45	PL	Hazelnuts	F	Aphids (<i>Aphididae</i>) – APXXSP; , Hazelnut weevil (<i>Curculio nucum</i>) - CURCNU; (<i>Oberea linearis</i>) - OBERLI; European brown scale (<i>Parthenolecanium corni</i>) - LECACO; , Reticulated tortrix (<i>Adoxophyes orana</i>) - CAPURE; European	Foliar spray	BBCH 51-65	2 a) 1 b) 2	7 days	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 1.66 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 33.2 g/10000m2 LWA	500-900 L/ha	14 days	Max. 2 x 0.11 L/ha (2 x 22 g/ha) 13000 LWA	R

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				leaf roller (<i>Archips rosana</i>) - CACORO; other totrix and other leaf caterpillars										
46	PL	Common osier, Purple willow	F	Aphids (<i>Aphididae</i>) – APXXSP, Bal- sam poplar leaf beetle (<i>Chrysomela populi</i>) - CHRSPQ; (<i>Chrysomelasali- ceti</i>)- CHRSSA, Blue willow beetle (<i>Phratora vulgatis- sima</i>) - PHRRVU; Brassy willow leaf beetle (<i>Phratora vitellinae</i>) - PHRRVI; Cream- bordered green pea moth (<i>Earias clorana</i>) -EARICH; Gall midge (<i>Dasineu- ra mar- ginemtor- quens</i>) - RHABMA	Foliar spray	BBCH 51-69	2 a) 1 b) 2	7 days	0.083 L/10000m2 LWA a) 0.083 L/10000m2 LWA b) 1.66 L/10000m2 LWA	16.6 g/10000m2 LWA a) 16.6 g/10000m2 LWA b) 33.2 g/10000m2 LWA	200-750 L/ha	N/A	Max. 2 x 0.11 L/ha (2 x 22 g/ha) 13000 LWA	R
47	PL	Forest and ornamental nurseries plants, re- stockings,afforestations and forest trees' seed plantations; Christmas trees grown on planta- tions	F	Aphids (<i>Aphididae</i>) – APXXSP, Springtails (<i>Collembola</i>) - ICOLLO; Larch case-bearer (<i>Cole- ophora laricella</i>) - COLELA	Foliar spray	BBCH 11-69	1 a) 1 b) 1	N/A	0.133 L/10000m2 LWA a) 0.133 L/10000m2 LWA b) 0.133 L/10000m2 LWA	26.6 g/10000m2 LWA a) 26.6 g/10000m2 LWA b) 26.6 g/10000m2 LWA	200-400 L/ha	N/A	Max. 0.19 L/ha (38 g/ha) 14000 LWA	

* 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
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R	Further refinement is required for PECgw for metabolite IM-1-5 or risk mitigation measure in label.
C	To be confirmed by cMS
N	No safe use

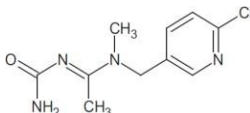
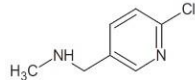
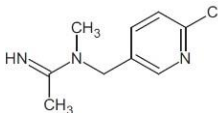
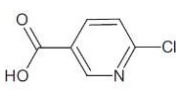
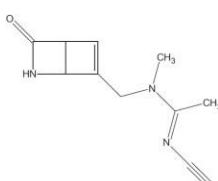
Table 8.1-2: Assessed (critical) uses during approval of acetamiprid concerning the Section Environmental Fate

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use- No.	Member state(s)	Crop and/or situation (crop destination / purpose of crop)	F, G, or I*	Pests or Group of pests controlled (additional- ly: developmental 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 applications (days)	kg product/ha a) max. rateper appl. b) max. totalrate per crop/season	kg as/ha a) max. rateper appl. b) max. totalrate per crop/season	Water L/ha min/max		
1	EU	Tomato	G	Aphids	Foliar	BBCH 61 – 89 (January - December)	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 – September)	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 – October)	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, G: 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 (g/mol)	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} PEC _{soil} PEC _{sw/sed}
IM-1-4	156.61		Maximum in soil: 72% Maximum in water/sediment: 81.5% *	PEC _{gw} PEC _{soil} PEC _{sw/sed}
IM-1-5	197.66		Maximum in soil: 20% (calcareous soils only)	PEC _{gw} PEC _{soil} PEC _{sw/sed}
IC-0 6-Chloronicotinic Acid (IV-0)	157.55		Maximum in soil: 11.3% Maximum in water/sediment: 29.5%	PEC _{gw} PEC _{soil} PEC _{sw/sed}
IB-1-1	204.23		Maximum in water/sediment: 35% **	PEC _{sw/sed}

*Observed in aerobic mineralisation study

**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

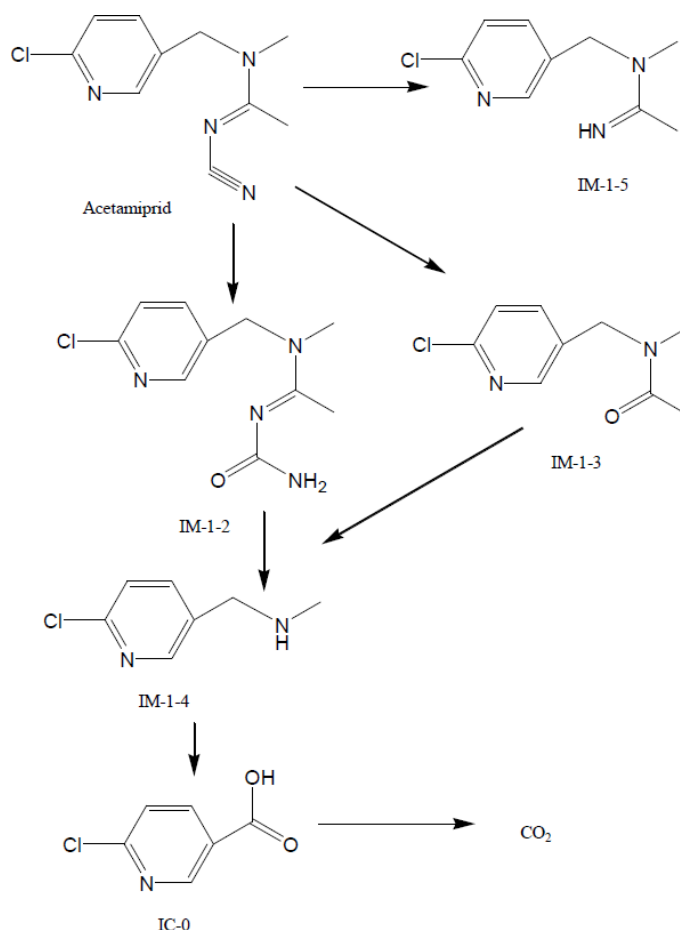
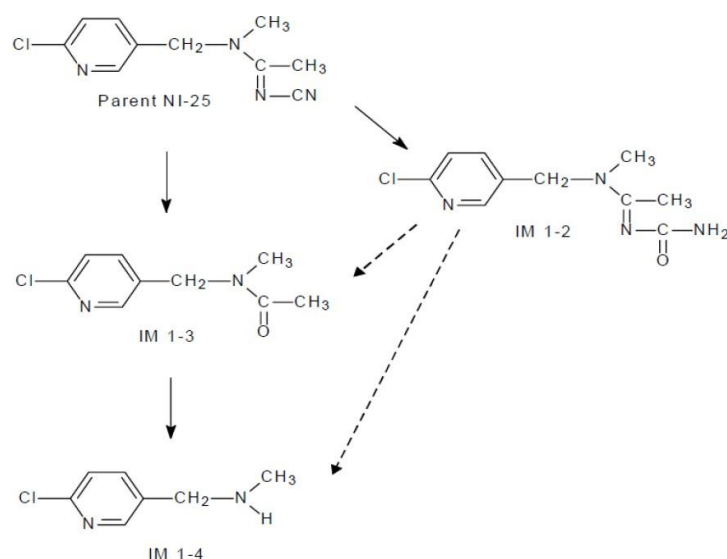


Figure 8.3-2: Proposed pathway of acetamiprid degradation in soil under anaerobic conditions



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

Acetamiprid, Laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH a)	t (°C)	MWHC (%)	DT50 (d)	DT90 (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	k1: 0.00806 k2: 0.1628 g: 0.155	6.9	DFOP	Yes / EFSA, 2016
Clay loam	7.4	10	45	7.9	49.3	k1: 0.1057 k2: 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

^{a)} Measured in water

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

IM-1-2, Laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t.oC	MWHC %	DT50 (d)	DT90 (d)	Parameters bi-phasic models	Chi2 (%)	Kinetic model	Evaluated on EU level y/ Reference
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
Geometric mean (n=3)				1.8					
pH-dependency:				n					

^{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

IM-1-4, Laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT50 (d)	DT90 (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=8)				146	483				

^{a)} Measured in water

^{b)} Parent kinetics DFOP

^{c)} Parent kinetics FOMC

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

IC-0, Laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT50 (d)	DT90 (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				

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

IM-1-5, Laboratory studies, dark aerobic conditions – Triggering endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT50 (d)	DT90 (d)	Parameters bi-phasic model	Chi ² (%)	Ki-netic 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 clayloam	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

Acetamiprid, Laboratory studies, dark aerobic conditions – Modelling endpoints									
Soil type	pH ^{a)}	t (°C)	MWHC (%)	DT50 (d)	DT90 (d)	DT50 (d) 20°C pF2/10kPa ^{b)}	Chi ² (%)	Ki-netic 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	1.0	3.2	1.0	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

IM-1-2, Laboratory studies, dark aerobic conditions – Modelling endpoints										
Soil type	pH a)	t (°C)	MWHC (%)	DT50 (d)	DT90 (d)	Formation fraction kf/kdp c)	DT50 (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

IM-1-4, Laboratory studies, dark aerobic conditions – Modelling endpoints										
Soil type	pH a)	t (°C)	MWH C(%)	DT50 (d)	DT90 (d)	For- mation frac- tion kf/kdp c)	DT50 (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

IC-0, Laboratory studies, dark aerobic conditions – Modelling endpoints										
Soil type	pH a)	t (°C)	MWHC (%)	DT50 (d)	DT90 (d)	Formation fraction kf/kdp c)	DT50 (d) 20°C pF2/10kPa ^{b)}	Chi² (%)	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

IM-1-5, Laboratory studies, dark aerobic conditions – Modelling endpoints										
Soil type	pH a)	t (°C)	MWHC (%)	DT50 (d)	DT90 (d)	Formation fraction kf/kdp e)	DT50 (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 (Hungary)	7.8	20	60.7% of pF2 moisture	420	1395	-	296	3.5	SFO	Yes / EFSA, 2016

Sandy clayloam	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.

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 (%)	DT50 (d)	DT90 (d)	DT50 (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

zRMS comments:

Information above is in line with information reported in EFSA Journal 2016;14(11):4610. Field studies (KCP 9.1.1.2)

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

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

8.3.3.1 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.

Triggering endpoints

Table 8.3-12: Summary of aerobic degradation rates for acetamiprid - field studies: Triggering endpoints

Acetamiprid, Field studies – Triggering endpoints									
Soil type	Location	pH	Depth (cm)	DissT50 (d) actual	DT90 (d) actual	Kinetic parameters	St. (σ^2)	Method of calculation	Evaluated on EU level y/n/ Reference
Clay loam	Italy	8.9 ^{a)}	0-30	0.4	19.8	k1: 4.122808 k2: 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
Maximum (n=x)				12.96	43.06				

^{a)} Measured in 1 M KCl

^{b)} Measured in 0.01 M CaCl₂

zRMS comments:

Field degradation data presented in table above are in with EU agreed endpoints presented in EFSA Journal 2016;14(11):4610.

Table 8.3-13: 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	50% after 28 days	39% after 4 days	Not analysed	Yes / EFSA, 2016
Sandy loam	United Kingdom	5.9 ^{a)}	0-10	50% after 30 days	< 3.9% after 2-7days	Not analysed	Yes / EFSA, 2016
Silty clay loam	France	8.7 ^{a)}	0-10	73% after 28 days	18% after 2 days	Not analysed	Yes / EFSA, 2016
Sandy loam	Spain	7 ^{a)}	0-10	55% after 31days	9% after 2 days	Not analysed	Yes / EFSA, 2016
Loam	Spain	7.45 ^{b)}	0-10	Not analysed	Not analysed	60% after 28 days	Yes / EFSA, 2016

Loam	Southern France	7.36 ^{b)}	0-10	Not analysed	Not analysed	25% after 29 days	Yes / EFSA, 2016
Loam	Northern France	7.49 ^{b)}	0-10	Not analysed	Not analysed	45% after 7 days	Yes / EFSA, 2016
Loam	Hungary	8.06 ^{b)}	0-10	Not analysed	Not analysed	24% after 169 days	Yes / EFSA, 2016

8.3.4 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.

8.4 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.

8.4.1 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 8.4-1: Summary of soil adsorption/desorption for acetamiprid

Acetamiprid						
Soil type	OC (%)	pH ^{a)}	Kf (mL/g)	Kfoc (mL/g)	1/n (-)	Evaluated on EU level y/n/ Reference
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	

Acetamiprid						
Soil type	OC (%)	pH ^{a)}	Kf (mL/g)	Kfoc (mL/g)	1/n (-)	Evaluated on EU level y/n/ Reference
Geometric mean (n=5)				102.1	-	
pH-dependency:				No		

^{a)} Measured in unknown medium

Table 8.4-2: Summary of soil adsorption/desorption for IM-1-2

IM-1-2						
Soil Type	OC (%)	pH ^{a)}	Kf (mL/g)	Kfoc (mL/g)	1/n (-)	Evaluated on EU level y/n/ Reference
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)				41.7	-	
pH-dependency:				No		

^{a)} Measured in CaCl₂ medium

Table 8.4-3: Summary of soil adsorption/desorption for IM-1-4

IM-1-4						
Soil Type	OC (%)	pH ^{a)}	Kf (mL/g)	Kfoc (mL/g)	1/n (-)	Evaluated on EU level y/n/ Reference
I Sand *	0.43	5.7	2.1	488	0.597	Yes / EFSA, 2016
II Laomy 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	
Arithmetic mean (n=5)				171	0.746	
Geometric mean (n=5)				167.1	-	
pH-dependency:				No		

^{a)} Measured in unknown medium

* Sediment already excluded during the previous evaluation

Table 8.4-4: Summary of soil adsorption/desorption for IC-0

IC-0						
Soil Type	OC (%)	pH ^{a)}	Kf (mL/g)	Kfoc (mL/g)	1/n (-)	Evaluated on EU level y/n/ Reference
I Sand	0.43	5.7	0.643	258	0.967	Yes / EFSA, 2016
II Laomy 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 8.4-5: Summary of soil adsorption/desorption for IM-1-5

IM-1-5						
Soil Type	OC (%)	pH ^{a)}	Kf (mL/g)	Kfoc (mL/g)	1/n (-)	Evaluated on EU level y/n/ Reference
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.

8.4.2 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 8.4-6: 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 mmTime 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

8.4.3 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.

8.4.4 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 Acetamiprid 120 SL is addressed in groundwater modelling.

8.5 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.

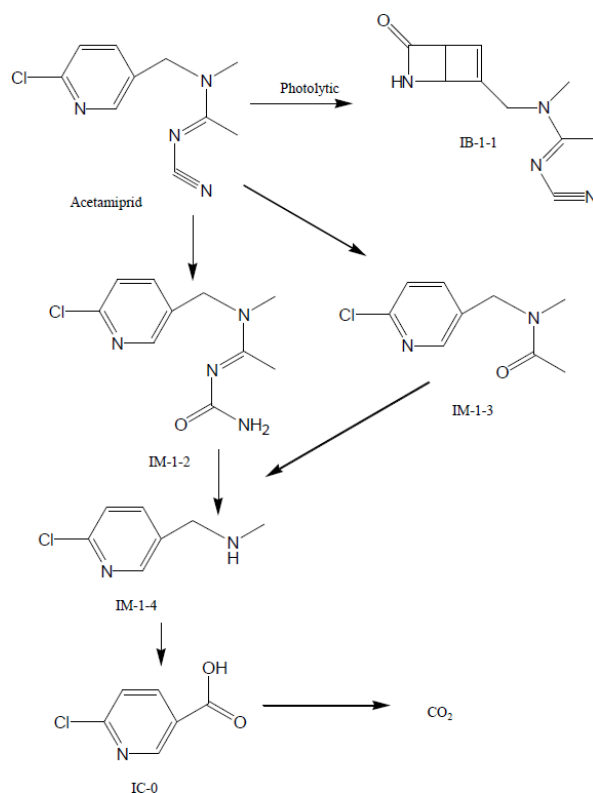
8.5.1 Acetamiprid and its metabolites

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. 11% AR), IM-1-4 (max. 12% AR) and IC-0 (max. 26% AR). Metabolite IM-1-4 was also a major metabolite in the sediment phase (max. 31% 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 and a DT50 of 24 days was determined.

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

Table 8.5-1: Summary of degradation in water/sediment of acetamiprid

Acetamiprid distribution (max. water/sediment 101.42% after 0 days, sediment 39.05% after 14 days)											
Water/sediment system	pH water/sed.	DegT50 whole syst. (d)	t (°C)	DT50 whole syst. (d)	Chi ² (x ²)	DT50 water (d)	Chi ² (x ²)	DT50 sed. (d)	Chi ² (x ²)	Method of calculation	Evaluated on EU level y/n/ Reference
Manningtree	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 8.5-2: Summary of aerobic mineralisation of acetamiprid in surface water

Acetamiprid distribution (max. water/sediment 101.42% after 0 days, sediment 39.05% after 14 days)											
Water/sediment system	pH water/sed.	DegT50 whole syst. (d)	t (°C)	DT50 whole syst. (d)	Chi ² (x ²)	DT50 water (d)	Chi ² (x ²)	DT50 sed. (d)	Chi ² (x ²)	Method of calculation	Evaluated on EU level y/n/ Reference
Manningtree	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							

Table 8.5-3: 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 used for the surface water exposure assessment.

8.6 Predicted Environmental Concentrations in soil (PEC_{soil}) (KCP 9.1.3)

8.6.1 Justification for new endpoints

All endpoints used for PEC soil calculations are EU approved and were evaluated on EU level.

8.6.2 Active substance(s) and relevant metabolite(s)

The predicted environmental concentrations in soil PECs of acetamiprid and its metabolites were calculated using excel calculation sheet which is in line with Ctgb Evaluation Manual version 2.2 (January 2018) and FOCUS guidance – FOCUS (1997): Soil persistence models and EU registration. For further risk assessment worst case PECs values were used. Input parameters related to application and active

substances/metabolites data for PECs calculation are summarized below.

Table 8.6-1: Input parameters related to application for PEC_{soil} calculations

Use No.		1, 2, 3, 10, 11	12, 13, 14	4	5, 6, 16, 22, 23, 25, 29, 32	7, 8, 15, 17, 18, 20, 21, 26, 28, 30, 31, 33, 35, 37, 38, 39	24	19, 27, 34, 36, 40, 44, 45, 46	9, 47
Crop		Winter oilseed rape/spring oilseed rape/turnip rape	Spring oilseed rape/turnip rape/ flax/ hemp	Potato	Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum)	Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum sweet cherry sour, cherry, peach, nectarine, apricot)	Apples (pear, chinese pear)	Apples (wild apple, pear, chinese pear, plum, sweet cherry, sour, cherry, peach, nectarine, apricot, hazelnut, walnut, common osier, purple willow)	Apples (Forest and ornamental nurseries plants, restocking, afforestations and forest trees' seed plantations; Christmas trees grown on plantations)
Application rate (g as/ha)		50 ^a	60	24	25	25 ^a	27	22	38 ^a
Number of applications/ interval		1/-	1/-	1/-	2/7	1/-	1/-	2/7	1/-
Crop interception (%)		80	80	60	65	60	65	60	60
Depth of soil layer (relevant for plateau concentration) (cm)		5 cm/ 20 cm (with tillage)	5 cm/ 20 cm (with tillage)	5 cm/ 20 cm (with tillage)	5 cm/ 5 cm (without tillage)	5 cm/ 5 cm (without tillage)	5 cm/ 5 cm (without tillage)	5 cm/ 5 cm (without tillage)	5 cm/ 5 cm (without tillage)

^a calculations covering all uses with lower application rates and later application timings

zRMS comments:

zRMS agrees with proposal regarding grouping of intended uses (1-47) for assessment of exposure in soil.

Table 8.6-2: Input parameter for active substance(s) and relevant metabolite(s) for PEC_{soil} calculation

Compound	Molecular weight (g/mol)	Max. occurrence (%)	Formation fraction (%)	DT50 (days)	K _{foc} (mL/g)	Value in accordance to EU end-point y/n/ Reference
Acetamiprid	222.7	-	-	12.96 (SFO, non-normalised worst case field DT50)	102 (geomean, n=5)	EFSA Journal 2016;14(11):4610
IM-1-2	240.7	55	77, from parent	1.9 (SFO, non-normalised/normalised worst case lab DT50)	41.7 (geomean, n=4)	EFSA Journal 2016;14(11):4610
IM-1-4	156.6	72	72, from IM-1-2	146 (SFO, non-normalised worst case lab DT50)	167 (geomean, n=4)	EFSA Journal 2016;14(11):4610
IC-0	157.6	11.3	67, from IM-1-4	5.6 (SFO, non-normalised/normalised worst case lab DT50)	106 (geomean, n=5)	EFSA Journal 2016;14(11):4610
IM-1-5	197.7	20	15, from parent	1000 (SFO, default DT50)	308 (geomean, n=4)	EFSA Journal 2016;14(11):4610

8.6.2.1 Acetamiprid and its metabolites

Winter oilseed rape/spring oilseed rape /turnip rape

Table 8.6-3: PEC_{soil} for acetamiprid on winter and spring oilseed rape (50 g as/ha) (use no. 1, 2, 3, 10,11)

PEC _{soil} (mg/kg)		Winter oilseed rape/spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.013		-	-
Short term	24h	0.013	0.013	-	-
	2d	0.012	0.013	-	-
	4d	0.011	0.012	-	-
Long term	7d	0.009	0.011	-	-
	14d	0.006	0.009	-	-
	21d	0.004	0.008	-	-
	28d	0.003	0.007	-	-
	50d	0.001	0.005	-	-
	100d	0.000	0.002	-	-
Background concentration (20 cm after 10 years)		Not required since DT50 in soil is <100d	-	-	-

PEC _{accumulation} (PEC _{act} +PEC _{background})	-	-	-	-
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Table 8.6-4: PEC_{soil} for IM-1-2 on winter and spring oilseed rape (50 g as/ha) (use no. 1, 2, 3, 10,11)

PEC _{soil} (mg/kg)		Winter oilseed rape/spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.008	-	-	-
Short term	24h	0.006	0.007	-	-
	2d	0.004	0.006	-	-
	4d	0.002	0.004	-	-
Long term	7d	0.001	0.003	-	-
	14d	0.000	0.002	-	-
	21d	0.000	0.001	-	-
	28d	0.000	0.001	-	-
	50d	0.000	0.000	-	-
	100d	0.000	0.000	-	-
Background concentration (20 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Table 8.6-5: PEC_{soil} for IM-1-4 on winter and spring oilseed rape (50 g as/ha) (use no. 1, 2, 3, 10,11)

PEC _{soil} (mg/kg)		Winter oilseed rape/spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	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	0.006	0.007	-	-
	21d	0.006	0.006	-	-
	28d	0.006	0.006	-	-
	50d	0.005	0.006	-	-
	100d	0.004	0.005	-	-
Background concentration (20 cm)		0.001	-	-	-

after 10 years				
PEC _{accumulation} (PEC _{act} +PEC _{background})	0.008	-	-	-

Table 8.6-6: PEC_{soil} for IM-1-5 on winter and spring oilseed rape (50 g as/ha) (use no. 1, 2, 3, 10,11)

PEC _{soil} (mg/kg)		Winter oilseed rape/spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	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	-	-
Background concentration (20 cm) after 10 years		0.009	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		0.011	-	-	-

Table 8.6-7: PEC_{soil} for IC-0 on winter and spring oilseed rape (50 g as/ha) (use no. 1, 2, 3, 10,11)

PEC _{soil} (mg/kg)		Winter oilseed rape/spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	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	0.000	0.001	-	-
	14d	0.000	0.001	-	-
	21d	0.000	0.000	-	-
	28d	0.000	0.000	-	-
	50d	0.000	0.000	-	-
	100d	0.000	0.000	-	-
Background concentration (20 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-

PEC _{accumulation} (PEC _{act} +PEC _{background})	-	-	-	-
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Spring oilseed rape /turnip rape/flax/hemp

Table 8.6-8: PEC_{soil} for acetamiprid on spring oilseed rape (60 g as/ha) (use no. 12, 13, 14)

PEC _{soil} (mg/kg)		spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.016	-	-	-
Short term	24h	0.015	0.016	-	-
	2d	0.014	0.015	-	-
	4d	0.013	0.014	-	-
Long term	7d	0.011	0.013	-	-
	14d	0.008	0.011	-	-
	21d	0.005	0.010	-	-
	28d	0.004	0.008	-	-
	50d	0.001	0.006	-	-
	100d	0.000	0.003	-	-
Background concentration (20 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Table 8.6-9: PEC_{soil} for IM-1-2 on spring oilseed rape (60 g as/ha) (use no. 12, 13, 14)

PEC _{soil} (mg/kg)		spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.010	-	-	-
Short term	24h	0.007	0.008	-	-
	2d	0.005	0.007	-	-
	4d	0.002	0.005	-	-
Long term	7d	0.001	0.003	-	-
	14d	0.000	0.002	-	-
	21d	0.000	0.001	-	-
	28d	0.000	0.001	-	-
	50d	0.000	0.001	-	-
	100d	0.000	0.000	-	-
Background concentration (20 cm) after 10 years		Not required since DT50 in soil is	-	-	-

	<100d			
PEC _{accumulation} (PEC _{act} +PEC _{background})	-	-	-	-

Table 8.6-10: PEC_{soil} for IM-1-4 spring oilseed rape (60 g as/ha) (use no. 12, 13, 14)

PEC _{soil} (mg/kg)		spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	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	0.007	0.008	-	-
	28d	0.007	0.008	-	-
	50d	0.006	0.007	-	-
	100d	0.005	0.006	-	-
Background concentration (20 cm) after 10 years		0.010	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		0.002	-	-	-

Table 8.6-11: PEC_{soil} for IM-1-5 on spring oilseed rape (60 g as/ha) (use no. 12, 13, 14)

PEC _{soil} (mg/kg)		spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.003	-	-	-
Short term	24h	0.003	0.003	-	-
	2d	0.003	0.003	-	-
	4d	0.003	0.003	-	-
Long term	7d	0.003	0.003	-	-
	14d	0.003	0.003	-	-
	21d	0.003	0.003	-	-
	28d	0.003	0.003	-	-
	50d	0.003	0.003	-	-
	100d	0.003	0.003	-	-
Background concentration (20 cm) after 10 years		0.01	-	-	-
PEC _{accumulation}		0.013	-	-	-

(PEC _{act} + PEC _{background})				
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Table 8.6-12: PEC_{soil} for IC-0 on spring oilseed rape (60 g as/ha) (use no. 12, 13, 14)

PEC _{soil} (mg/kg)		spring oilseed rape			
		Single application		Multiple applications	
		Actual	TWA	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	0.000	0.001	-	-
	21d	0.000	0.000	-	-
	28d	0.000	0.000	-	-
	50d	0.000	0.000	-	-
	100d	0.000	0.000	-	-
Background concentration (20 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		-	-	-	-

Potato

Table 8.6-13: PEC_{soil} for acetamiprid on potato (24 g as/ha) (Use no. 4)

PEC _{soil} (mg/kg)		Potato			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.013		-	-
Short term	24h	0.012	0.012	-	-
	2d	0.012	0.012	-	-
	4d	0.010	0.012	-	-
Long term	7d	0.009	0.011	-	-
	14d	0.006	0.009	-	-
	21d	0.004	0.008	-	-
	28d	0.003	0.007	-	-
	50d	0.001	0.004	-	-
	100d	0.000	0.002	-	-
Background concentration (20 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		-	-	-	-

Table 8.6-14: PEC_{soil} for IM-1-2 on potato (24 g as/ha) (Use no. 4)

PEC _{soil} (mg/kg)		Potato			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.008	-	-	-
Short term	24h	0.005	0.006	-	-
	2d	0.004	0.005	-	-
	4d	0.002	0.004	-	-
Long term	7d	0.001	0.003	-	-
	14d	0.000	0.001	-	-
	21d	0.000	0.001	-	-
	28d	0.000	0.001	-	-
	42d	0.000	0.000	-	-
	50d	0.000	0.000	-	-
	100d	0.005	0.006	-	-
Background concentration (20 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Table 8.6-15: PEC_{soil} for IM-1-4 on potato (24 g as/ha) (Use no. 4)

PEC _{soil} (mg/kg)		Potato			
		Single application		Multiple applications	
		Actual	TWA	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	0.004	0.005	-	-
Background concentration (20 cm) after 10 years		0.001	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		0.008	-	-	-

Table 8.6-16: PEC_{soil} for IM-1-5 on potato (24 g as/ha) (use no. 4)

PEC _{soil} (mg/kg)		Potato			
		Single application		Multiple applications	
		Actual	TWA	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	-	-
Background concentration (20 cm) after 10 years		0.008	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		0.01	-	-	-

Table 8.6-17: PEC_{soil} for IC-0 on potato (24 g as/ha) (use no. 4)

PEC _{soil} (mg/kg)		Potato			
		Single application		Multiple applications	
		Actual	TWA	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	0.000	0.001	-	-
	14d	0.000	0.000	-	-
	21d	0.000	0.000	-	-
	28d	0.000	0.000	-	-
	42d	0.000	0.000	-	-
	50d	0.000	0.000	-	-
	100d	0.001	0.001	-	-
Background concentration (20 cm) after 10 years		Not required since DT50 in soil is <100d		-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		-	-	-	-

Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum)

Table 8.6-18: PEC_{soil} for acetamiprid on apples, 2 x 25 g as/ha (use no. 5 , 6 , 16 , 22 , 23 , 25 , 29 , 32)

PEC _{soil} (mg/kg)		Apple			
		1 x 25 g/ha		2 x 25 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.012	-	0.020	-
Short term	24h	0.011	0.011	0.019	0.019
	2d	0.010	0.011	0.018	0.019
	4d	0.009	0.011	0.016	0.018
Long term	7d	0.008	0.010	0.014	0.016
	14d	0.006	0.008	0.009	0.014
	21d	0.004	0.007	0.006	0.012
	28d	0.003	0.006	0.004	0.010
	50d	0.001	0.004	0.001	0.007
	100d	0.000	0.002	0.000	0.004
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	Not required since DT50 in soil is <100d	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		-	-	-	-

Table 8.6-19: PEC_{soil} for IM-1-2 on apples, 2 x 25 g as/ha (use no. 5, 6, 16, 22, 23, 25, 29, 32)

PEC _{soil} (mg/kg)		Apple			
		1 x 25 g/ha		2 x 25 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.007	-	0.007	-
Short term	24h	0.005	0.006	0.005	0.006
	2d	0.003	0.005	0.004	0.005
	4d	0.002	0.004	0.002	0.004
Long term	7d	0.001	0.003	0.001	0.003
	14d	0.000	0.001	0.000	0.001
	21d	0.000	0.001	0.000	0.001
	28d	0.000	0.001	0.000	0.001
	50d	0.000	0.000	0.000	0.000
	100d	0.000	0.000	0.000	0.000
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	Not required since DT50 in soil is <100d	-
PEC _{accumulation}		-	-	-	-

(PEC _{act} +PEC _{background})				
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Table 8.6-20: PEC_{soil} for IM-1-4 on apples, 2 x 25 g as/ha (use no. 5, 6, 16, 22, 23, 25, 29, 32)

PEC _{soil} (mg/kg)		Apple			
		1 x 25 g/ha		2 x 25 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.006	-	0.012	-
Short term	24h	0.006	0.006	0.012	0.012
	2d	0.006	0.006	0.012	0.012
	4d	0.006	0.006	0.011	0.012
Long term	7d	0.006	0.006	0.011	0.011
	14d	0.006	0.006	0.011	0.011
	21d	0.005	0.006	0.011	0.011
	28d	0.005	0.006	0.010	0.011
	50d	0.005	0.005	0.009	0.010
	100d	0.004	0.005	0.007	0.009
Background concentration (5 cm) after 10 years		0.001	-	0.002	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		0.007	-	0.014	-

Table 8.6-21: PEC_{soil} for IM-1-5 on apples, 2 x 25 g as/ha (use no. 5, 6, 16, 22, 23, 25, 29, 32)

PEC _{soil} (mg/kg)		Apple			
		1 x 25 g/ha		2 x 25 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.004	-
Short term	24h	0.002	0.002	0.004	0.004
	2d	0.002	0.002	0.004	0.004
	4d	0.002	0.002	0.004	0.004
Long term	7d	0.002	0.002	0.004	0.004
	14d	0.002	0.002	0.004	0.004
	21d	0.002	0.002	0.004	0.004
	28d	0.002	0.002	0.004	0.004
	50d	0.002	0.002	0.004	0.004
	100d	0.002	0.002	0.004	0.004
Background concentration (5 cm) after 10 years		0.007	-	0.014	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		0.009	-	0.018	-

Table 8.6-22: PEC_{soil} for IC-0 on apples, 2 x 25 g as/ha (use no. 5, 6, 16, 22, 23, 25, 29, 32)

PEC _{soil}	Apple
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(mg/kg)		1 x 25 g/ha		2 x 25 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.001	-	0.001	-
Short term	24h	0.001	0.001	0.001	0.001
	2d	0.001	0.001	0.001	0.001
	4d	0.001	0.001	0.001	0.001
Long term	7d	0.000	0.001	0.001	0.001
	14d	0.000	0.000	0.000	0.001
	21d	0.000	0.000	0.000	0.000
	28d	0.000	0.000	0.000	0.000
	50d	0.000	0.000	0.000	0.000
	100d	0.000	0.000	0.000	0.000
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	Not required since DT50 in soil is <100d	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum sweet cherry sour, cherry, peach, nectarine, apricot)

Table 8.6-23: PEC_{soil} for acetamiprid on apple, 25 g as/ha (use no. 7, 8, 15, 17, 18, 20, 21, 26, 28, 30, 31, 33, 35, 37, 38, 39)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.013	-	-	-
Short term	24h	0.013	0.013	-	-
	2d	0.012	0.013	-	-
	4d	0.011	0.012	-	-
Long term	7d	0.009	0.011	-	-
	14d	0.006	0.009	-	-
	21d	0.004	0.008	-	-
	28d	0.003	0.007	-	-
	50d	0.001	0.005	-	-
	100d	0.000	0.002	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Table 8.6-24: PEC_{soil} for IM-1-2 on apple 25 g as/ha (use no. 7, 8, 15, 17, 18, 20, 21, 26, 28, 30, 31, 33, 35, 37, 38, 39)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.008	-	-	-
Short term	24h	0.006	0.007	-	-
	2d	0.004	0.006	-	-
	4d	0.002	0.004	-	-
Long term	7d	0.001	0.003	-	-
	14d	0.000	0.002	-	-
	21d	0.000	0.001	-	-
	28d	0.000	0.001	-	-
	50d	0.000	0.000	-	-
	100d	0.000	0.000	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		-	-	-	-

Table 8.6-25: PEC_{soil} for IM-1-4 on apple 25 g as/ha (use no. 7, 8, 15, 17, 18, 20, 21, 26, 28, 30, 31, 33, 35, 37, 38, 39)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.0079	-	-	-
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	0.006	0.007	-	-
	21d	0.006	0.006	-	-
	28d	0.006	0.006	-	-
	50d	0.005	0.006	-	-
	100d	0.004	0.005	-	-
Background concentration (5 cm) after 10 years		0.001	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		0.008	-	-	-

Table 8.6-26: PEC_{soil} for IM-1-5 on apple, 25 g as/ha (use no. 7, 8, 15, 17, 18, 20, 21, 26, 28, 30, 31, 33, 35, 37, 38, 39)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	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	-	-
Background concentration (5 cm) after 10 years		0.009	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		0.011	-	-	-

Table 8.6-27: PEC_{soil} for IC-0 on apple, 25 g as/ha (use no. 7, 8, 15, 17, 18, 20, 21, 26, 28, 30, 31, 33, 35, 37, 38, 39)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	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	0.000	0.001	-	-
	14d	0.000	0.001	-	-
	21d	0.000	0.000	-	-
	28d	0.000	0.000	-	-
	42d	0.000	0.000	-	-
	50d	0.000	0.000	-	-
	100d	0.001	0.001	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		-	-	-	-

Apples (*pear, chinese pear*)

Table 8.6-28: PEC_{soil} for acetamiprid on apple, 27 g as/ha (use no. 24)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.013	-	-	-
Short term	24h	0.012	0.012	-	-
	2d	0.011	0.012	-	-
	4d	0.010	0.011	-	-
Long term	7d	0.009	0.011	-	-
	14d	0.006	0.009	-	-
	21d	0.004	0.008	-	-
	28d	0.003	0.007	-	-
	50d	0.001	0.004	-	-
	100d	0.000	0.002	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Table 8.6-29: PEC_{soil} for IM-1-2 on apple, 27 g as/ha (use no. 24)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.007	-	-	-
Short term	24h	0.005	0.006	-	-
	2d	0.004	0.005	-	-
	4d	0.002	0.004	-	-
Long term	7d	0.001	0.003	-	-
	14d	0.000	0.001	-	-
	21d	0.000	0.001	-	-
	28d	0.000	0.001	-	-
	50d	0.000	0.000	-	-
	100d	0.000	0.000	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Table 8.6-30: PEC_{soil} for IM-1-4 on apple, 27 g as/ha (use no. 24)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	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	0.004	0.005	-	-
Background concentration (5 cm) after 10 years		0.001	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		0.008	-	-	-

Table 8.6-31: PEC_{soil} for IM-1-5 on apple, 27 g as/ha (use no. 24)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	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	-	-
Background concentration (5 cm) after 10 years		0.008	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		0.010	-	-	-

Table 8.6-32: PEC_{soil} for IC-0 on apple, 27 g as/ha (use no. 24)

PEC _{soil} (mg/kg)		Apple	
		Single application	Multiple applications

		Actual	TWA	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	0.000	0.001	-	-
	14d	0.000	0.000	-	-
	21d	0.000	0.000	-	-
	28d	0.000	0.000	-	-
	50d	0.000	0.000	-	-
	100d	0.000	0.000	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Apples (wild apple, pear, chinese pear, plum, sweet cherry sour, cherry, peach, nectarine, apricot, hazelnut, walnut, common osier, purple willow)

Table 8.6-33: PEC_{soil} for acetamiprid on apples, 2 x 22 g as/ha (use no. 19, 27, 34, 36, 40, 44, 45, 46)

PEC _{soil} (mg/kg)		Apple			
		1 x 22 g/ha		2 x 22 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.012	-	0.020	-
Short term	24h	0.011	0.011	0.019	0.019
	2d	0.011	0.011	0.018	0.019
	4d	0.009	0.011	0.016	0.018
Long term	7d	0.008	0.010	0.014	0.017
	14d	0.006	0.008	0.009	0.014
	21d	0.004	0.007	0.006	0.012
	28d	0.003	0.006	0.004	0.010
	50d	0.001	0.004	0.001	0.007
	100d	0.000	0.002	0.000	0.004
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	Not required since DT50 in soil is <100d	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Table 8.6-34: PEC_{soil} for IM-1-2 on apples, 2 x 22 g as/ha (use no. 19, 27, 34, 36, 40, 44, 45, 46)

PEC _{soil} (mg/kg)		Apple			
		1 x 22 g/ha		2 x 22 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.007	-	0.008	-
Short term	24h	0.005	0.006	0.005	0.006
	2d	0.003	0.005	0.004	0.005
	4d	0.002	0.004	0.002	0.004
Long term	7d	0.001	0.003	0.001	0.003
	14d	0.000	0.001	0.000	0.001
	21d	0.000	0.001	0.000	0.001
	28d	0.000	0.001	0.000	0.001
	50d	0.000	0.000	0.000	0.000
	100d	0.000	0.000	0.000	0.000
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	Not required since DT50 in soil is <100d	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		-	-	-	-

Table 8.6-35: PEC_{soil} for IM-1-4 on apples, 2 x 22 g as/ha (use no. 19, 27, 34, 36, 40, 44, 45, 46)

PEC _{soil} (mg/kg)		Apple			
		1 x 22 g/ha		2 x 22 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.006	-	0.012	-
Short term	24h	0.006	0.006	0.012	0.012
	2d	0.006	0.006	0.012	0.012
	4d	0.006	0.006	0.011	0.012
Long term	7d	0.006	0.006	0.011	0.011
	14d	0.006	0.006	0.011	0.011
	21d	0.005	0.006	0.011	0.011
	28d	0.005	0.006	0.010	0.011
	50d	0.005	0.005	0.009	0.010
	100d	0.004	0.005	0.007	0.009
Background concentration (5 cm) after 10 years		0.001	-	0.002	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		0.007	-	0.014	-

Table 8.6-36: PEC_{soil} for IM-1-5 on apples, 2 x 22 g as/ha (use no. 19, 27, 34, 36, 40, 44, 45, 46)

PEC_{soil} (mg/kg)		Apple			
		1 x 22 g/ha		2 x 22 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.002	-	0.004	-
Short term	24h	0.002	0.002	0.004	0.004
	2d	0.002	0.002	0.004	0.004
	4d	0.002	0.002	0.004	0.004
Long term	7d	0.002	0.002	0.004	0.004
	14d	0.002	0.002	0.004	0.004
	21d	0.002	0.002	0.004	0.004
	28d	0.002	0.002	0.004	0.004
	50d	0.002	0.002	0.004	0.004
	100d	0.002	0.002	0.004	0.004
Background concentration (5 cm) after 10 years		0.007	-	0.014	-
$PEC_{accumulation}$ ($PEC_{act} + PEC_{background}$)		0.009	-	0.018	-

Table 8.6-37: PEC_{soil} for IC-0 on apples, 2 x 22 g as/ha (use no. 19, 27, 34, 36, 40, 44, 45, 46)

PEC_{soil} (mg/kg)		Apple			
		1 x 22 g/ha		2 x 22 g/ha	
		Actual	TWA	Actual	TWA
Initial		0.001	-	0.001	-
Short term	24h	0.001	0.001	0.001	0.001
	2d	0.001	0.001	0.001	0.001
	4d	0.001	0.001	0.001	0.001
Long term	7d	0.000	0.001	0.001	0.001
	14d	0.000	0.000	0.000	0.001
	21d	0.000	0.000	0.000	0.000
	28d	0.000	0.000	0.000	0.000
	50d	0.000	0.000	0.000	0.000
	100d	0.000	0.000	0.000	0.000
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	Not required since DT50 in soil is <100d	-
$PEC_{accumulation}$ ($PEC_{act} + PEC_{background}$)		-	-	-	-

Apples (Forest and ornamental nurseries plants, restockings, afforestations and forest trees' seed plantations; Christmas trees grown on plantations)

Table 8.6-38: PEC_{soil} for acetamiprid on apple, 38 g as/ha (use no. 9, 47)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.020	-	-	-
Short term	24h	0.019	0.020	-	-
	2d	0.018	0.019	-	-
	4d	0.016	0.018	-	-
Long term	7d	0.014	0.017	-	-
	14d	0.010	0.014	-	-
	21d	0.007	0.012	-	-
	28d	0.005	0.011	-	-
	50d	0.001	0.007	-	-
	100d	0.000	0.004	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d		-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		-	-	-	-

Table 8.6-39: PEC_{soil} for IM-1-2 on apple, 38 g as/ha (use no. 9, 47)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	Actual	TWA
Initial		0.012	-	-	-
Short term	24h	0.008	0.010	-	-
	2d	0.006	0.009	-	-
	4d	0.003	0.006	-	-
Long term	7d	0.001	0.004	-	-
	14d	0.000	0.002	-	-
	21d	0.000	0.002	-	-
	28d	0.000	0.001	-	-
	50d	0.000	0.001	-	-
	100d	0.000	0.000	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d		-	-

PEC _{accumulation} (PEC _{act} +PEC _{background})	-	-	-	-
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Table 8.6-40: PEC_{soil} for IM-1-4 on apple, 38 g as/ha (use no. 9, 47)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	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	0.009	0.010	-	-
	28d	0.009	0.010	-	-
	50d	0.008	0.009	-	-
	100d	0.006	0.008	-	-
Background concentration (5 cm) after 10 years		0.012	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		0.002	-	-	-

Table 8.6-41: PEC_{soil} for IM-1-5 on apple, 38 g as/ha (use no. 9, 47)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	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	0.003	0.004	-	-
	100d	0.003	0.003	-	-
Background concentration (5 cm) after 10 years		0.012	-	-	-
PEC _{accumulation} (PEC _{act} +PEC _{background})		0.016	-	-	-

Table 8.6-42: PEC_{soil} for IC-0 on apple, 38 g as/ha (use no. 9, 47)

PEC _{soil} (mg/kg)		Apple			
		Single application		Multiple applications	
		Actual	TWA	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	0.000	0.001	-	-
	21d	0.000	0.001	-	-
	28d	0.000	0.000	-	-
	50d	0.000	0.000	-	-
	100d	0.000	0.000	-	-
Background concentration (5 cm) after 10 years		Not required since DT50 in soil is <100d	-	-	-
PEC _{accumulation} (PEC _{act} + PEC _{background})		-	-	-	-

8.6.2.2 PEC_{soil} of Acetamipryd 200 SL

Table 8.6-43: PEC_{soil} for Acetamipryd 200 SL

Crop	Active substance	Application rate (g/ha)	PEC _{act} (mg/kg)	PEC _{twa21 d} (mg/kg)	PEC _{soil, back-ground} (mg/kg)	PEC _{accu} = PEC _{act} + PEC _{soil, back-ground} (mg/kg)
Winter oilseed rape/spring oilseed rape/turnip rape	acetamiprid	50	0.013	NR	NR	NR
	Acetamipryd 200 SL	286	0.076	NR	NR	NR
Spring oilseed rape/turnip rape/ flax/ hemp	acetamiprid	60	0.016	NR	NR	NR
	Acetamipryd 200 SL	343.2	0.092	NR	NR	NR
Potato	acetamiprid	24	0.013	NR	NR	NR
	Acetamipryd 200 SL	137.3	0.073	NR	NR	NR
Apples (wild apple, pear, chinese pear, plum, sweet cherry sour, cherry, peach, nectarine,	acetamiprid	2 × 25	0.02	NR	NR	NR
	Acetamipryd 200	2 × 143	0.113	NR	NR	NR

Crop	Active substance	Application rate (g/ha)	PEC _{act} (mg/kg)	PEC _{twa21 d} (mg/kg)	PEC _{soil, back-ground} (mg/kg)	PEC _{accu} = PEC _{act} + PEC _{soil, back-ground} (mg/kg)
<i>apricot, hazelnut, walnut, common osier, purple willow)</i>	SL					
Apples (<i>apple, wild apple, pear, chinese pear, quince, medlar, plum sweet cherry sour, cherry, peach, nectarine, apricot</i>)	acetamiprid	25	0.013	NR	NR	NR
	Acetamipryd 200 SL	143	0.076	NR	NR	NR
Apples (<i>wild apple, pear, chinese pear, plum, sweet cherry sour, cherry, peach, nectarine, apricot, hazelnut, walnut, common osier, purple willow</i>)	acetamiprid	2 × 22	0.2	NR	NR	NR
	Acetamipryd 200 SL	2 × 125.8	0.113	NR	NR	NR
Apple, Forest and ornamental nurseries plants, restockings, afforestations and forest trees' seed plantations; Christmas trees grown on plantations	acetamiprid	38	0.020	NR	NR	NR
	Acetamipryd 200 SL	217.4	0.116	NR	NR	NR

The application rate of the formulation was calculated based on density of 1.144 g/mL

zRMS comments:

The application pattern presented in Table 8.7-1 and assumed in the soil exposure assessment is in line with the Central Zone GAP presented in Table 8.1-1.
Relevant crop interception in line with FOCUS groundwater guidance (2021) have been selected.
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 results reported in tables above may be used for the soil risk assessment purposes.
The PECs for formulation are accepted by zRMS and included in Table 8.6-44.

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

8.7.1 Justification for new endpoints

All endpoints used for PEC ground water calculations are EU approved and were evaluated on EU level.

8.7.2 Acetamiprid and relevant metabolites (KCP 9.2.4.1)

PECgw simulations for acetamiprid and metabolites (IM-1-2, IM-1-4, IC-0 and IM-1-5) have been conducted with FOCUS PEARL 5.5.5, FOCUS PELMO 6.6.4 and MACRO 5.5.4 for all important scenarios, inclusive the representative ones for Poland (Hamburg, Kremsmünster & Chateaudun). Calculations of PECgw for active substance and its relevant metabolites at Tier 1 were provided with PUF = 0. ~~At Tier 2, for metabolite IM-1-5 the PUF = 0.5 was used.~~

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

Use No.	2	10	3	1	11	12	13, 14	4	5, 6, 16, 22, 23, 24, 25, 29, 32	7, 8, 15, 17, 18, 20, 21, 28, 30, 31, 33, 35, 37, 39	9	19, 26, 27, 34, 36, 38, 40, 44, 45, 46	47
Crop	Winter oilseed rape	Spring oilseed rape (turnip rape)	Winter oilseed rape	Winter oilseed rape	Spring oilseed rape (turnip rape)	Spring oilseed rape (turnip rape)	Winter oilseed rape (flax, common hemp)	Potato	Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum)	Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum, peach, nectarine, apricot, sour cherry, sweet cherry)	Apples (apple)	Apples (wild apple, pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier, purple willow)	Apples (Forest and ornamental nurseries plants, restockings, afforestation s and forest trees' seed plantations; Christmas trees grown on plantations)
Application rate (g as/ha)	acetamiprid 24 g/ha		Acetamiprid 24 g/ha	acetamiprid 50 g/ha		acetamiprid 60 g/ha	acetamiprid 60 g/ha	acetamiprid 24 g/ha	acetamiprid 27 g/ha ^a	acetamiprid 22 g/ha	acetamiprid 36 g/ha	acetamiprid 25 g/ha ^b	acetamiprid 40 g/ha ^c
BBCH	50		60	30		59	30	35	71	56	56	51	11
Number of applications/ interval (d)	1/-		1/-	1/-		1/-	1/-	1/-	2/7	1/-	1/-	2/7	1/-
Crop interception	80		80	80		80	80	60	65	60	60	60	60

(%)											
Frequency of application	annual										
Models used for calculation	FOCUS PEARL v5.5.5., FOCUS PELMO v6.6.4, FOCUS MACRO v5.5.4										

^a calculations covering uses with lower application rate 2×25 g as/ha

^b calculations covering uses with lower application rate 2×22 g as/ha and with single dose rate 1×25 g as/ha

^c calculations covering uses with lower application rate 38 g as/ha

PECgw modelling for some uses (use no. 5, 6, 16, 19, 22-27, 29, 32, 34, 36, 38, 40, 44, 45-47) has been conducted with slightly higher application rates than those in the GAP. Since PECsw modelling for higher rates is worse scenario it can be assumed that it fully covers the risk of surface water contamination from in the current GAP and further modelling is not required.

Table 8.7-2: Application dates used for groundwater risk assessment

Crop	Scenario	Application dates (absolute)
Winter oilseed rape 1 × 50 g as/ha BBCH 30	Châteaudun	11/03 (70)*
	Hamburg	18/04
	Kremsmünster	15/04
	Okehampton	09/04
	Piacenza	07/03
	Porto	29/12
Winter oilseed rape 1 × 24 g as/ha BBCH 50	Châteaudun	31/03 (90)*
	Hamburg	27/04
	Kremsmünster	25/04
	Okehampton	20/04
	Piacenza	27/03
	Porto	23/02
Winter oilseed rape 1 × 24 g as/ha BBCH 60	Châteaudun	20/04 (110)*
	Hamburg	05/05
	Kremsmünster	05/05
	Okehampton	30/04
	Piacenza	15/04
	Porto	20/04
Winter oilseed rape ^a (<i>flax, common hemp</i>) 1 × 60 g as/ha BBCH 30	Châteaudun	11/03 (70)*
	Hamburg	18/04
	Kremsmünster	15/04
	Okehampton	09/04
	Piacenza	07/03
	Porto	29/12
Spring oilseed rape 1 × 50 g as/ha BBCH 30	Châteaudun ^a	11/03 (70)*
	Hamburg ^a	18/04
	Kremsmünster ^a	15/04
	Jokioinen	13/06
	Okehampton	23/04
	Piacenza ^a	07/03
	Porto	27/04
Spring oilseed rape 1 × 24 g as/ha BBCH 50	Châteaudun ^a	31/03 (90)*
	Hamburg ^a	27/04
	Kremsmünster ^a	25/04

Crop	Scenario	Application dates (absolute)
	Jokioinen	24/06
	Okehampton	04/05
	Piacenza ^a	27/03
	Porto	14/05
Spring oilseed rape 1 × 60 g as/ha BBCH 59	Châteaudun ^a	18/04
	Hamburg ^a	04/05
	Kremsmünster ^a	04/05
	Jokioinen	04/07
	Okehampton	14/05
	Piacenza ^a	13/04
	Porto	29/05
Potato 1 × 24 g as/ha BBCH 35	Châteaudun	29/05 (149)*
	Hamburg	24/06
	Jokioinen	29/07
	Kremsmünster	24/06
	Okehampton	17/06
	Piacenza	17/05
	Porto	02/05
	Sevilla	09/03
	Thiva	08/04
Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum) 2 × 27 g as/ha BBCH 71	Châteaudun	06/06 (157)*-13/06 (164)*
	Hamburg	07/07-14/07
	Jokioinen	01/06-08/06
	Kremsmünster	07/07-14/07
	Okehampton	20/06-27/06
	Piacenza	08/06-15/06
	Porto	06/07-13/07
	Sevilla	07/06-14/06
	Thiva	06/07-13/07
Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum, peach, nectarine, apricot, sour cherry, sweet cherry) 1 × 22 g as/ha BBCH 56	Châteaudun	10/05 (130)*
	Hamburg	04/06
	Jokioinen	20/05
	Kremsmünster	04/06
	Okehampton	18/05
	Piacenza	10/05
	Porto	24/05
	Sevilla	04/05
	Thiva	24/05
Apples	Châteaudun	10/05 (130)*

Crop	Scenario	Application dates (absolute)
(apple) 1 × 36 g as/ha BBCH 56	Hamburg	04/06
	Jokioinen	20/05
	Kremsmünster	04/06
	Okehampton	18/05
	Piacenza	10/05
	Porto	24/05
	Sevilla	04/05
	Thiva	24/05
Apples (pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier, purple willow) 2 × 22 g as/ha BBCH 51	Châteaudun	03/05 (123)*-10/05 (130)*
	Hamburg	26/05-02/06
	Jokioinen	18/05-25/05
	Kremsmünster	26/05-02/06
	Okehampton	08/05-15/05
	Piacenza	03/05-10/05
	Porto	11/05-18/05
	Sevilla	25/04-02/05
	Thiva	11/05-18/05
Apples (Forest and ornamental nurseries plants, restockings, afforestations and forest trees' seed plantations; Christmas trees grown on plantations) 1 × 38 g as/ha BBCH 11	Châteaudun	03/04 (93)*
	Hamburg	18/04
	Jokioinen	11/05
	Kremsmünster	18/04
	Okehampton	28/03
	Piacenza	03/04
	Porto	19/03
	Sevilla	18/03
	Thiva	19/03

*Respective Julian day in brackets

^a winter oilseed rape used as surrogate crop

Table 8.7-3: Input parameters related to active substance acetamiprid and its metabolites for PEC_{gw} calculations

Compound	acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5	Value in accordance with EU endpoint y/n/ Reference*
Molecular weight (g/mol)	222.68	240.69	156.61	157.55	197.66	EFSA Journal 2016;14(11):4610
Water solubility (g/mol):	2950 at 25°C	1 x 10 ⁶ at 25°C	1 x 10 ⁶ at 25°C	1 x 10 ⁶ at 25°C	1 x 10 ⁶ at 25°C	EFSA Journal 2016;14(11):4610

Compound	acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5	Value in accordance with EU endpoint y/n/ Reference*
Saturated vapour pressure (Pa):	1 x 10 ⁻⁶ at 20°C	1 x 10 ⁻⁸ at 20°C	1 x 10 ⁻⁸ at 20°C	1 x 10 ⁻⁸ at 20°C	1 x 10 ⁻⁸ at 20°C	EFSA Journal 2016;14(11):4610
DT ₅₀ in soil (d)	1.45 (geomean, normalisation to 10 kPa or pF2, 20 °C with Q ₁₀ of 2.58, n=7)	1.7 (geomean, normalisation to 10 kPa or pF2, 20 °C with Q ₁₀ of 2.58, n=3)	14.6 (geomean, normalisation to 10 kPa or pF2, 20 °C with Q ₁₀ of 2.58, n=7)	2.7 (geomean, normalisation to 10 kPa or pF2, 20 °C with Q ₁₀ of 2.58, n=7)	495 (geomean, normalisation to 10 kPa or pF2, 20 °C with Q ₁₀ of 2.58, n=7)	EFSA Journal 2016;14(11):4610
Transformation rate	0.368085 to IM-1-2 0.071705 to IM-1-5	0.293568 to IM-1-4	0.031809 to IC-0	0.256721 to sink	0.0014 to sink	PELMO: (ln(2)/DT ₅₀)xFF
K _{foc} (mL/g)/K _{fom}	102/59.2 (geomean, n=5)	42/24.4 (geomean, n=4)	167/96.9 (geomean, n=4)	106/61.5 (geomean, n=5)	308/178.6 (geomean, n=5)	EFSA Journal 2016;14(11):4610
1/n	0.86 (arithmetic mean, n=5)	0.9 (arithmetic mean, n=4)	0.764 (arithmetic mean, n=4)	0.953 (arithmetic mean, n=5)	0.886 (arithmetic mean, n=4)	EFSA Journal 2016;14(11):4610
Plant uptake factor	Tier 1: 0	Tier 1: 0	Tier 1: 0	Tier 1: 0	Tier 1: 0 Tier: 0.5	Default
Formation fraction	-	0.77 from parent	0.72 from IM-1-2	0.67 from IM-1-4	0.15 from parent	EFSA Journal 2016;14(11):4610
Conversion factor for MACRO	-	0.832	0.390	0.263	0.133	Calculated*

*Calculated as: Formation fraction x Molar Mass Metabolite / Molar Mass Parent

Tier 1

Table 8.7-4: PEC_{gw} for acetamiprid and its metabolites on winter and spring oilseed rape with FOCUS PEARL 5.5.5 (tier 1)

Crop	Scenario	80 th Percentile PEC _{gw} at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
Winter oilseed rape 1×50 g as/ha BBCH 30	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.006201
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.027438
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.020047
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.026455
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.013421
	Porto	<0.001	<0.001	<0.001	<0.001	0.015092
Winter oilseed rape 1×24 g as/ha	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.001365
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.009865
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.007099

BBCH 50	Okehampton	<0.001	<0.001	<0.001	<0.001	0.010248
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.004854
	Porto	<0.001	<0.001	<0.001	<0.001	0.005448
Winter oilseed rape 1×24 g as/ha BBCH 60	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.001326
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.009815
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.007052
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.010264
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.004800
	Porto	<0.001	<0.001	<0.001	<0.001	0.005298
Winter oilseed rape^a (<i>Flax, common hemp</i>) 1 × 60 g as/ha BBCH 30	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.086163
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.035188
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.025648
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.033349
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.017275
	Porto	<0.001	<0.001	<0.001	<0.001	0.019243
Spring oilseed rape (<i>Turnip rape</i>) 1 × 50 g as/ha BBCH 30	Châteaudun ^a	<0.001	<0.001	<0.001	<0.001	0.006201
	Hamburg ^a	<0.001	<0.001	<0.001	<0.001	0.027438
	Kremsmünster ^a	<0.001	<0.001	<0.001	<0.001	0.020047
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000000
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.024089
	Piacenza ^a	<0.001	<0.001	<0.001	<0.001	0.013421
	Porto	<0.001	<0.001	<0.001	<0.001	0.012841
Spring oilseed rape (<i>Turnip rape</i>) 1 × 24 g as/ha BBCH 50	Châteaudun ^a	<0.001	<0.001	<0.001	<0.001	0.001365
	Hamburg ^a	<0.001	<0.001	<0.001	<0.001	0.009865
	Kremsmünster ^a	<0.001	<0.001	<0.001	<0.001	0.007099
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000000
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.008978
	Piacenza ^a	<0.001	<0.001	<0.001	<0.001	0.004854
	Porto	<0.001	<0.001	<0.001	<0.001	0.004647
Spring oilseed rape (<i>Turnip rape</i>) 1 × 60 g as/ha BBCH 59	Châteaudun ^a	<0.001	<0.001	<0.001	<0.001	0.008479
	Hamburg ^a	<0.001	<0.001	<0.001	<0.001	0.035188
	Kremsmünster ^a	<0.001	<0.001	<0.001	<0.001	0.025592
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000000
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.030614
	Piacenza ^a	<0.001	<0.001	<0.001	<0.001	0.016903
	Porto	<0.001	<0.001	<0.001	<0.001	0.016371

^a winter oilseed rape as surrogate crop

Table 8.7-5: PEC_{gw} for acetamiprid and its metabolites on winter oilseed rape with FO-CUS PELMO 6.6.4.

Crop	Scenario	80 th Percentile PEC _{gw} at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
Winter oilseed rape 1×50 g as/ha BBCH 30	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.000
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.002
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.007
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.010
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.011
	Porto	<0.001	<0.001	<0.001	<0.001	0.014
Winter oilseed rape 1×24 g as/ha BBCH 50	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.000
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.001
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.002
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.003
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.005
	Porto	<0.001	<0.001	<0.001	<0.001	0.005
Winter oilseed rape 1×24 g as/ha BBCH 60	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.000
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.001
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.001
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.004
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.005
	Porto	<0.001	<0.001	<0.001	<0.001	0.003
Winter oilseed rape^a (<i>Flax, common hemp</i>) 1 × 60 g as/ha BBCH 30	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.000
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.003
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.008
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.014
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.015
	Porto	<0.001	<0.001	<0.001	<0.001	0.019
Spring oilseed rape (<i>Turnip rape</i>) 1 × 50 g as/ha BBCH 30	Châteaudun ^a	<0.001	<0.001	<0.001	<0.001	0.000
	Hamburg ^a	<0.001	<0.001	<0.001	<0.001	0.002
	Kremsmünster ^a	<0.001	<0.001	<0.001	<0.001	0.007
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.009
	Piacenza ^a	<0.001	<0.001	<0.001	<0.001	0.011
	Porto	<0.001	<0.001	<0.001	<0.001	0.027
Spring oilseed rape (<i>Turnip rape</i>) 1 × 24 g as/ha BBCH 50	Châteaudun ^a	<0.001	<0.001	<0.001	<0.001	0.000
	Hamburg ^a	<0.001	<0.001	<0.001	<0.001	0.001
	Kremsmünster ^a	<0.001	<0.001	<0.001	<0.001	0.002
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000

	Okehampton	<0.001	<0.001	<0.001	<0.001	0.003
	Piacenza ^a	<0.001	<0.001	<0.001	<0.001	0.005
	Porto	<0.001	<0.001	<0.001	<0.001	0.008
Spring oilseed rape (<i>Turnip rape</i>) 1 × 60 g as/ha BBCH 59	Châteaudun ^a	<0.001	<0.001	<0.001	<0.001	0.000
	Hamburg ^a	<0.001	<0.001	<0.001	<0.001	0.003
	Kremsmünster ^a	<0.001	<0.001	<0.001	<0.001	0.007
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.013
	Piacenza ^a	<0.001	<0.001	<0.001	<0.001	0.020
	Porto	<0.001	<0.001	<0.001	<0.001	0.030

^a winter oilseed rape as surrogate crop

Table 8.7-6: PEC_{gw} for acetamiprid and its metabolites on potato (with FOCUS PEARL 5.5.5./PELMO 6.6.4., tier 1)

Crop	Scenario	80 th Percentile PEC _{gw} at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
FOCUS PEARL 5.5.5.						
Potato 1 × 24 g as/ha BBCH 35	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.008125
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.017033
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000000
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.013535
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.021422
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.016629
	Porto	<0.001	<0.001	<0.001	<0.001	0.009152
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.000249
	Thiva	<0.001	<0.001	<0.001	<0.001	0.004395
PELMO 6.6.4.						
Potato 1 × 24 g as/ha BBCH 35	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.001
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.001
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.001
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.003
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.015
	Porto	<0.001	<0.001	<0.001	<0.001	0.006
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.000
	Thiva	<0.001	<0.001	<0.001	<0.001	0.002

Table 8.7-7: PEC_{gw} for acetamiprid and its metabolites on apple with FOCUS PEARL 5.5.5. (tier 1)

Crop	Scenario	80 th Percentile PEC _{gw} at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum) 2 × 27 g as/ha BBCH 71	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.094317
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.096212
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000039
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.063388
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.068396
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.089402
	Porto	<0.001	<0.001	<0.001	<0.001	0.039903
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.079187
	Thiva	<0.001	<0.001	<0.001	<0.001	0.113295
Apples (apple) 1 × 36 g as/ha BBCH 56	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.066368
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.066920
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000010
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.043906
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.048652
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.062144
	Porto	<0.001	<0.001	<0.001	<0.001	0.027282
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.055235
	Thiva	<0.001	<0.001	<0.001	<0.001	0.079622
Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum, peach, nectarine, apricot, sour cherry, sweet cherry) 1 × 22 g as/ha BBCH 56	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.034060
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.035058
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000000
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.022359
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.026068
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.032590
	Porto	<0.001	<0.001	<0.001	<0.001	0.014423
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.055235
	Thiva	<0.001	<0.001	<0.001	<0.001	0.041820
Apples (pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier, purple willow) 2 × 25 g as/ha BBCH 51	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.102411
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.103564
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000052
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.068018
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.073191
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.095308
	Porto	<0.001	<0.001	<0.001	<0.001	0.041442
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.087368

	Thiva	<0.001	<0.001	<0.001	<0.001	0.122248
Apples (Forest and ornamental nurseries plants, restockings, afforestations and forest trees' seed plantations; Christmas trees grown on plantations) 1 × 40 g as/ha BBCH 11	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.077390
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.075871
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000022
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.050775
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.055872
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.071351
	Porto	<0.001	<0.001	<0.001	<0.001	0.031435
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.065797
	Thiva	<0.001	<0.001	<0.001	<0.001	0.089807

Table 8.7-8: PEC_{gw} for acetamiprid and its metabolites on apple with PELMO 6.6.4 (tier 1)

Crop	Scenario	80 th Percentile PEC _{gw} at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum, peach, nectarine, apricot, sour cherry, sweet cherry) 2 × 27 g as/ha BBCH 71	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.026
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.005
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.012
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.019
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.080
	Porto	<0.001	<0.001	<0.001	<0.001	0.028
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.019
	Thiva	<0.001	<0.001	<0.001	<0.001	0.029
Apples 1 × 36 g as/ha BBCH 56	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.017
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.003
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.006
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.011
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.049
	Porto	<0.001	<0.001	<0.001	<0.001	0.022
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.018
	Thiva	<0.001	<0.001	<0.001	<0.001	0.030
Apples (apple, wild apple, pear, chinese pear, quince, medlar, plum, peach, nectarine, apricot, sour cherry, sweet cherry) 1 × 22 g as/ha	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.008
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.001
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.002
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.005
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.026
	Porto	<0.001	<0.001	<0.001	<0.001	0.011

BBCH 56	Sevilla	<0.001	<0.001	<0.001	<0.001	0.007
	Thiva	<0.001	<0.001	<0.001	<0.001	0.014
Apples <i>(pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier, purple willow)</i> 2 × 25 g as/ha BBCH 51	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.029
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.004
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.012
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.018
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.076
	Porto	<0.001	<0.001	<0.001	<0.001	0.039
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.030
	Thiva	<0.001	<0.001	<0.001	<0.001	0.000
Apples <i>(Forest and ornamental nurseries plants, restockings, afforestations and forest trees' seed plantations; Christmas trees grown on plantations)</i> 1 × 40 g as/ha BBCH 11	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.20
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.003
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.007
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.013
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.070
	Porto	<0.001	<0.001	<0.001	<0.001	0.032
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.024
	Thiva	<0.001	<0.001	<0.001	<0.001	0.056

Table 8.7-9: PEC_{gw} for acetamiprid and its metabolites (with MACRO 5.5.4)

Crop	Scenario	80 th Percentile PEC _{gw} at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
FOCUS MACRO						
Winter oilseed rape 1×24 g as/ha BBCH 50	Châteaudun	<0.001	-	-	-	0.000691
Winter oilseed rape 1×24 g as/ha BBCH 60	Châteaudun	<0.001	-	-	-	0.000679
Winter oilseed rape 1×50 g as/ha BBCH 30	Châteaudun	<0.001	-	-	-	0.00316
Winter oilseed rape 1×60 g as/ha BBCH 30	Châteaudun	<0.001	-	-	-	0.00454

Potato 1×24 g as/ha BBCH 35	Châteaudun	<0.001	-	-	-	0.0485
Apple 1×36 g as/ha BBCH 56	Châteaudun	<0.001	-	-	-	0.0256
Apple 1×22 g as/ha BBCH 56	Châteaudun	<0.001	-	-	-	0.0119
Apple 2×27 g as/ha BBCH 71	Châteaudun	<0.001	-	-	-	0.0389
Apple 2×25 g as/ha BBCH 51	Châteaudun	<0.001	-	-	-	0.0208
Apple 1×40 g as/ha BBCH 11	Châteaudun	<0.001	-	-	-	0.0183

Tier 2

Table 8.7-10: ———— PEC_{gw} for acetamiprid and its metabolites on apple with FOCUS PEARL 5.5.5. (tier 2)

Crop	Scenario	80 th -Percentile-PEC _{gw} -at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
Apples (apple,wild apple,pear, chinese-pear, quince,medlar, plum,peach) 2 × 27 g as/ha BBCH 71						
	Jokioinen	0.000000	0.000000	0.000000	0.000000	0.000028
	Okehampton	0.000000	0.000000	0.000000	0.000000	0.053429
	Piacenza	0.000000	0.000000	0.000000	0.000000	0.046920
	Porto	0.000000	0.000000	0.000000	0.000000	0.030827
	Sevilla	0.000000	0.000000	0.000000	0.000000	0.035872
	Thiva	0.000000	0.000000	0.000000	0.000000	0.051681

Table 8.7-11: ———— PEC_{gw} for acetamiprid and its metabolites on apple with FOCUS PEARL 5.5.5. (tier 2)

Crop	Scenario	80 th -Percentile-PEC _{gw} -at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
Apples (pear,chinese pear,plum; peach; nectarine; apricot,sour cherry,sweet						
	Jokioinen	0.000000	0.000000	0.000000	0.000000	0.000038

cherry, walnut, hazelnut, common osier, purple willow) 2 x 25 g as/ha BBCH 51	Okehampton	0.000000	0.000000	0.000000	0.000000	0.057037
	Piacenza	0.000000	0.000000	0.000000	0.000000	0.049704
	Porto	0.000000	0.000000	0.000000	0.000000	0.031838
	Sevilla	0.000000	0.000000	0.000000	0.000000	0.039303
	Thiva	0.000000	0.000000	0.000000	0.000000	0.055271

Conclusions

Based on FOCUS PEARL, PELMO and MACRO simulations values of PEC_{gw} for acetamiprid and its metabolites are far below the threshold concentration of 0.1 µg/L for all scenarios and crops with exception of metabolite IM-1-5. At tier 1, metabolite IM-1-5 showed PEC_{gw} value greater than trigger of 0.1 µg/L in some scenarios in some uses in apple. For uses in orchards: 2 x 27 g as/ha from BBCH 71 (apple, wild apple, pear, chinese pear, quince, medlar, plum) PEC_{gw} value in PEARL model for Thiva was 0.113295 µg/L. For uses in orchards 2 x 25 g as/ha, from BBCH 51 (apple, pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier and purple willow), PEC_{gw} value in PEARL model were for Châteaudun- 0.102411 µg/L, for Hamburg 0.103564 µg/L and for Thiva 0.122248 µg/L.

IM-1-5 metabolite only appears in calcareous soils with pH (water) > 8 and none of the FOCUS scenarios has pH greater than 8, only Châteaudun has pH = 8 and Hamburg has a pH of 6.5. Therefore, under realistic conditions this metabolite will never be found in Hamburg scenario. Further relevance evaluation of IM-1-5 was conducted in dRR Part 10.

At the request of the Polish Ministry of Agriculture and Rural Development and the evaluator, the PEC_{gw} calculations for the application of Acetamipryd 200 SL in orchards BBCH 51 (apple, pear, Chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier and purple willow) was performed again.

The existing modelling was done with envelope risk assessment for the worst case which strongly overestimated PEC_{gw} values i.e. it was assumed that modelling of application rate 2 x 25 g a.s./ha will cover either use 1 x 25 g a.s./ha or 2 x 22 g a.s./ha. The new modelling, presented in this dRR/RR update was done with the realistic application rates i.e. 1 x 25 g a.s./ha or 2 x 22 g a.s./ha (results in Table 8.8-13).

Table 8.7-12: Input parameters related to application for PEC_{gw} calculations

Use No.	19, 27, 34, 36, 40, 44, 45, 46 (realistic rate)	26, 38 (realistic rate)
Crop	Apples (wild apple, pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier, purple willow)	Apples (pear, chinese pear, sour cherry, sweet cherry)
Application rate (g as/ha)	acetamiprid 2 x 22 g/ha	acetamiprid 1 x 25 g/ha
BBCH	51	51
Number of applications/interval (d)	2/7	1/-
Crop interception (%)	60	
Frequency of application	annual	
Models used for calculation	FOCUS PEARL v5.5.5.	

Application dates used for PEC_{gw} modelling and input parameters related to active substance acetamiprid and its metabolites are in Table 8.8-2 and Table 8.8-3, respectively.

Table 8.7-13: PEC_{gw} for acetamiprid and its metabolites on apple with PEARL 5.5.5 (Tier 1)

Crop	Scenario	80 th Percentile PEC _{gw} at 1 m Soil Depth (µg/L)				
		acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5
Apples (wild apple, pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier, purple willow) 2 × 22 g as/ha, 7d BBCH 51 (uses: 19, 27, 34, 36, 40, 44, 45, 46)	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.086702
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.086927
	Jokioinen	<0.001	<0.001	<0.001	<0.001	0.000028
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.057419
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.062329
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.080797
	Porto	<0.001	<0.001	<0.001	<0.001	0.035220
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.073694
	Thiva	<0.001	<0.001	<0.001	<0.001	0.103659
Apples (wild apple, pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier, purple willow) 1 × 25 g as/ha, BBCH 51 (uses: 26, 38)	Châteaudun	<0.001	<0.001	<0.001	<0.001	0.040799
	Hamburg	<0.001	<0.001	<0.001	<0.001	0.041370
	Jokioinen	<0.001	<0.001	<0.001	<0.001	<0.001
	Kremsmünster	<0.001	<0.001	<0.001	<0.001	0.026808
	Okehampton	<0.001	<0.001	<0.001	<0.001	0.030640
	Piacenza	<0.001	<0.001	<0.001	<0.001	0.038845
	Porto	<0.001	<0.001	<0.001	<0.001	0.017083
	Sevilla	<0.001	<0.001	<0.001	<0.001	0.034438
	Thiva	<0.001	<0.001	<0.001	<0.001	0.122247

The new modelling with the realistic application rates, PEC_{gw} values for active substance and metabolites are below the trigger value of 0.1 µg/L indicating there is no unacceptable risk of groundwater contamination except of scenario Thiva for which further risk refinement at national level is needed.

zRMS comments:

The application pattern assumed in groundwater exposure calculations is in line with Central Zone GAP as presented in Table 8.1-1. Assumed crop interception corresponds with BBCH stages at which product is intended to be applied.

Since not all relevant to the central zone scenarios are defined for the evaluated crops modelling was performed with consideration of the surrogate crop in case missing scenarios.

Input parameters for acetamiprid and its metabolites presented in Table 8.8.1-3 are in line with EU agreed parameters reported in EFSA Journal 2016;14(11):4610 The groundwater modelling was performed 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.

However, for metabolite IM-1-5 systemic uptake was demonstrated in a rotational crop study where IM-1-5 was

applied. This study is evaluated in Volume 3 B.7 (AS). Therefore a default value of 0.5 for systemic substances was used for metabolite IM-1-5.

Taking this into account, the PUF value assumed in the course of acetamiprid EU renewal was a default value taken from the FOCUS groundwater guidance in place at the time of evaluation and is not substance specific.

Since finalisation of the renewal process the FOCUS groundwater guidance was updated (in 2014 and 2021) and currently PUF of 0 must be used for all compounds, regardless if systemic or not. Refinement of this parameter is possible only on the basis of the respective data specific for the substance under.

On the basis of the obtained results no unacceptable leaching of acetamiprid and its metabolites is expected following annual application of acetamiprid 200 SL to uses proposed in GAP, except IM-1-5 metabolite. Based on FOCUS PEARL and PELMO and MACRO simulations values of PEC_{gw} for acetamiprid and its metabolites are far below the threshold concentration of 0.1 µg/L for all scenarios and crops. Only the PEC_{gw} of metabolite IM-1-5 exceeded 0.1 µg/L in some scenarios and some crops, however they all were <0.75 µg/L. In opinion zRMS no unacceptable risk for groundwater was identified.

However, mitigation measures has to be considered at National Level, to protect groundwater, do not apply in all scenarios (SPs 2) or the PEC_{gw} of metabolite IM-1-5 can be recalculated with other risk mitigation measure.

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

zRMS comments: February 2026

New PEC gw simulations have been accepted. They were performed using PUF = 0 and for uses proposed in GAP. Simulation values of PEC_{gw} for metabolite IM-1-5 are below the concentration threshold of 0.1 µg/L for all scenarios and crops. In opinion zRMS no unacceptable risk for groundwater was identified, except scenario Thiva. This scenario is not relevant for Poland.

8.8 Predicted Environmental Concentrations in surface water (PEC_{sw}) (KCP 9.2.5)

8.8.1 Justification for new endpoints

8.8.2 Active substance(s), relevant metabolite(s) and the formulation (KCP 9.2.5)

Table 8.8-1: Input parameters related to application for PEC_{SW/SED} calculations

Plant protection product	Acetamipryd 200 SL												
Use No.	1	11	2, 3	10	13, 14	12	4	5, 6, 16, 22, 23, 24, 25, 29, 32	19, 26, 27, 34, 36, 38, 40, 44, 45, 46	47	7, 8, 15, 17, 18, 20, 21, 28, 30, 31, 33, 35, 37, 39	9	41, 42, 43
Crop	Winter oilseed rape	Spring oilseed rape (turnip rape)	Winter oilseed rape	Spring oilseed rape (turnip rape)	Winter oilseed rape (flax, common hemp)	Spring oilseed rape (turnip rape)	Potato	Pome/stone fruit (apple, wild apple, pear, chinese pear, quince, medlar, plum)	Pome/stone fruit (wild apple, pear, chinese pear, plum, peach, nectarine, apricot, sour cherry, sweet cherry, walnut, hazelnut, common osier, purple willow)	Pome/stone fruit (forest and ornamental nurseries plants, restockings, afforestations and forest trees' seed plantations; Christmas trees grown on plantations)	Pome/stone fruit (apple, wild apple, pear, chinese pear, quince, medlar, plum, peach, nectarine, apricot, sour cherry, sweet cherry)	Pome/stone fruit	Greenhouses Tomato Aubergine Pepper
Application rate (g as/ha)	Acetamiprid 50 g/ha		Acetamiprid 24 g/ha		Acetamiprid 60 g/ha	Acetamiprid 60 g/ha	Acetamiprid 24 g/ha	Acetamiprid 27 g/ha ^a	Acetamiprid 25 g/ha ^b	Acetamiprid 40 g/ha ^c	Acetamiprid 22 g/ha	Acetamiprid 36 g/ha	Acetamiprid 0.06 g/ha (0.1% of application rate)
Number of applications/interval (d)	1/-		1/-		1/-	1/-	1/-	2/7	2/7	1/-	1/-	1/-	1/-
BBCH	30-50		50-69		30-61	59-71	35-75	71-84	51-73	11-69	56-84 ^d	56-84	20-89
Application window	North Europe: March-May, June-September Southern Europe: March-May, June-September		North Europe: March-May, June-September Southern Europe: March-May, June-September		North Europe: March-May, June-September Southern Europe: March-May, June-	North Europe: March-May, June-September Southern Europe: March-	North Europe: March-May, June-September Southern Europe: March-	pome/stone fruit, late application: North Europe: June-September, October-February	pome/stone fruit, early application: North Europe: March-May, June-September Southern	pome/stone fruit, early application: North Europe: March-May, June-September	pome/stone fruit, early application: North Europe: March-May, June-September Southern Europe: March-May, June-September pome/stone fruit, late application:		vegetables, fruiting North Europe: March-May, June-September Southern

			September	May, June-September	May, June-September	Southern Europe: June-September, October-February	Europe: March-May, June-September	Southern Europe: March-May, June-September	North Europe: June-September, October-February Southern Europe: June-September, October-February		Europe: March-May, June-September
Crop interception	Average crop cover	Full canopy	Average crop cover	Full canopy	Average crop cover	Full canopy	Full canopy	Minimal crop cover	Full canopy	Full canopy	Full canopy
Application method	Foliar spray					Air blast					
CAM (Chemical application method)	2										
Soil depth (cm)	4										
Models used for calculation	FOCUS STEP12 v 3.2, FOCUS SWASH v5.3, FOCUS PRZM v4.3.1, FOCUS MACRO v5.5.4, FOCUS TOXSWA v5.5.3, ECPA SWAN v5.0.1, VFSmod										

^a calculations covering also uses with lower application rate 2 × 25 g as/ha

^b calculations covering also uses with single dose rate 1 × 25 g as/ha and narrower application timing, lower application rate- 2 × 22 g as/ha and narrower application timings

^c calculations covering also uses with lower application rate 38 g as/ha

^d calculations covering also uses with narrower application timings

The application windows used in SWASH v5.3 for all crops were chosen based on the model AppDate v.3.06. For winter and spring oilseed rape and potato, the corresponding earliest (begin of application window) BBCH and latest BBCH (end application window) values were chosen as given in the GAP. For early and late application to apple, the same application windows covering the entire range of BBCH were chosen. For apple, the end date of the application window was set to the date given for BBCH 85 by AppDate.

The dossier has been updated with additional PEC_{sw} modelling for greenhouse use (use 41, 42, 43) with FOCUS STEPS 1-2 v3.2. In the modelling it was assumed that 0.1% of the applied field rate is released into the environment during greenhouse use, and for this value, PEC_{sw} for the active substance and metabolites were determined in steps 1 and 2. The obtained PEC_{sw} values were used in further aquatic organisms risk assessment.

Table 8.8-2: FOCUS Step 3 Scenario related input parameters for PEC_{sw/sed} calculations for the application of Acetamipryd 200 SL

Crop	Scenario	Application window used in modelling
Winter oilseed rape 1×50 g as/ha BBCH 30-50	D2	10/03 (69) - 28/05 (148)
	D3	21/02 (52) – 09/05 (129)
	D4	01/03 (60) – 18/05 (138)
	D5	01/03 (60) – 05/05 (125)
	R1	15/04 (105) - 04/06 (155)
	R3	07/03 (66) – 28/04 (118)
Winter oilseed rape 1×24 g as/ha BBCH 50-69	D2	28/04 (118) – 24/07 (205)
	D3	09/04 (99) - 11/07 (192)
	D4	18/04 (108) - 25/07 (206)
	D5	05/04 (95) - 26/06 (177)
	R1	05/05 (125) - 08/07 (189)
	R3	29/03 (88) - 03/06 (154)
Winter oilseed rape ^a (<i>flax, common hemp</i>) 1×60 g as/ha BBCH 30-61	D2	10/03 (69) – 16/07 (197)
	D3	21/02 (52) – 26/06 (177)
	D4	01/03 (60) - 07/07 (188)
	D5	01/03 (60) – 11/06 (162)
	R1	15/04 (105) - 26/06 (177)
	R3	07/03 (66) – 22/05 (142)
Spring oilseed rape (<i>turnip rape</i>) 1×50 g as/ha BBCH 30-50	D1	12/06 (163) - 23/07 (204)
	D3	14/05 (134) - 29/06 (180)
	D4	25/05 (145) - 06/07 (187)
	D5	20/04 (110) - 07/06 (158)
	R1	10/05 (130) – 23/06 (174)
Spring oilseed rape (<i>turnip rape</i>) 1×24 g as/ha BBCH 50-69	D1	23/07 (204) – 23/08 (235)
	D3	29/06 (180) – 05/08 (217)
	D4	06/07 (187) – 09/08 (221)
	D5	07/06 (158) – 14/07 (195)
	R1	23/06 (174) – 28/07 (209)
Spring oilseed rape (<i>turnip rape</i>) 1×60 g as/ha BBCH 59-71	D1	03/07 (184) - 27/08 (239)
	D3	13/06 (164) - 10/08 (222)
	D4	16/06 (167) -14/08 (226)
	D5	23/05 (143) - 18/07 (199)
	R1	06/06 (157) - 01/08 (213)
Potato 1×24 g as/ha BBCH 35-75	D3	24/06 (175) - 17/09 (260)
	D4	18/07 (199) - 07/10 (280)
	D6	12/05 (132) - 22/07 (203)

Crop	Scenario	Application window used in modelling	
	R1	06/06 (157) - 01/09 (244)	
	R2	02/05 (122) - 07/07 (188)	
	R3	12/05 (132) - 15/08 (227)	
		Early application	
Pome/stone fruit 2×25 g as/ha BBCH 51-73	D3	26/05 (146) - 25/08 (237)	
	D4	30/05 (150) - 29/08 (241)	
	D5	03/05 (123) - 27/07 (208)	
	R1	26/05 (146) - 25/08 (237)	
	R2	27/05 (147) - 15/09 (258)	
	R3	03/05 (123) - 28/07 (209)	
	R4	25/04 (115) – 28/07 (209)	
		Early application	
Pome/stone fruit 1×40 g as/ha BBCH 11-69	D3	18/04 (108) - 29/07 (210)	
	D4	23/04 (113) - 02/08 (219)	
	D5	03/04 (93) – 29/06 (180)	
	R1	18/04 (108) - 29/07 (210)	
	R2	19/03 (78) – 27/08 (239)	
	R3	03/04 (93) - 29/06 (180)	
	R4	18/03 (77) – 28/06 (179)	
		Late application	
Pome/stone fruit 2×27 g as/ha BBCH 71-84	D3	07/07 (188) - 06/11 (310)	
	D4	11/07 (192) - 07/11 (311)	
	D5	07/06 (158) – 14/10 (287)	
	R1	07/07 (188) - 06/11 (310)	
	R2	03/08 (215) – 22/10 (295)	
	R3	07/06 (158) – 18/10 (291)	
	R4	07/06 (158) – 18/10 (291)	
		Early application	Late application
Pome/stone fruit 1×36 g as/ha BBCH 56-84 1×22 g as/ha BBCH 56-84	D3	04/06 (155) – 30/10 (303)	04/06 (155) – 30/10 (303)
	D4	09/06 (160) – 31/10 (304)	09/06 (160) – 31/10 (304)
	D5	10/05 (130) – 07/10 (280)	10/05 (130) – 07/10 (280)
	R1	04/06 (155) - 30/10 (303)	04/06 (155) - 30/10 (303)
	R2	13/06 (164) - 15/10 (288)	13/06 (164) - 15/10 (288)
	R3	10/05 (130) – 11/10 (284)	10/05 (130) – 11/10 (284)
	R4	04/05 (124) - 11/10 (284)	04/05 (124) - 11/10 (284)

8.8.2.1 Acetamiprid and its metabolites

[illegible]

Compound	acetamiprid	IM-1-2	IM-1-4	IC-0	IM-1-5	IB-1-1	Value in accordance to EU endpoint y/n/ Reference
	(default)	(default)	(default)	(default)	(default)	(default)	2016;14(11):4610
DT _{50,whole system} (d)	27	1000 (default)	1000 (default)	1000 (default)	1000 (default)	1000 (default)	EFSA Journal 2016;14(11):4610
Maximum occurrence observed (% molar basis with respect to the parent)	-	Soil: 55 Total system: 13.4	Soil: 72 Total system: 81.5	Soil: 11.3 Total system: 29.5	Soil: 20 Total system: 0*	Soil: 0 Total system: 35	EFSA Journal 2016;14(11):4610

PEC_{sw/sed}

Table 8.8-3: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to winter oilseed rape (1 × 50 g as/ha, BBCH 30-50) (use no. 1)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	15.1312	---	11.6552	14.9879
Step 2					
Northern Europe	March-May	0.5129	---	0.3958	0.5080
	June-Sept	0.5129	---	0.3958	0.5080
Southern Europe	March-May	0.6430	---	0.4990	0.6406
	June-Sept	0.5779	---	0.4474	0.5743
Step 3					
D2	ditch	0.3210	drainage	0.09916	0.2885
D2	stream	0.2856	drainage	0.07112	0.2558
D3	ditch	0.3161	drainage	0.01252	0.08324
D4	pond	0.01094	drainage	0.009181	0.02639
D4	stream	0.2511	drainage	0.000754	0.01086
D5	pond	0.01093	drainage	0.008939	0.02506
D5	stream	0.2524	drainage	0.000442	0.000442
R1	pond	0.01093	runoff/erosion	0.009076	0.02778
R1	stream	0.2084	runoff/erosion	0.007363	0.04743
R3	stream	0.3391	runoff/erosion	0.01273	0.08902

Table 8.8-4: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to winter oilseed rape (1 × 60 g as/ha, BBCH 30-61) (use no. 13, 14)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	18.1574	---	13.9863	17.9855
Step 2					
Northern Europe	March-May	0.6155	---	0.4750	0.6096
	June-Sept	0.6155	---	0.4750	0.6096
Southern Europe	March-May	0.7715	---	0.5989	0.7687
	June-Sept	0.6935	---	0.5369	0.6892
Step 3					
D2	ditch	0.3852	drainage	0.1191	0.3423
D2	stream	0.3427	drainage	0.08543	0.3036
D3	ditch	0.3794	drainage	0.01502	0.09881
D4	pond	0.01312	drainage	0.01102	0.03131
D4	stream	0.3013	drainage	0.000905	0.01300
D5	pond	0.01312	drainage	0.01073	0.02973
D5	stream	0.3029	drainage	0.000530	0.007974
R1	pond	0.01312	runoff/erosion	0.01091	0.03304
R1	stream	0.2501	runoff/erosion	0.008950	0.05740
R3	stream	0.4113	runoff/erosion	0.01539	0.1068

Table 8.8-5: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to winter oilseed rape (1 × 24 g as/ha, BBCH 50-69) (use no. 2, 3)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	---	7.2630	---	5.5945	7.1942
Step 2					
Northern Europe	March-May	0.2358	---	0.1817	0.2332
	June-Sept	0.2358	---	0.1817	0.2332
Southern Europe	March-May	0.2878	---	0.2230	0.2863
	June-Sept	0.2618	---	0.2024	0.2598
Step 3					
D2	ditch	0.1541	drainage	0.04535	0.1514
D2	stream	0.1371	drainage	0.03912	0.1353
D3	ditch	0.1521	drainage	0.007688	0.04753

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
D4	pond	0.005248	drainage	0.004345	0.01240
D4	stream	0.1168	drainage	0.000270	0.004079
D5	pond	0.005249	drainage	0.004307	0.01237
D5	stream	0.1233	drainage	0.000243	0.003692
R1	pond	0.006778	runoff/erosion	0.005598	0.01622
R1	stream	0.2449	runoff/erosion	0.005634	0.04523
R3	stream	0.1406	runoff/erosion	0.001821	0.02020

* single applications should be marked.

** twa-time as required by ecotox

Table 8.8-6: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to spring oilseed rape (1 × 24 g as/ha, BBCH 50-69) (use no. 10)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	7.2630	---	5.5945	7.1942
Step 2					
Northern Europe	March-May	0.2358	---	0.1817	0.2332
	June-Sept	0.2358	---	0.1817	0.2332
Southern Europe	March-May	0.2878	---	0.2230	0.2863
	June-Sept	0.2618	---	0.2024	0.2598
Step 3					
D1	ditch	0.1539	drainage	0.1073	0.2003
D1	stream	0.1346	drainage	0.005812	0.04147
D3	ditch	0.1527	drainage	0.01246	0.06025
D4	pond	0.005252	drainage	0.003945	0.01014
D4	stream	0.1316	drainage	0.001814	0.01999
D5	pond	0.005253	drainage	0.004061	0.01054
D5	stream	0.1419	drainage	0.002603	0.02593
R1	pond	0.02570	runoff/erosion	0.01929	0.04673
R1	stream	0.2646	runoff/erosion	0.01316	0.07689

Table 8.8-7: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to spring oilseed rape (1 × 50 g as/ha, BBCH 30-50) (use no. 11)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	15.1312	---	11.6552	14.9879
Step 2					
Northern Europe	March-May	0.5129	---	0.3958	0.5080
	June-Sept	0.5129	---	0.3958	0.5080
Southern Europe	March-May	0.6430	---	0.4990	0.6406
	June-Sept	0.5779	---	0.4474	0.5743
Step 3					
D1	ditch	0.3213	drainage	0.1563	0.4170
D1	stream	0.2805	drainage	0.01212	0.09297
D3	ditch	0.3180	drainage	0.02501	0.1179
D4	pond	0.01094	drainage	0.008241	0.02014
D4	stream	0.2741	drainage	0.003779	0.04051
D5	pond	0.01094	drainage	0.008577	0.02158
D5	stream	0.2956	drainage	0.005364	0.05190
R1	pond	0.07677	runoff/erosion	0.05852	0.1244
R1	stream	0.5610	runoff/erosion	0.02457	0.2485

Table 8.8-8: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to spring oilseed rape (1 × 60 g as/ha, BBCH 59-71) (use no. 12)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	18.1574	---	13.9863	17.9855
Step 2					
Northern Europe	March-May	0.5894	---	0.4544	0.5831
	June-Sept	0.5894	---	0.4544	0.5831
Southern Europe	March-May	0.7195	---	0.5576	0.7157
	June-Sept	0.6545	---	0.5060	0.6494
Step 3					
D2	ditch	0.3855	drainage	0.2711	0.4951
D2	stream	0.3366	drainage	0.01454	0.1104
D3	ditch	0.3816	drainage	0.03002	0.1398
D4	pond	0.01313	drainage	0.009896	0.02388

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
D4	stream	0.3289	drainage	0.004535	0.04826
D5	pond	0.01313	drainage	0.01030	0.02560
D5	stream	0.3547	drainage	0.006437	0.06177
R1	pond	0.09331	runoff/erosion	0.07117	0.1492
R1	stream	0.6829	runoff/erosion	0.02986	0.2966

Table 8.8-9: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to potato (1 × 24 g as/ha, BBCH 35-75) (use no. 4)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	7.2630	---	5.5945	7.1942
Step 2					
Northern Europe	March-May	0.2878	---	0.2230	0.2863
	June-Sept	0.2878	---	0.2230	0.2863
Southern Europe	March-May	0.3919	---	0.3056	0.3923
	June-Sept	0.3398	---	0.2643	0.3393
Step 3					
D3	ditch	0.1258	drainage	0.006307	0.03952
D4	pond	0.005081	drainage	0.003842	0.01059
D4	stream	0.09460	drainage	0.000147	0.002244
D6	ditch	0.1254	drainage	0.004313	0.03276
R1	pond	0.02575	runoff/erosion	0.01960	0.04519
R1	stream	0.1841	runoff/erosion	0.008270	0.08725
R2	stream	0.1171	runoff/erosion	0.003033	0.03052
R3	stream	0.2723	runoff/erosion	0.01105	0.07611

Table 8.8-10: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to pome/stone fruit, early application (1 × 22 g as/ha, BBCH 56-84) (use no. 7, 8, 15, 17, 18, 20, 21, 28, 30, 31, 33, 35, 37, 39)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	8.5965	---	6.4531	8.2914
Step 2					
Northern	March-May	2.1411	---	1.5577	1.8162

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Europe	June-Sept	2.1411	---	1.5577	1.8162
Southern Europe	March-May	2.1411	---	1.6040	1.8843
	June-Sept	2.1411	---	1.5809	1.8088
Step 3					
D3	ditch	1.714	drainage	0.1428	0.5875
D4	pond	0.1039	drainage	0.07888	0.1656
D4	stream	1.817	drainage	0.02363	0.2388
D5	pond	0.1039	drainage	0.08269	0.1824
D5	stream	1.857	drainage	0.008660	0.01096
R1	pond	0.1039	runoff/erosion	0.07928	0.1627
R1	stream	1.392	runoff/erosion	0.01949	0.1575
R2	stream	1.866	runoff/erosion	0.01123	0.1217
R3	stream	1.949	runoff/erosion	0.02667	0.2617
R4	stream	1.361	runoff/erosion	0.01530	0.1002

Table 8.8-11: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to pome/stone fruit, late application (1 × 22 g as/ha, BBCH 56-84) (use no. 7, 8, 15, 17, 18, 20, 21, 28, 30, 31, 33, 35, 37, 39)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	7.6086	---	5.7780	7.4268
Step 2					
Northern Europe	June-Sept	1.1532	---	0.8603	1.0096
	Oct-Feb	1.1532	---	0.9298	1.1117
Southern Europe	June-Sept	1.1532	---	0.8835	1.0436
	Oct-Feb	1.1532	---	0.9067	1.0776
Step 3					
D3	ditch	0.8085	drainage	0.06734	0.2906
D4	pond	0.03623	drainage	0.02741	0.06177
D4	stream	0.8103	drainage	0.01053	0.1100
D5	pond	0.03623	drainage	0.02873	0.06802
D5	stream	0.8281	drainage	0.003862	0.05127
R1	pond	0.03621	runoff/erosion	0.02761	0.06089
R1	stream	0.6210	runoff/erosion	0.008464	0.07231

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
R2	stream	0.8323	runoff/erosion	0.005043	0.05551
R3	stream	0.8690	runoff/erosion	0.01189	0.1210
R4	stream	0.6070	runoff/erosion	0.008962	0.06082

Table 8.8-12: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to pome/stone fruit, early application (1 × 36 g as/ha, BBCH 56-84) (use no. 9)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	---	14.0670	---	10.5596	13.5677
Step 2					
Northern Europe	March-May	3.5036		2.5490	2.9720
	June-Sept	3.5036		2.5490	2.9720
Southern Europe	March-May	3.5036	---	2.6248	3.0833
	June-Sept	3.5036	---	2.5869	3.0277
Step 3					
D3	ditch	2.805	drainage	0.2338	0.9318
D4	pond	0.1701	drainage	0.1293	0.2626
D4	stream	2.974	drainage	0.03866	0.3827
D5	pond	0.1701	drainage	0.1355	0.2893
D5	stream	3.039	drainage	0.01417	0.1831
R1	pond	0.1700	runoff/erosion	0.1300	0.2582
R1	stream	2.279	runoff/erosion	0.03222	0.04124
R2	stream	3.054	runoff/erosion	0.01856	0.1966
R3	stream	3.189	runoff/erosion	0.04364	0.4196
R4	stream	2.227	runoff/erosion	0.02531	0.1617

* single applications should be marked.

** two-time as required by ecotox

Table 8.8-13: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to pome/stone fruit, late application (1 × 36 g as/ha, BBCH 56-84) (use no. 9)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	12.4504	---	9.4549	12.1529
Step 2					

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Northern Europe	June-Sept	1.8870	---	1.4078	1.6520
	Oct-Feb	1.8870	---	1.6263	1.8191
Southern Europe	June-Sept	1.8870	---	1.4457	1.7077
	Oct-Feb	1.8870	---	1.4836	1.7634
Step 3					
D3	ditch	1.323	drainage	0.1102	0.4609
D4	pond	0.05929	drainage	0.04492	0.09794
D4	stream	1.326	drainage	0.01724	0.02074
D5	pond	0.05929	drainage	0.04709	0.1079
D5	stream	1.355	drainage	0.08309	0.01472
R1	pond	0.05926	runoff/erosion	0.04528	0.09661
R1	stream	1.016	runoff/erosion	0.01396	0.1163
R2	stream	1.362	runoff/erosion	0.008338	0.08960
R3	stream	1.422	runoff/erosion	0.01946	0.1938
R4	stream	0.9932	runoff/erosion	0.01487	0.09891

* single applications should be marked.

** two-time as required by ecotox

Table 8.8-14: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following single application of Acetamipryd 200 SL to pome/stone fruit, early application (1 × 40 g as/ha, BBCH 11-69) (use no. 47)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	15.6300	---	11.7329	15.0752
Step 2					
Northern Europe	March-May	3.8929	---	2.9405	3.4613
	June-Sept	3.8929	---	2.9405	3.4613
Southern Europe	March-May	3.8929	---	3.1330	3.7441
	June-Sept	3.8929	---	3.0368	3.6027
Step 3					
D3	ditch	3.107	drainage	0.1697	0.8355
D4	pond	0.1889	drainage	0.1492	0.3111
D4	stream	3.168	drainage	0.01622	0.2049
D5	pond	0.1889	drainage	0.1566	0.3495
D5	stream	3.082	drainage	0.005823	0.08458
R1	pond	0.1888	runoff/erosion	0.1513	0.3189
R1	stream	2.512	runoff/erosion	0.02021	0.2377

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
R2	stream	3.328	runoff/erosion	0.01342	0.1714
R3	stream	3.554	runoff/erosion	0.05574	0.5002
R4	stream	2.527	runoff/erosion	0.02682	0.2677

Table 8.8-15: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following double application of Acetamipryd 200 SL to pome/stone fruit, early application (2 x 25 g as/ha, BBCH 51-73) (use no. 19, 26, 27, 34, 36, 38, 40, 44, 45, 46)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	19.5375	---	14.6661	18.8440
Step 2					
Northern Europe	March-May	3.7778	---	2.8258	3.2901
	June-Sept	3.7778	---	2.8258	3.2901
Southern Europe	March-May	3.7778	---	2.8803	3.3701
	June-Sept	3.7778	---	2.8530	3.3301
Step 3					
D3	ditch	1.678	drainage	0.2861	0.7899
D4	pond	0.1517	drainage	0.1172	0.3177
D4	stream	1.763	drainage	0.02292	0.2406
D5	pond	0.1763	drainage	0.1418	0.3415
D5	stream	1.904	drainage	0.04243	0.3154
R1	pond	0.1606	runoff/erosion	0.1189	0.2920
R1	stream	1.351	runoff/erosion	0.01782	0.1747
R2	stream	1.807	runoff/erosion	0.02258	0.1335
R3	stream	1.904	runoff/erosion	0.05981	0.3389
R4	stream	1.348	runoff/erosion	0.02882	0.1463

Table 8.8-16: FOCUS Step 1, 2 and 3 PEC_{sw} and PEC_{sed} for acetamiprid following double application of Acetamipryd 200 SL to pome/stone fruit, late application (2 x 27 g as/ha, BBCH 71-84) (use no. 5, 6, 16, 22, 23, 24, 25, 29, 32)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	18.6756	---	14.1824	18.2294
Step 2					
Northern Europe	June-Sept	1.9383	---	1.4807	1.7334
	Oct-Feb	1.9383	---	1.5690	1.8631

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Southern Europe	June-Sept	1.9383	---	1.5102	1.7767
	Oct-Feb	1.9383	---	1.5396	1.8199
Step 3					
D3	ditch	0.7879	drainage	0.1555	0.4058
D4	pond	0.06386	drainage	0.05189	0.1406
D4	stream	0.7789	drainage	0.009900	0.06844
D5	pond	0.05183	drainage	0.03981	0.1191
D5	stream	0.8607	drainage	0.01579	0.1588
R1	pond	0.05941	runoff/erosion	0.04462	0.1132
R1	stream	0.5981	runoff/erosion	0.007642	0.008737
R2	stream	0.8180	runoff/erosion	0.008354	0.06350
R3	stream	0.8602	runoff/erosion	0.01534	0.1556
R4	stream	0.6102	runoff/erosion	0.01918	0.1026

Table 8.8-17: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for acetamiprid following application of Acetamipryd 200 SL in greenhouses (1 x 0.06 g as/ha - 0.01% of application rate 60 g a.s./ha, BBCH 20-89) (use no. 41, 42, 43)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominant entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	0.0182	---	0.0140	0.0180
Step 2					
Northern Europe	Mar.-May	0.0006	---	0.0005	0.0006
	June-Sep.	0.0006	---	0.0005	0.0006
Southern Europe	Mar.-May	0.0008	---	0.0006	0.0008
	June-Sep.	0.0007	---	0.0005	0.0007

Step 4

Table 8.8-18: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 50 g as/ha, BBCH 30-50) to winter oilseed rape according to the central zone GAP according to surface water Step 4 (use no. 1)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)

	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D2 ditch	0.3210	0.08703	0.07123	0.07123	-	0.07123	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D2 stream	0.2856	0.1044	0.05532	0.04684	-	0.05532	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D3 ditch	0.3161	0.08570	0.04544	0.03105	-	0.04544	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D4 pond	0.01094	0.009462	0.006802	0.005422	-	0.006802	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D4 stream	0.2511	0.09175	0.04864	0.03325	-	0.04864	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D5 pond	0.01093	0.009460	0.006801	0.005421	-	0.006801	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D5 stream	0.2524	0.09223	0.04889	0.03342	-	0.04889	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R1 pond	0.01093	0.009460	0.006907	0.006087	-	0.006801	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R1 stream	0.2084	0.1953	0.1953	0.1953	-	0.04037	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R3 stream	0.3391	0.3391	0.3391	0.3391	-	0.05674	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	-	-	-	-	-	-

Table 8.8-19: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 60 g as/ha, BBCH 30-61) to winter oilseed rape according to the central zone GAP according to surface water Step 4 (use no. 13, 14)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D2 ditch	0.3852	0.1045	0.09213	0.09213	-	0.09213	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D2 stream	0.3427	0.1252	0.06641	0.06043	-	0.06641	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D3 ditch	0.3794	0.1029	0.05453	0.03727	-	0.05453	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D4 pond	0.01312	0.01135	0.008163	0.006507	-	0.008163	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D4 stream	0.3013	0.1101	0.05838	0.03989	-	0.05838	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D5 pond	0.01312	0.01135	0.008161	0.006506	-	0.008161	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	-	-	-	-	-	-
None	D5 stream	0.3029	0.1107	0.05869	0.04010	-	0.05869	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R1 pond	0.01312	0.01135	0.008337	0.007353	-	0.008161	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R1 stream	0.2501	0.2388	0.2388	0.2388	-	0.04845	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R3 stream	0.4113	0.4113	0.4113	0.4113	-	0.06811	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-

Table 8.8-20: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 50 g as/ha, BBCH 30-50) to spring oilseed rape according to the central zone GAP according to surface water Step 4 (use no. 11)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D1 ditch	0.3213	0.08749	0.04665	0.03204	-	0.04665	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D1 stream	0.2805	0.1025	0.05434	0.03714	-	0.05434	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	-	-	-	-	-	-
None	D3 ditch	0.3180	0.08621	0.04571	0.03123	-	0.04571	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D4 pond	0.01094	0.009467	0.006806	0.005424	-	0.006806	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D4 stream	0.2741	0.1002	0.05310	0.03629	-	0.05310	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D5 pond	0.01094	0.009469	0.006807	0.005426	-	0.006807	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D5 stream	0.2956	0.1080	0.05726	0.03913	-	0.05726	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R1 pond	0.07677	0.07565	0.07362	0.07257	-	0.009048	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R1 stream	0.5610	0.5610	0.5610	0.5610	-	0.04062	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-

Table 8.8-21: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 60 g as/ha, BBCH 59-71) to spring oilseed rape according to the central zone GAP according to surface water Step 4 (use no. 12)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D1 ditch	0.3855	0.1050	0.05598	0.03847	-	0.05598	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D1 stream	0.3366	0.1230	0.06523	0.04456	-	0.06523	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D3 ditch	0.3816	0.1035	0.05486	0.03749	-	0.05486	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D4 pond	0.01313	0.01136	0.008167	0.006510	-	0.008167	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D4 stream	0.3289	0.1202	0.06373	0.04354	-	0.06373	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D5 pond	0.01313	0.01136	0.008169	0.006511	-	0.008169	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	D5 stream	0.3547	0.1296	0.06873	0.04695	-	0.06873	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-
None	R1 pond	0.09331	0.09196	0.08954	0.08827	-	0.01093	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	-	-	-	-	-	-
None	R1 stream	0.6829	0.6829	0.6829	0.6829	-	0.04875	-
50 %		-	-	-	-	-	-	-
75 %		-	-	-	-	-	-	-
90 %		-	-	-	-	-	-	-

Table 8.8-22: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 22 g as/ha, BBCH 56-84) to pome/stone fruit, early application according to the central zone GAP according to surface water Step 4 (use no. 7, 8, 15, 17, 18, 20, 21, 28, 30, 31, 33, 35, 37, 39)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D3 ditch	1.714	1.347	0.8271	0.3721	0.1891	0.8271	0.1891
50 %		-	0.6736	0.4137	0.1861	-	-	-
75 %		-	0.3368	0.2068	0.09305	-	-	-
90 %		-	0.1347	0.08271	0.03721	-	-	-
None	D4 pond	0.1039	0.1170	0.06415	0.03387	0.02075	0.06415	0.02075
50 %		-	0.05850	0.03208	0.01693	-	-	-
75 %		-	0.02925	0.01604	0.008467	-	-	-
90 %		-	0.01170	0.006415	0.003387	-	-	-
None	D4 stream	1.817	1.561	0.9586	0.4312	0.2192	0.9586	0.2192
50 %		-	0.7807	0.4793	0.2156	-	-	-
75 %		-	0.3903	0.2397	0.1078	-	-	-
90 %		-	0.1561	0.09586	0.04312	-	-	-
None	D5 pond	0.1039	0.1170	0.06415	0.03387	0.02075	0.06415	0.02075
50 %		-	0.07807	0.03208	0.01693	-	-	-
75 %		-	0.02925	0.01604	0.008467	-	-	-
90 %		-	0.01170	0.006415	0.003387	-	-	-
None	D5 stream	1.857	1.595	0.9797	0.4406	0.2240	0.9797	0.2240
50 %		-	0.7978	0.4898	0.2204	-	-	-
75 %		-	0.3989	0.2449	0.1102	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	0.1595	0.09797	0.04406	-	-	-
None	R1 pond	0.1039	0.1169	0.06411	0.03385	0.02073	0.06411	0.02073
50 %		-	0.05846	0.03206	0.01692			
75 %		-	0.02924	0.01603	0.008759			
90 %		-	0.01169	0.007165	0.004815			
None	R1 stream	1.392	1.196	0.7346	0.3304	0.1680	0.7346	0.1680
50 %		-	0.5982	0.3673	0.1652	-	-	-
75 %		-	0.2991	0.1837	0.1418	-	-	-
90 %		-	0.1418	0.1418	0.1418	-	-	-
None	R2 stream	1.866	1.603	0.9846	0.4429	0.2252	0.9846	0.2252
50 %		-	0.8019	0.4923	0.2215	-	-	-
75 %		-	0.4009	0.2462	0.1107	-	-	-
90 %		-	0.1603	0.09846	0.04429	-	-	-
None	R3 stream	1.949	1.674	1.028	0.4624	0.2351	1.028	0.2351
50 %		-	0.8372	0.5140	0.2313	-	-	-
75 %		-	0.4186	0.2570	0.1156	-	-	-
90 %		-	0.1674	0.1028	0.04624	-	-	-
None	R4 stream	1.361	1.169	0.7180	0.3229	0.1642	0.7180	0.1642
50 %		-	0.5847	0.3590	0.2032	-	-	-
75 %		-	0.2924	0.2032	0.2032	-	-	-
90 %		-	0.2032	0.2032	0.2032	-	-	-

Table 8.8-23: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 22 g as/ha, BBCH 56-84) to pome/stone fruit, late application according to the central zone GAP according to surface water Step 4 (use no. 7, 8, 15, 17, 18, 20, 21, 28, 30, 31, 33, 35, 37, 39)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D3 ditch	0.8085	0.5458	0.2438	0.1231	0.07525	0.2438	0.07525
50 %		-	0.2729	-	-	-	-	-
75 %		-	0.1364	-	-	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	0.05458	-	-	-	-	-
None	D4 pond	0.03623	0.04144	0.02298	0.01468	0.01046	0.02298	0.01046
50 %		-	0.02072	-	-	-	-	-
75 %		-	0.01036	-	-	-	-	-
90 %		-	0.004144	-	-	-	-	-
None	D4 stream	0.8103	0.6324	0.2826	0.1427	0.08722	0.2826	0.08722
50 %		-	0.3162	-	-	-	-	-
75 %		-	0.1581	-	-	-	-	-
90 %		-	0.06324	-	-	-	-	-
None	D5 pond	0.03623	0.04144	0.02298	0.01468	0.01046	0.02298	0.01046
50 %		-	0.02072	-	-	-	-	-
75 %		-	0.01036	-	-	-	-	-
90 %		-	0.004144	-	-	-	-	-
None	D5 stream	0.8281	0.6463	0.2888	0.1458	0.08913	0.2888	0.08913
50 %		-	0.3232	-	-	-	-	-
75 %		-	0.1616	-	-	-	-	-
90 %		-	0.06463	-	-	-	-	-
None	R1 pond	0.03621	0.04142	0.02297	0.01467	0.01045	0.02297	0.01045
50 %		-	0.02070	-	-	-	-	-
75 %		-	0.01035	-	-	-	-	-
90 %		-	0.004142	-	-	-	-	-
None	R1 stream	0.6210	0.4846	0.2166	0.1094	0.06684	0.2166	0.06684
50 %		-	0.2423	-	-	-	-	-
75 %		-	0.1212	-	-	-	-	-
90 %		-	0.05744	-	-	-	-	-
None	R2 stream	0.8323	0.6495	0.2903	0.1466	0.08959	0.2903	0.08959
50 %		-	0.3248	-	-	-	-	-
75 %		-	0.1624	-	-	-	-	-
90 %		-	0.06495	-	-	-	-	-
None	R3 stream	0.8690	0.6782	0.3031	0.1530	0.09354	0.3031	0.09354
50 %		-	0.3391	-	-	-	-	-
75 %		-	0.1696	-	-	-	-	-
90 %		-	0.06782	-	-	-	-	-
None	R4 stream	0.6070	0.4737	0.2117	0.1639	0.06533	0.2117	0.06533

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
50 %		-	0.2369	-	-	-	-	-
75 %		-	0.1639	-	-	-	-	-
90 %		-	0.1639	-	-	-	-	-

Table 8.8-24: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 36 g as/ha, BBCH 56-84) to pome/stone fruit, early application according to the central zone GAP according to surface water Step 4 (use no. 9)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D3 ditch	2.805	2.204	1.353	0.6089	0.3095	1.353	0.3095
50 %		-	1.102	0.6769	0.3045	-	-	-
75 %		-	0.5511	0.3384	0.1522	-	-	-
90 %		-	0.2204	0.1353	0.06089	-	-	-
None	D4 pond	0.1701	0.1915	0.1050	0.05542	0.03395	0.1050	0.03395
50 %		-	0.09574	0.05249	0.02771	-	-	-
75 %		-	0.04786	0.02625	0.01385	-	-	-
90 %		-	0.01915	0.01050	0.005542	-	-	-
None	D4 stream	2.974	2.555	1.569	0.7057	0.3588	1.569	0.3588
50 %		-	1.277	0.7845	0.3530	-	-	-
75 %		-	0.6388	0.3923	0.1765	-	-	-
90 %		-	0.2555	0.1569	0.07057	-	-	-
None	D5 pond	0.1701	0.1915	0.1050	0.05542	0.03395	0.1050	0.03395
50 %		-	0.09574	0.05249	0.02771	-	-	-
75 %		-	0.04786	0.02625	0.01385	-	-	-
90 %		-	0.01915	0.01050	0.005542	-	-	-
None	D5 stream	3.039	2.611	1.603	0.7212	0.3666	1.603	0.3666
50 %		-	1.305	0.8017	0.3608	-	-	-
75 %		-	0.6528	0.4009	0.1803	-	-	-
90 %		-	0.2611	0.1603	0.07212	-	-	-
None	R1 pond	0.1700	0.1914	0.1049	0.05539	0.03393	0.1049	0.03393

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
50 %	R1 stream	-	0.09568	0.05246	0.02769	-	-	-
75 %		-	0.04783	0.02623	0.01448	-	-	-
90 %		-	0.01914	0.01187	0.008019	-	-	-
None		2.279	1.958	1.202	0.5408	0.2749	1.202	0.2749
50 %	R2 stream	-	0.9787	0.6012	0.2705	-	-	-
75 %		-	0.4895	0.3006	0.2405	-	-	-
90 %		-	0.2405	0.2405	0.2405	-	-	-
None		3.054	2.624	1.611	0.7249	0.3685	1.611	0.3685
50 %	R3 stream	-	1.312	0.8058	0.3626	-	-	-
75 %		-	0.6561	0.4029	0.1812	-	-	-
90 %		-	0.2624	0.1611	0.07249	-	-	-
None		3.189	2.740	1.682	0.7568	0.3847	1.682	0.3847
50 %	R4 stream	-	1.370	0.8413	0.3786	-	-	-
75 %		-	0.6850	0.4207	0.1892	-	-	-
90 %		-	0.2740	0.1682	0.07568	-	-	-
None		2.227	1.914	1.175	0.5286	0.2687	1.175	0.2687
50 %	R5 stream	-	0.9567	0.5876	0.3421	-	-	-
75 %		-	0.4784	0.3421	0.3421	-	-	-
90 %		-	0.3421	0.3421	0.3421	-	-	-
None		2.227	1.914	1.175	0.5286	0.2687	1.175	0.2687

Table 8.8-25: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 36 g as/ha, BBCH 56-84) to pome/stone fruit, late application according to the central zone GAP according to surface water Step 4 (use no. 9)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D3 ditch	1.323	0.8928	0.3989	0.2015	0.1231	0.3989	0.1231
50 %		-	0.4464	0.1995	-	-	-	-
75 %		-	0.2232	0.09975	-	-	-	-
90 %		-	0.08928	0.03989	-	-	-	-
None	D4 pond	0.05929	0.06781	0.03760	0.02403	0.01711	0.03760	0.01711

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
50 %		-	0.03390	0.01881	-	-	-	-
75 %		-	0.01695	0.009402	-	-	-	-
90 %		-	0.006781	0.003760	-	-	-	-
None	D4 stream	1.326	1.035	0.4624	0.2335	0.1427	0.4624	0.1427
50 %		-	0.5176	0.2312	-	-	-	-
75 %		-	0.2587	0.1156	-	-	-	-
90 %		-	0.1035	0.04624	-	-	-	-
None	D5 pond	0.05929	0.06781	0.03760	0.02403	0.01711	0.03760	0.01711
50 %		-	0.03390	0.01881	-	-	-	-
75 %		-	0.01695	0.009402	-	-	-	-
90 %		-	0.006781	0.003760	-	-	-	-
None	D5 stream	1.355	1.058	0.4726	0.2386	0.1458	0.4726	0.1458
50 %		-	0.5289	0.2363	-	-	-	-
75 %		-	0.2644	0.1181	-	-	-	-
90 %		-	0.1058	0.04726	-	-	-	-
None	R1 pond	0.05926	0.06777	0.03758	0.02402	0.01710	0.03758	0.01710
50 %		-	0.03388	0.01880	-	-	-	-
75 %		-	0.01694	0.009396	-	-	-	-
90 %		-	0.006777	0.004408	-	-	-	-
None	R1 stream	1.016	0.7930	0.3544	0.1789	0.1094	0.3544	0.1094
50 %		-	0.3966	0.1772	-	-	-	-
75 %		-	0.1983	0.09692	-	-	-	-
90 %		-	0.09692	0.09692	-	-	-	-
None	R2 stream	1.362	1.063	0.4750	0.2398	0.1466	0.4750	0.1466
50 %		-	0.5316	0.2375	-	-	-	-
75 %		-	0.2657	0.1187	-	-	-	-
90 %		-	0.1063	0.04750	-	-	-	-
None	R3 stream	1.422	1.110	0.4959	0.2504	0.1530	0.4959	0.1530
50 %		-	0.5551	0.2480	-	-	-	-
75 %		-	0.2775	0.1240	-	-	-	-
90 %		-	0.1110	0.04959	-	-	-	-
None	R4 stream	0.9932	0.7751	0.3464	0.2753	0.1069	0.3464	0.1069
50 %		-	0.3877	0.2753	-	-	-	-
75 %		-	0.2753	0.2753	-	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	0.2753	0.2753	-	-	-	-

Table 8.8-26: Global maximum PEC_{sw} values for acetamiprid, following single application of Acetamipryd 200 SL (1 × 40 g as/ha, BBCH 11-69) to pome/stone fruit, early application according to the central zone GAP according to surface water Step 4 (use no. 47)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D3 ditch	3.107	2.441	1.499	0.6743	0.3429	1.499	0.3429
50 %		-	1.221	0.7494	0.3373	-	-	-
75 %		-	0.6102	0.3749	0.1686	-	-	-
90 %		-	0.2441	0.1499	0.06743	-	-	-
None	D4 pond	0.1889	0.2127	0.1166	0.06156	0.03771	0.1166	0.03771
50 %		-	0.1063	0.05830	0.03078	-	-	-
75 %		-	0.05317	0.02916	0.01539	-	-	-
90 %		-	0.02127	0.01166	0.006156	-	-	-
None	D4 stream	3.168	2.722	1.671	0.7519	0.3822	1.671	0.3822
50 %		-	1.361	0.8357	0.3761	-	-	-
75 %		-	0.6803	0.4177	0.1880	-	-	-
90 %		-	0.2722	0.1671	0.07519	-	-	-
None	D5 pond	0.1889	0.2126	0.1166	0.06154	0.03770	0.1166	0.03770
50 %		-	0.1063	0.05829	0.03077	-	-	-
75 %		-	0.05315	0.02915	0.01538	-	-	-
90 %		-	0.02126	0.01166	0.006154	-	-	-
None	D5 stream	3.082	2.648	1.626	0.7315	0.3718	1.626	0.3718
50 %		-	1.324	0.8130	0.3659	-	-	-
75 %		-	0.6619	0.4063	0.1829	-	-	-
90 %		-	0.2648	0.1626	0.07315	-	-	-
None	R1 pond	0.1888	0.2126	0.1166	0.06153	0.03770	0.1166	0.03770
50 %		-	0.1063	0.05828	0.03077	-	-	-
75 %		-	0.05315	0.02914	0.01538	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	0.02126	0.01166	0.006153		-	
None	R1 stream	2.512	2.158	1.325	0.5963	0.3031	1.325	0.3031
50 %		-	1.079	0.6627	0.2983	-	-	-
75 %		-	0.5396	0.3312	0.1491	-	-	-
90 %		-	0.2158	0.1325	0.05963	-	-	-
None	R2 stream	3.328	2.859	1.756	0.7899	0.4015	1.756	0.4015
50 %		-	1.429	0.8779	0.3951	-	-	-
75 %		-	0.7147	0.4388	0.1975	-	-	-
90 %		-	0.2859	0.1756	0.07899	-	-	-
None	R3 stream	3.554	3.054	1.875	0.8436	0.4288	1.875	0.4288
50 %		-	1.527	0.9376	0.4220	-	-	-
75 %		-	0.7633	0.4686	0.2109	-	-	-
90 %		-	0.3054	0.1875	0.08436	-	-	-
None	R4 stream	2.527	2.171	1.333	0.5998	0.3049	1.333	0.3049
50 %		-	1.085	0.6666	0.3000	-	-	-
75 %		-	0.5427	0.3332	0.1500	-	-	-
90 %		-	0.2171	0.1333	0.08825	-	-	-

Table 8.8-27: Global maximum PEC_{sw} values for acetamiprid, following double application of Acetamipryd 200 SL (2 × 25 g as/ha, BBCH 51-73) to pome/stone fruit, early application according to the central zone GAP according to surface water Step 4 (use no. 19, 26, 27, 34, 36, 38, 40, 44, 45, 46)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D3 ditch	1.678	1.294	0.7642	0.4195	0.1979	0.7642	0.1979
50 %		-	0.6468	0.3821	0.2098	-	-	-
75 %		-	0.3235	0.1911	0.1049	-	-	-
90 %		-	0.1294	0.07645	0.04197	-	-	-
None	D4 pond	0.1517	0.1702	0.09660	0.05067	0.02907	0.09660	0.02907
50 %		-	0.08500	0.04824	0.02530	-	-	-
75 %		-	0.04244	0.02409	0.01263	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	0.01695	0.009616	0.005044	-	-	-
None	D4 stream	1.763	1.497	0.8840	0.4854	0.2289	0.8840	0.2289
50 %		-	0.7482	0.4420	0.2427	-	-	-
75 %		-	0.3741	0.2210	0.1213	-	-	-
90 %		-	0.1497	0.08840	0.04854	-	-	-
None	D5 pond	0.1763	0.1978	0.1122	0.05888	0.03378	0.1122	0.03378
50 %		-	0.09877	0.05605	0.02940	-	-	-
75 %		-	0.04931	0.02799	0.01468	-	-	-
90 %		-	0.01969	0.01117	0.005860	-	-	-
None	D5 stream	1.904	1.616	0.9547	0.5242	0.2472	0.9547	0.2472
50 %		-	0.8080	0.4774	0.2621	-	-	-
75 %		-	0.4040	0.2387	0.1310	-	-	-
90 %		-	0.1616	0.09547	0.05242	-	-	-
None	R1 pond	0.1606	0.1801	0.1025	0.05405	0.03127	0.1025	0.03067
50 %		-	0.09025	0.05148	0.02730	-	-	-
75 %		-	0.04537	0.02601	0.01393	-	-	-
90 %		-	0.01848	0.01075	0.005925	-	-	-
None	R1 stream	1.351	1.147	0.6774	0.3720	0.1754	0.6774	0.1754
50 %		-	0.5733	0.3387	0.1860	-	-	-
75 %		-	0.2867	0.1694	0.1157	-	-	-
90 %		-	0.1157	0.1157	0.1157	-	-	-
None	R2 stream	1.807	1.534	0.9063	0.4976	0.2346	0.9063	0.2346
50 %		-	0.7670	0.4531	0.2488	-	-	-
75 %		-	0.3835	0.2266	0.1244	-	-	-
90 %		-	0.1534	0.09104	0.09104	-	-	-
None	R3 stream	1.904	1.617	0.9548	0.5243	0.2472	0.9548	0.2472
50 %		-	0.8081	0.4774	0.2621	-	-	-
75 %		-	0.4040	0.2387	0.1310	-	-	-
90 %		-	0.1617	0.09548	0.05243	-	-	-
None	R4 stream	1.348	1.145	0.6761	0.3712	0.1751	0.6761	0.1751
50 %		-	0.5722	0.3381	0.1856	-	-	-
75 %		-	0.2861	0.1691	0.1540	-	-	-
90 %		-	0.1540	0.1540	0.1540	-	-	-

Table 8.8-28: Global maximum PEC_{sw} values for acetamiprid, following double application of Acetamipryd 200 SL (2 × 27 g as/ha, BBCH 71-84) to pome/stone fruit, late application according to the central zone GAP according to surface water Step 4 (use no. 5, 6, 16, 22, 23, 24, 25, 29, 32)

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
None	D3 ditch	0.7879	0.5481	0.2632	0.1289	0.07474	0.2632	0.07474
50 %		-	0.2740	0.1316	-	-	-	-
75 %		-	0.1370	0.06580	-	-	-	-
90 %		-	0.05482	0.02632	-	-	-	-
None	D4 pond	0.06386	0.07291	0.04005	0.02424	0.01655	0.04005	0.01655
50 %		-	0.03641	0.01999	-	-	-	-
75 %		-	0.01819	0.009982	-	-	-	-
90 %		-	0.007258	0.003986	-	-	-	-
None	D4 stream	0.7789	0.6198	0.2976	0.1457	0.08453	0.2976	0.08453
50 %		-	0.3099	0.1488	-	-	-	-
75 %		-	0.1550	0.07443	-	-	-	-
90 %		-	0.06198	0.02976	-	-	-	-
None	D5 pond	0.05183	0.05918	0.03251	0.01968	0.01343	0.03251	0.01343
50 %		-	0.02955	0.01623	-	-	-	-
75 %		-	0.01477	0.008105	-	-	-	-
90 %		-	0.005894	0.003237	-	-	-	-
None	D5 stream	0.8607	0.6848	0.3289	0.1610	0.09340	0.3289	0.09340
50 %		-	0.3424	0.1644	-	-	-	-
75 %		-	0.1712	0.08224	-	-	-	-
90 %		-	0.06848	0.03289	-	-	-	-
None	R1 pond	0.05941	0.06782	0.03729	0.02260	0.01538	0.03729	0.01538
50 %		-	0.03391	0.01865	-	-	-	-
75 %		-	0.01698	0.009351	-	-	-	-
90 %		-	0.006819	0.003778	-	-	-	-
None	R1 stream	0.5981	0.4759	0.2285	0.1119	0.06491	0.2285	0.06491
50 %		-	0.2379	0.1143	-	-	-	-
75 %		-	0.1190	0.05715	-	-	-	-
90 %		-	0.04759	0.02285	-	-	-	-
None	R2 stream	0.8180	0.6509	0.3126	0.1530	0.08877	0.3126	0.08877
50 %		-	0.3254	0.1563	-	-	-	-
75 %		-	0.1627	0.07816	-	-	-	-

PEC _{sw} (µg/L)	Scenario	STEP 4 acetamiprid						
Nozzle reduction	Vegetative strip (m)	None	None	None	None	None	10 (VFS)	20 (VFS)
	No spray buffer (m)	1/3	5	10	15	20	10	20
90 %		-	0.06509	0.03126	-	-	-	-
None	R3 stream	0.8602	0.6844	0.3287	0.1609	0.09335	0.3287	0.09335
50 %		-	0.3422	0.1643	-	-	-	-
75 %		-	0.1711	0.08219	-	-	-	-
90 %		-	0.06844	0.03287	-	-	-	-
None	R4 stream	0.6102	0.4856	0.2332	0.1834	0.09335	0.2332	0.09335
50 %		-	0.2428	0.1834	-	-	-	-
75 %		-	0.1834	0.1834	-	-	-	-
90 %		-	0.1834	0.1834	-	-	-	-

Metabolites of acetamiprid

Table 8.8-29: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to winter oilseed rape (1 x 50 g as/ha, BBCH 30-50) (use no. 1)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	11.7352	---	11.6468	4.9239
Step 2					
Northern Europe	March-May	0.1945	---	0.1920	0.0812
	June-Sept	0.1945	---	0.1920	0.0812
Southern Europe	March-May	0.3250	---	0.3215	0.1359
	June-Sept	0.2597	---	0.2567	0.1085
IM-1-4					
Step 1	---	14.9795	---	14.8245	24.9183
Step 2					
Northern Europe	March-May	0.6407	---	0.6226	1.0460
	June-Sept	0.6407	---	0.6226	1.0460
Southern Europe	March-May	1.0525	---	1.0314	1.7332
	June-Sept	0.8466	---	0.8270	1.3896
IM-1-5					
Step 1	---	2.0975	---	2.0823	6.4602
Step 2					

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Northern Europe	March-May	0.1251	---	0.1242	0.3854
	June-Sept	0.1251	---	0.1242	0.3854
Southern Europe	March-May	0.2503	---	0.2485	0.7709
	June-Sept	0.1877	---	0.1864	0.5782
IC-0					
Step 1	---	4.3113	---	4.2686	4.5542
Step 2					
Northern Europe	March-May	0.1396	---	0.1351	0.1440
	June-Sept	0.1396	---	0.1351	0.1440
Southern Europe	March-May	0.1917	---	0.1868	0.1992
	June-Sept	0.1656	---	0.1609	0.1716
IB-1-1					
Step 1	---	5.4976	---	5.4578	0.0000
Step 2					
Northern Europe	March-May	0.1946	---	0.1932	0.0000
	June-Sept	0.1946	---	0.1932	0.0000
Southern Europe	March-May	0.2421	---	0.2403	0.0000
	June-Sept	0.2183	---	0.2168	0.0000

Table 8.8-30: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to winter oilseed rape (1 × 24 g as/ha, BBCH 50-69) (use no. 2, 3)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	5.6329	---	5.5904	2.3635
Step 2					
Northern Europe	March-May	0.0829	---	0.0818	0.0346
	June-Sept	0.0829	---	0.0818	0.0346
Southern Europe	March-May	0.1351	---	0.1336	0.0565
	June-Sept	0.1090	---	0.1077	0.0455
IM-1-4					
Step 1	---	7.1902	---	7.1158	11.9608
Step 2					
Northern Europe	March-May	0.2746	---	0.2661	0.4471
	June-Sept	0.2746	---	0.2661	0.4471

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Southern Europe	March-May	0.4393	---	0.4296	0.7220
	June-Sept	0.3569	---	0.3479	0.5845
IM-1-5					
Step 1	---	1.0068	---	0.9995	3.1009
Step 2					
Northern Europe	March-May	0.0501	---	0.0497	0.1542
	June-Sept	0.0501	---	0.0497	0.1542
Southern Europe	March-May	0.1001	---	0.0994	0.3084
	June-Sept	0.0751	---	0.0745	0.2313
IC-0					
Step 1	---	2.0694	---	2.0489	2.1860
Step 2					
Northern Europe	March-May	0.0628	---	0.0607	0.0647
	June-Sept	0.0628	---	0.0607	0.0647
Southern Europe	March-May	0.0837	---	0.0814	0.0868
	June-Sept	0.0732	---	0.0710	0.0758
IB-1-1					
Step 1	---	2.6389	---	2.6197	0.0000
Step 2					
Northern Europe	March-May	0.0896	---	0.0890	0.0000
	June-Sept	0.0896	---	0.0890	0.0000
Southern Europe	March-May	0.1086	---	0.1078	0.0000
	June-Sept	0.0991	---	0.0984	0.0000

* single applications should be marked.

** twa-time as required by ecotox

Table 8.8-31: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to winter oilseed rape (1 × 60 g as/ha, BBCH 30-61) (use no. 13, 14)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	14.0822	---	13.9761	5.9087
Step 2					
Northern Europe	March-May	0.2334	---	0.2304	0.0974
	June-Sept	0.2334	---	0.2304	0.0974
Southern	March-May	0.3899	---	0.3858	0.1631

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Europe	June-Sept	0.3117	---	0.3081	0.1302
IM-1-4					
Step 1	---	17.9754	---	17.7894	29.9020
Step 2					
Northern Europe	March-May	0.7688	---	0.7471	1.2552
	June-Sept	0.7688	---	0.7471	1.2552
Southern Europe	March-May	1.2629	---	1.2376	2.0798
	June-Sept	1.0159	---	0.9924	1.6675
IM-1-5					
Step 1	---	2.5169	---	2.4987	7.7522
Step 2					
Northern Europe	March-May	0.1502	---	0.1491	0.4625
	June-Sept	0.1502	---	0.1491	0.4625
Southern Europe	March-May	0.3003	---	0.2982	0.9251
	June-Sept	0.2253	---	0.2236	0.6938
IC-0					
Step 1	---	5.1736	---	5.1223	5.4651
Step 2					
Northern Europe	March-May	0.1675	---	0.1621	0.1728
	June-Sept	0.1675	---	0.1621	0.1728
Southern Europe	March-May	0.2300	---	0.2242	0.2391
	June-Sept	0.1988	---	0.1931	0.2059
IB-1-1					
Step 1	---	6.5971	---	6.5494	0.0000
Step 2					
Northern Europe	March-May	0.2336	---	0.2319	0.0000
	June-Sept	0.2336	---	0.2319	0.0000
Southern Europe	March-May	0.2905	---	0.2884	0.0000
	June-Sept	0.2620	---	0.2601	0.0000

Table 8.8-32: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to spring oilseed rape (1 × 24 g as/ha, BBCH 50-69) (use no. 10)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	5.6329	---	5.5904	2.3635
Step 2					
Northern Europe	March-May	0.0829	---	0.0818	0.0346
	June-Sept	0.0829	---	0.0818	0.0346
Southern Europe	March-May	0.1351	---	0.1336	0.0565
	June-Sept	0.1090	---	0.1077	0.0455
IM-1-4					
Step 1	---	7.1902	---	7.1158	11.7963
Step 2					
Northern Europe	March-May	0.2746	---	0.2661	0.4471
	June-Sept	0.2746	---	0.2661	0.4471
Southern Europe	March-May	0.4393	---	0.4296	0.7220
	June-Sept	0.3569	---	0.3479	0.5845
IM-1-5					
Step 1	---	1.0068	---	0.9995	3.1009
Step 2					
Northern Europe	March-May	0.0501	---	0.0497	0.1542
	June-Sept	0.0501	---	0.0497	0.1542
Southern Europe	March-May	0.1001	---	0.0994	0.3084
	June-Sept	0.0751	---	0.0745	0.2313
IC-0					
Step 1	---	2.0694	---	2.0489	2.1860
Step 2					
Northern Europe	March-May	0.0628	---	0.0607	0.0647
	June-Sept	0.0628	---	0.0607	0.0647
Southern Europe	March-May	0.0837	---	0.0814	0.0868
	June-Sept	0.0732	---	0.0710	0.0758
IB-1-1					
Step 1	---	2.6389	---	2.6197	0.0000
Step 2					
Northern Europe	March-May	0.0896	---	0.0890	0.0000
	June-Sept	0.0896	---	0.0890	0.0000
Southern	March-May	0.1086	---	0.1078	0.0000

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Europe	June-Sept	0.0991	---	0.0984	0.0000

Table 8.8-33: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to spring oilseed rape (1 × 50 g as/ha, BBCH 30-50) (use no. 11)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
IM-1-2					
Step 1	---	11.7352	---	11.6468	4.9239
Step 2					
Northern Europe	March-May	0.1945	---	0.1920	0.0812
	June-Sept	0.1945	---	0.1920	0.0812
Southern Europe	March-May	0.3250	---	0.3215	0.1359
	June-Sept	0.2597	---	0.2567	0.1085
IM-1-4					
Step 1	---	14.9795	---	14.8245	24.9183
Step 2					
Northern Europe	March-May	0.6407	---	0.6226	1.0460
	June-Sept	0.6407	---	0.6226	1.0460
Southern Europe	March-May	1.0525	---	1.0314	1.7332
	June-Sept	0.8466	---	0.8270	1.3896
IM-1-5					
Step 1	---	2.0975	---	2.0823	6.4602
Step 2					
Northern Europe	March-May	0.1251	---	0.1242	0.3854
	June-Sept	0.1251	---	0.1242	0.3854
Southern Europe	March-May	0.2503	---	0.2485	0.7709
	June-Sept	0.1877	---	0.1864	0.5782
IC-0					
Step 1	---	4.3113	---	4.2686	4.5542
Step 2					
Northern Europe	March-May	0.1396	---	0.1351	0.1440
	June-Sept	0.1396	---	0.1351	0.1440
Southern Europe	March-May	0.1917	---	0.1868	0.1992
	June-Sept	0.1656	---	0.1609	0.1716
IB-1-1					

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Step 1	---	5.4976	---	5.4578	0.0000
Step 2					
Northern Europe	March-May	0.1946	---	0.1932	0.0000
	June-Sept	0.1946	---	0.1932	0.0000
Southern Europe	March-May	0.2421	---	0.2403	0.0000
	June-Sept	0.2183	---	0.2168	0.0000

Table 8.8-34: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to spring oilseed rape (1 × 60 g as/ha, BBCH 59-71) (use no. 12)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	14.0822	---	13.9761	5.9087
Step 2					
Northern Europe	March-May	0.2073	---	0.2045	0.0864
	June-Sept	0.2073	---	0.2045	0.0864
Southern Europe	March-May	0.3378	---	0.3340	0.1412
	June-Sept	0.2725	---	0.2692	0.1138
IM-1-4					
Step 1	---	17.9754	---	17.7894	29.9020
Step 2					
Northern Europe	March-May	0.6864	---	0.6653	1.1177
	June-Sept	0.6864	---	0.6653	1.1177
Southern Europe	March-May	1.0982	---	1.0741	1.8049
	June-Sept	0.8923	---	0.8697	1.4613
IM-1-5					
Step 1	---	2.5169	---	2.4987	7.7522
Step 2					
Northern Europe	March-May	0.1251	---	0.1242	0.3854
	June-Sept	0.1251	---	0.1242	0.3854
Southern Europe	March-May	0.2503	---	0.2485	0.7709
	June-Sept		---		
IC-0					
Step 1	---	5.1736	---	5.1223	5.4651
Step 2					

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Northern Europe	March-May	0.1571	---	0.1517	0.1618
	June-Sept	0.1571	---	0.1517	0.1618
Southern Europe	March-May	0.2092	---	0.2035	0.2170
	June-Sept	0.1831	---	0.1776	0.1894
IB-1-1					
Step 1	---	6.5971	---	6.5494	0.0000
Step 2					
Northern Europe	March-May	0.2241	---	0.2224	0.0000
	June-Sept	0.2241	---	0.2224	0.0000
Southern Europe	March-May	0.2715	---	0.2695	0.0000
	June-Sept	0.2478	---	0.2460	0.0000

Table 8.8-35: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to potato (1 × 24 g as/ha, BBCH 35-75) (use no. 4)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
IM-1-2					
Step 1	---	5.6329	---	5.5904	2.3635
Step 2					
Northern Europe	March-May	0.1351	---	0.1336	0.0565
	June-Sept	0.1351	---	0.1336	0.0565
Southern Europe	March-May	0.2395	---	0.2372	0.1003
	June-Sept	0.1873	---	0.1854	0.0784
IM-1-4					
Step 1	---	7.1902	---	7.1158	11.9608
Step 2					
Northern Europe	March-May	0.4393	---	0.4296	0.7220
	June-Sept	0.4393	---	0.4296	0.7220
Southern Europe	March-May	0.7687	---	0.7567	1.2718
	June-Sept	0.6040	---	0.5932	0.9969
IM-1-5					
Step 1	---	1.0068	---	0.9995	3.1009
Step 2					
Northern	March-May	0.1001	---	0.0994	0.3084

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)*	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)**	Max PEC _{sed} (µg/kg)*
Europe	June-Sept	0.1001	---	0.0994	0.3084
Southern Europe	March-May	0.2002	---	0.1988	0.6167
	June-Sept	0.1502	---	0.1491	0.4625
IC-0					
Step 1	---	2.0694	---	2.0489	2.1860
Step 2					
Northern Europe	March-May	0.0837	---	0.0814	0.0868
	June-Sept	0.0837	---	0.0814	0.0868
Southern Europe	March-May	0.1254	---	0.1228	0.1310
	June-Sept	0.1045	---	0.1021	0.1089
IB-1-1					
Step 1	---	2.6389	---	2.6197	0.0000
Step 2					
Northern Europe	March-May	0.1086	---	0.1078	0.0000
	June-Sept	0.1086	---	0.1078	0.0000
Southern Europe	March-May	0.1465	---	0.1455	0.0000
	June-Sept	0.1276	---	0.1267	0.0000

Table 8.8-36: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to pome/stone fruit, early application (1 × 22 g as/ha, BBCH 56-84) (use no. 7, 8, 15, 17, 18, 20, 21, 28, 30, 31, 33, 35, 37, 39)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	5.4443	---	5.3889	2.2781
Step 2					
Northern Europe	March-May	0.3651	---	0.3573	0.1510
	June-Sept	0.3651	---	0.3573	0.1510
Southern Europe	March-May	0.4321	---	0.4238	0.1791
	June-Sept	0.3986	---	0.3906	0.1651
IM-1-4					
Step 1	---	7.7023	---	7.4299	12.4809
Step 2					
Northern Europe	March-May	1.2771	---	1.2051	2.0232
	June-Sept	1.2771	---	1.2051	2.0232
Southern	March-May	1.4884	---	1.4150	2.3760

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Europe	June-Sept	1.3828	---	1.3101	2.1996
IM-1-5					
Step 1	---	0.9229	---	0.9162	2.8425
Step 2					
Northern Europe	March-May	0.0642	---	0.0638	0.1979
	June-Sept	0.0642	---	0.0638	0.1979
Southern Europe	March-May	0.1285	---	0.1276	0.3957
	June-Sept	0.0964	---	0.0957	0.2968
IC-0					
Step 1	---	2.3016	---	2.2314	2.3794
Step 2					
Northern Europe	March-May	0.4469	---	0.4155	0.4419
	June-Sept	0.4469	---	0.4155	0.4419
Southern Europe	March-May	0.4608	---	0.4411	0.4703
	June-Sept	0.4474	---	0.4279	0.4561
IB-1-1					
Step 1	---	3.0413	---	3.0193	0.0000
Step 2					
Northern Europe	March-May	0.7097	---	0.7046	0.0000
	June-Sept	0.7097	---	0.7046	0.0000
Southern Europe	March-May	0.7341	---	0.7288	0.0000
	June-Sept	0.7219	---	0.7167	0.0000

Table 8.8-37: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to pome/stone fruit, late application (1 × 22 g as/ha BBCH 56-84) (use no. 7, 8, 15, 17, 18, 20, 21, 28, 30, 31, 33, 35, 37, 39)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	5.3012	---	5.2542	2.2212
Step 2					
Northern Europe	June-Sept	0.2275	---	0.2231	0.0943
	Oct-Feb	0.3280	---	0.3229	0.1365
Southern Europe	June-Sept	0.2610	---	0.2564	0.1084
	Oct-Feb	0.2945	---	0.2896	0.1224
IM-1-4					

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 1	---	7.1360	---	6.9677	11.7079
Step 2					
Northern Europe	June-Sept	0.7853	---	0.7459	1.2525
	Oct-Feb	1.1024	---	1.0607	1.7816
Southern Europe	June-Sept	0.8910	---	0.8508	1.4288
	Oct-Feb	0.9967	---	0.9557	1.6052
IM-1-5					
Step 1	---	0.9229	---	0.9162	2.8425
Step 2					
Northern Europe	June-Sept	0.0642	---	0.0638	0.1979
	Oct-Feb	0.1606	---	0.1594	0.4947
Southern Europe	June-Sept	0.0964	---	0.0957	0.2968
	Oct-Feb	0.1285	---	0.1276	0.3957
IC-0					
Step 1	---	2.0954	---	2.0514	2.1881
Step 2					
Northern Europe	June-Sept	0.2461	---	0.2355	0.2511
	Oct-Feb	0.2862	---	0.2754	0.2936
Southern Europe	June-Sept	0.2595	---	0.2488	0.2653
	Oct-Feb	0.2728	---	0.2621	0.2794
IB-1-1					
Step 1	---	2.7242	---	2.7044	0.0000
Step 2					
Northern Europe	June-Sept	0.3935	---	0.3906	0.0000
	Oct-Feb	0.4300	---	0.4269	0.0000
Southern Europe	June-Sept	0.4057	---	0.4027	0.0000
	Oct-Feb	0.4178	---	0.4148	0.0000

Table 8.8-38: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to pome/stone fruit, early application (1 × 36 g as/ha BBCH 56-84) (use no. 9)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	8.9088	---	8.8182	3.7278

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Step 2					
Northern Europe	March-May	0.5974	---	0.5847	0.2471
	June-Sept	0.5974	---	0.5847	0.2471
Southern Europe	March-May	0.7070	---	0.6935	0.2931
	June-Sept	0.6522	---	0.6391	0.2701
IM-1-4					
Step 1	---	12.6037	---	12.1580	20.4232
Step 2					
Northern Europe	March-May	2.0897	---	1.9720	3.3108
	June-Sept	2.0897	---	1.9720	3.3108
Southern Europe	March-May	2.4356	---	2.3154	3.8880
	June-Sept	2.2627	---	2.1437	3.5994
IM-1-5					
Step 1	---	1.5102	---	1.4992	4.6513
Step 2					
Northern Europe	March-May	0.1051	---	0.1044	0.3238
	June-Sept	0.1051	---	0.1044	0.3238
Southern Europe	March-May	0.2102	---	0.2087	0.6475
	June-Sept	0.1577	---	0.1565	0.4857
IC-0					
Step 1	---	3.7663	---	3.6513	3.8936
Step 2					
Northern Europe	March-May	0.7313	---	0.6799	0.7232
	June-Sept	0.7313	---	0.6799	0.7232
Southern Europe	March-May	0.7540	---	0.7219	0.7695
	June-Sept	0.7321	---	0.7002	0.7464
IB-1-1					
Step 1	---	4.9767	---	4.9406	0.0000
Step 2					
Northern Europe	March-May	1.1614	---	1.1530	0.0000
	June-Sept	1.1614	---	1.1530	0.0000
Southern Europe	March-May	1.2012	---	1.1925	0.0000
	June-Sept	1.1813	---	1.1728	0.0000

Table 8.8-39: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to pome/stone fruit, late application (1 × 36 g as/ha BBCH 56-84) (use no. 9)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	8.6747	---	8.5978	3.6348
Step 2					
Northern Europe	June-Sept	0.3723	---	0.3651	0.1543
	Oct-Feb	0.5367	---	0.5283	0.2233
Southern Europe	June-Sept	0.4271	---	0.4195	0.1773
	Oct-Feb	0.4819	---	0.4739	0.2003
IM-1-4					
Step 1	---	11.6771	---	11.4016	19.1585
Step 2					
Northern Europe	June-Sept	1.2851	---	1.2205	2.0495
	Oct-Feb	1.8040	---	1.7357	2.9154
Southern Europe	June-Sept	1.4581	---	1.3922	2.3381
	Oct-Feb	1.6310	---	1.5639	2.6267
IM-1-5					
Step 1	---	1.5102	---	1.4992	4.6513
Step 2					
Northern Europe	June-Sept	0.1051	---	0.1044	0.3238
	Oct-Feb	0.2628	---	0.2609	0.8094
Southern Europe	June-Sept	0.1577	---	0.1565	0.4857
	Oct-Feb	0.2102	---	0.2087	0.6475
IC-0					
Step 1	---	3.4289	---	3.3568	3.5805
Step 2					
Northern Europe	June-Sept	0.4027	---	0.3854	0.4109
	Oct-Feb	0.4684	---	0.4506	0.4804
Southern Europe	June-Sept	0.4246	---	0.4072	0.4341
	Oct-Feb		---		
IB-1-1					
Step 1	---	4.4577	---	4.4255	0.0000
Step 2					
Northern Europe	June-Sept	0.6439	---	0.6392	0.0000
	Oct-Feb	0.7037	---	0.6986	0.0000
Southern	June-Sept	0.6638	---	0.6590	0.0000

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Europe	Oct-Feb	0.6837	---	0.6837	0.0000

Table 8.8-40: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following single application to pome/stone fruit, early application (1 × 40 g as/ha BBCH 11-69) (use no. 47)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)*	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	9.8987	---	9.7980	4.1420
Step 2					
Northern Europe	March-May	0.8204	---	0.8051	0.3403
	June-Sept	0.8204	---	0.8051	0.3403
Southern Europe	March-May	1.0987	---	1.0815	0.4571
	June-Sept	0.9595	---	0.9433	0.3987
IM-1-4					
Step 1	---	14.0041	---	13.5089	22.6925
Step 2					
Northern Europe	March-May	2.8161	---	2.6817	4.5033
	June-Sept	2.8161	---	2.6817	4.5033
Southern Europe	March-May	3.6946	---	3.5538	5.9694
	June-Sept	3.2553	---	3.1178	5.2363
IM-1-5					
Step 1	---	1.6780	---	1.6658	5.1681
Step 2					
Northern Europe	March-May	0.2670	---	0.2650	0.8223
	June-Sept	0.2670	---	0.2650	0.8223
Southern Europe	March-May	0.5339	---	0.5301	1.6446
	June-Sept	0.4005	---	0.3976	1.2334
IC-0					
Step 1	---	4.1848	---	4.0570	4.3262
Step 2					
Northern Europe	March-May	0.8517	---	0.8159	0.8698
	June-Sept	0.8517	---	0.8159	0.8698
Southern Europe	March-May	0.9628	---	0.9262	0.9875
	June-Sept	0.9072	---	0.8711	0.9286
IB-1-1					

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)*	Max PEC _{sed} (µg/kg)
Step 1	---	5.5296	---	5.4896	0.0000
Step 2					
Northern Europe	March-May	1.3474	---	1.3376	0.0000
	June-Sept	1.3474	---	1.3376	0.0000
Southern Europe	March-May	1.4486	---	1.4381	0.0000
	June-Sept	1.3980	---	1.3878	0.0000

Table 8.8-41: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following double application to pome/stone fruit, early application (2 × 25 g as/ha BBCH 51-73) (use no. 19, 26, 27, 34, 36, 38, 40, 44, 45, 46)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	12.3734		12.2475	5.1775
Step 2					
Northern Europe	March-May	0.6713	---	0.6563	0.2774
	June-Sept	0.6713	---	0.6563	0.2774
Southern Europe	March-May	0.7515	---	0.7359	0.3110
	June-Sept	0.7114	---	0.6961	0.2942
IM-1-4					
Step 1	---	17.5051	---	16.8862	28.3656
Step 2					
Northern Europe	March-May	2.4977	---	2.3553	3.9542
	June-Sept	2.4977	---	2.3553	3.9542
Southern Europe	March-May	2.8826	---	2.7375	4.5966
	June-Sept	2.6902	---	2.5464	4.2754
IM-1-5					
Step 1	---	2.0975	---	2.0823	6.4602
Step 2					
Northern Europe	March-May	0.1453	---	0.1442	0.4475
	June-Sept	0.1453	---	0.1442	0.4475
Southern Europe	March-May	0.2906	---	0.2885	0.8950
	June-Sept	0.2179	---	0.2164	0.6712
IC-0					
Step 1	---	5.2310	---	5.0713	5.4078
Step 2					

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Northern Europe	March-May	0.8479	---	0.8064	0.8554
	June-Sept	0.8479	---	0.8064	0.8554
Southern Europe	March-May	0.8742	---	0.8356	0.8907
	June-Sept	0.8575	---	0.8190	0.8730
IB-1-1					
Step 1	---	6.9121	---	6.8620	0.0000
Step 2					
Northern Europe	March-May	1.3875	---	1.3774	0.0000
	June-Sept	1.3875	---	1.3774	0.0000
Southern Europe	March-May	1.4161	---	1.4059	0.0000
	June-Sept	1.4018	---	1.3916	0.0000

Table 8.8-42: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following double application to pome/stone fruit, late application (2 × 27 g as/ha BBCH 71-84) (use no. 5, 6, 16, 22, 23, 24, 25, 29, 32)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	13.0120	---	12.8967	5.4521
Step 2					
Northern Europe	June-Sept	0.3899	---	0.3819	0.1614
	Oct-Feb	0.5199	---	0.5122	0.2159
Southern Europe	June-Sept	0.4332	---	0.4249	0.1796
	Oct-Feb	0.4765	---	0.4679	0.1978
IM-1-4					
Step 1	---	17.5156	---	17.1024	28.7377
Step 2					
Northern Europe	June-Sept	1.4997	---	1.4251	2.3930
	Oct-Feb	2.1234	---	2.0442	3.4337
Southern Europe	June-Sept	1.7076	---	1.6315	2.7399
	Oct-Feb	1.9155	---	1.8378	3.0868
IM-1-5					
Step 1	---	2.2652	---	2.2488	6.9770
Step 2					
Northern Europe	June-Sept	0.1569	---	0.1558	0.4833
	Oct-Feb	0.3923	---	0.3894	1.2082

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Southern Europe	June-Sept	0.2354	---	0.2337	0.7249
	Oct-Feb	0.3138	---	0.3116	0.9666
IC-0					
Step 1	---	5.1434	---	5.0352	5.3707
Step 2					
Northern Europe	June-Sept	0.4503	---	0.4305	0.4589
	Oct-Feb	0.5044	---	0.4842	0.5162
Southern Europe	June-Sept	0.4684	---	0.4484	0.4780
	Oct-Feb	0.4864	---	0.4663	0.4971
IB-1-1					
Step 1	---	6.6866	---	6.6382	0.0000
Step 2					
Northern Europe	June-Sept	0.7281	---	0.7228	0.0000
	Oct-Feb	0.7745	---	0.7689	0.0000
Southern Europe	June-Sept	0.7436	---	0.7382	0.0000
	Oct-Feb	0.7591	---	0.7536	0.0000

Table 8.8-43: FOCUS Step 1 and 2 PEC_{sw} and PEC_{sed} for metabolites of acetamiprid following application of Acetamipryd 200 SL in greenhouses (1 x 0.06 g as/ha - 0.01% of application rate 60 g a.s./ha, BBCH 20-89) (use no. 41, 42, 43)

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
IM-1-2					
Step 1	---	0.0141	---	0.0140	0.0059
Step 2					
Northern Europe	Mar.-May	0.0002	---	0.0002	0.0001
	June-Sep.	0.0002	---	0.0002	0.0001
Southern Europe	Mar.-May	0.0004	---	0.0004	0.0002
	June-Sep.	0.0003	---	0.0003	0.0001
IM-1-4					
Step 1	---	0.0180	---	0.0178	0.0295
Step 2					
Northern Europe	Mar.-May	0.0008	---	0.0007	0.0013
	June-Sep.	0.0008	---	0.0007	0.0013
Southern	Mar.-May	0.0013	---	0.0012	0.0021

Scenario FOCUS	Waterbody	Max PEC _{sw} (µg/L)	Dominat entry route	21 d- PEC _{sw, twa} (µg/L)	Max PEC _{sed} (µg/kg)
Europe	June-Sep.	0.0010	---	0.0010	0.0017
IM-1-5					
Step 1	---	0.0025	---	0.0025	0.0078
Step 2					
Northern Europe	Mar.-May	0.0002	---	0.0001	0.0005
	June-Sep.	0.0002	---	0.0001	0.0005
Southern Europe	Mar.-May	0.0003	---	0.0003	0.0009
	June-Sep.	0.0002	---	0.0002	0.0007
IC-0					
Step 1	---	0.0052	---	0.0051	0.0054
Step 2					
Northern Europe	Mar.-May	0.0002	---	0.0002	0.0002
	June-Sep.	0.0002	---	0.0002	0.0002
Southern Europe	Mar.-May	0.0002	---	0.0002	0.0002
	June-Sep.	0.0002	---	0.0002	0.0002
IB-1-1					
Step 1	---	0.0066	---	0.0065	0.0000
Step 2					
Northern Europe	Mar.-May	0.0002	---	0.0002	0.0000
	June-Sep.	0.0002	---	0.0002	0.0000
Southern Europe	Mar.-May	0.0003	---	0.0003	0.0000
	June-Sep.	0.0003	---	0.0003	0.0000

PEC_{sw/sed} of Acetamipryd 200 SL

The PEC_{sw} of the formulation Acetamipryd 200 SL were calculated based on the FOCUS spray drift values of the SWASH drift calculator and the density of the formulation of 1144 g/mL.

Table 8.8-44: PEC_{sw} for Acetamipryd 200 SL

Crop	Waterbody	Application rate (g formulation/ha)	Buffer zone (m)	PEC _{sw} (µg formulation/L)
Winter oilseed rape, 1 × 343.2 g form/ha	ditch	343.2	NR	2.2049
	pond			0.0752
	stream			1.6363
	ditch		5m	0.5977
	pond			0.0651
	stream			0.5977

Crop	Waterbody	Application rate (g formulation/ha)	Buffer zone (m)	PEC _{sw} (µg formulation/L)
	ditch		10m	0.3170
	pond			0.0468
	stream			0.3170
	ditch		20m	0.1647
	pond			0.0312
	stream			0.1647
Spring oilseed rape, 1 × 343.2 g form/ha	ditch	343.2	NR	2.2049
	pond			0.0752
	stream			1.6363
	ditch		5m	0.5977
	pond			0.0651
	stream			0.5977
	ditch		10m	0.3170
	pond			0.0468
	stream			0.3170
	ditch		20m	0.1647
	pond			0.0312
	stream			0.1647
Potato, 1 × 137.3 g form/ha	pond	137.3	NR	0.7293
	stream			0.0291
	stream			0.5681
	ditch		5m	0.2391
	pond			0.0260
	stream			0.2391
	ditch		10m	0.1268
	pond			0.0187
	stream			0.1268
	ditch		20m	0.0659
	pond			0.0125
	stream			0.0659
Pome fruit, early application 2 × 154.4 g form/ha	ditch	2 × 154.4	NR	10.4438
	pond			0.6381
	stream			9.4840
	ditch		5m	8.0505
	pond			0.7158
	stream			8.0505
	ditch		10m	4.7562

Crop	Waterbody	Application rate (g formulation/ha)	Buffer zone (m)	PEC _{sw} (µg formulation/L)
	pond			0.4066
	stream			4.7562
	ditch		20m	1.2313
	pond			0.1227
	stream			1.2313
Pome fruit, early application 1 × 228.8 g form/ha	ditch	228.8	NR	17.9979
	pond			1.0821
	stream			16.4604
	ditch		5m	14.1420
	pond			1.2183
	stream			14.1420
	ditch		10m	8.6847
	pond			0.6680
	stream			8.6847
	ditch		20m	1.9859
	pond			0.2160
	stream			1.9859

zRMS comments:

The application pattern assumed in simulations is in line with the GAP as presented in Table 8.9.2-1. Since not all relevant to the central zone scenarios are defined for the evaluated crops, the surrogate crops were considered by the Applicant in simulations.b

Input parameters presented in Tables 8.9.2-4 and 8.9.2-5 and considered by the Applicant in surface water modelling for acetamiprid and its metabolites are in general in line with EU agreed endpoints reported in EFSA Journal 2016;14(11):4610.

The geometric mean was used instead of arithmetic mean K_{foc} values for acetamiprid and its metabolites. This deviations are accepted by evaluator. The geometric means K_{foc} values are lower than arithmetic means values and represent thus worst case in terms of the water in exposure. Moreover, consideration of geometric mean K_{foc} values is in line with current EFSA recommendations. The geometric mean values calculated by the Applicant were based on the currently EU agreed individual values and are confirmed to be correct. No PEC_{SED} are required in the risk assessment for acetamiprid.

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, FOCUS TOXSWA v5.5.3, ECPA SWAN v5.0.1, VFSmod. Obtained PEC_{sw}. Thus, surface water exposure reported in Tables 8.9.2-6 to 8.9.2-23 is relevant for the aquatic risk assessment.

ZRMS comment: February 2026:

Applicant performed calculation for uses in greenhouses with a permanent structure, isolated from the ground. The product can be approved for use in greenhouses with a permanent structure, isolated from the ground. The applicant cited an assessment accepted in sealed greenhouses with a permanent ground greenhouse. Use calculates doses of were 0.1% of the declared dose.

In this case uses in greenhouse are cover by uses in field.

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

Table 8.9-1 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: $76.435 \text{ cm}^3 \times \text{molecule}^{-1} \times \text{sec}^{-1}$ DT50: 0.140 days (derived by the Atkinson model assuming a OH(12 h) concentration of $1.5 \times 10^6 \text{ OH/cm}^3$)
Volatilisation	Vapour pressure (Pa): 1.73×10^{-7} Henry's Law Constant (Pa m ³ /mol): $< 5.3 \times 10^{-8}$ (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 the contamination of the atmosphere with acetamiprid from the intended uses of Acetamiprid 120SL is considered to be negligible.

Appendix 1 Lists of data considered in support of the evaluation

Tables considered not relevant can be deleted as appropriate.

MS to blacken authors of vertebrate studies in the version made available to third parties/public.

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	Hara-Skrzypiec A.	2024	Acetamipryd 200 SL - A Leaching Assessment for acetamiprid and its metabolites using the PEARL 5.5.5, PELMO 6.6.4 and MACRO 5.5.4 Groundwater Models. Company Report No: EST/5/2024 Not GLP Unpublished	N	Pestila* ProAgri*
KCP 9.2.4/02	Tabor E.	2026	ACETAMIPRYD 200 SL- A Leaching Assessment for acetamiprid and its metabolites using the PEARL 5.5.5 Groundwater Models Company Report No: Amendment No 1 EST/5/2024 Not GLP Unpublished	N	Pestila* ProAgri*
KCP 9.2.5/01	Hara-Skrzypiec A.	2024	Acetamipryd 200 SL - A European Environmental Fate Assessment for acetamiprid and its metabolites using the FOCUS Surface Water Models at Steps 1 to 4. Company Report No: EST/6/2024 Not GLP Unpublished	N	Pestila* ProAgri*
KCP 9.2.5/02	Tabor E.	2026	ACETAMIPRYD 200 SL European Environmental Fate Assessment for acetamiprid and its metabolites using the FOCUS Surface Water Models at Steps 1-2 Company Report No: Amendment No 1 EST/6/2024 Not GLP Unpublished	N	Pestila* ProAgri*

*Pestila Spółka z ograniczoną odpowiedzialnością (short name: Pestila Sp. z o.o.)
**ProAgri Spółka z ograniczoną odpowiedzialnością or ProAgri International Spółka z ograniczoną odpowiedzialnością (short name: ProAgri Sp. z o.o. or ProAgri International Sp. z o.o.)

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
-	-	-	-	-	-

The following tables are to be completed by MS

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

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

Appendix 2 Detailed evaluation of the new Annex II studies

Not relevant.

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