REGISTRATION REPORT

Part A

Risk Management

Product code: AG-P4-400 SC

Product name(s): PENTIUM FLO

Chemical active substance(s):

Pendimethalin, 400 g/L

Southern Zone

Zonal Rapporteur Member State: France

NATIONAL ASSESSMENT FRANCE

(Authorisation renewal according to Art. 43)

Applicant: ADAMA France S.A.S.

Date: 2026-01-27

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PART A
RISK MANAGEMENT

1 Details of the application

The company ADAMA France S.A.S. has requested a marketing authorisation in France for the product PENTIUM FLO (formulation code: AG-P4-400 SC), containing 400 g/L pendimethalin as a herbicide for professional uses.

The risk assessment conclusions provided in this document are based on the information, data and assessments provided in the Registration Report, Part B Sections 1-10 and Part C, and where appropriate the addendum for France. The information, data and assessments provided in the Registration Report, Part B include assessment of further data or information as required at national registration by EU regulations. It also includes assessment of data and information related to PENTIUM FLO (AG-P4-400 SC) where those data have not been considered in the EU peer review process. Otherwise assessments for the safe use of PENTIUM FLO (AG-P4-400 SC) have been made using endpoints agreed in the EU peer review of pendimethalin.

This document describes the specific conditions of use and labelling required for France for the registration of PENTIUM FLO (AG-P4-400 SC).

Appendix 1 of this document provides a copy of the product authorisation.

Appendix 2 of this document contains a copy of the product label (draft as proposed by the applicant).

Appendix 3 of this document contains a copy of the Letter(s) of Access.

1.1 Application background

The present registration report concerns the evaluation of ADAMA France S.A.S.'s application to market PENTIUM FLO (AG-P4-400 SC) in France as a herbicide (product uses described under point 2.3). France acted as a zonal Rapporteur Member State (zRMS) for this request and assessed the application submitted for the renewal of authorisation after approval of the active substance pendimethalin of this product in France and in other MSs of the Southern zone.

The present application (2017-3324, 2018-400, 2019-0793 and 2019-0797) was evaluated in France by the French Agency for Food, Environmental and Occupational Health & Safety (Anses) in the context of the zonal procedure for all Member States of the Southern zone, taking into account the worst-case uses ("risk envelope approach")[1] – the highest application rates applied for in the Southern Zone. When risk mitigation measures were necessary, they are adapted to the situation in France.

The current document (RR) based on Anses's assessment of the application submitted for this product is in compliance with Regulation (EC) no 1107/2009[2], implementing regulations, and French regulations.

The data taken into account are those deemed to be valid either at European Union level or at zonal/national

[1] SANCO document "risk envelope approach", European Commission (14 March 2011). Guidance document on the preparation and submission of dossiers for plant protection products according to the "risk envelope approach"; SANCO/11244/2011 rev. 5

[2] REGULATION (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC

level. This part A of the RR presents a summary of essential scientific points upon which recommendations are based and is not intended to show the assessment in detail.

The conclusions on the acceptability of risk are based on the criteria provided in Regulation (EU) No 546/2011[3], and are expressed as "acceptable" or "not acceptable" in accordance with those criteria.

1.2 Letters of Access

The applicant has provided (a) letter(s) of access for active substance and PPP data.

1.3 Justification for submission of tests and studies

According to the applicant: « All studies and data provided with this application are requested by current guidelines for re-authorisation of a plant protection product (AG-P4-400 SC) in EU countries ».

1.4 Data protection claims

Where protection for data is being claimed for information supporting registration of PENTIUM FLO (AG-P4-400 SC), it is indicated in the reference lists in Appendix 1 of the Registration Report, Part B Sections 1-7.

2 Details of the authorisation decision

2.1 Product identity

Product code	AG-P4-400 SC
Product name in MS	PENTIUM FLO
Authorisation number	2100215
Low risk (article 47)	No
Function	herbicide
Applicant	ADAMA FRANCE S.A.S.
Active substance(s) (incl. content)	Pendimethalin, 400 g/L
Formulation type	Suspension concentrate [SC]
Packaging	1 L, 5 L and 10 L HDPE[4] 1 L, 5 L, 10 L and 20 L HDPE/PA[5] 5 L HDPE/EVOH[6]
Coformulants of concern for national authorisations	-

[3] COMMISSION REGULATION (EU) No 546/2011 of 10 June 2011 implementing Regulation (EC) No 1107/2009 of the European Parliament and of the Council as regards uniform principles for evaluation and authorisation of plant protection products
[4] HDPE = high density polyethylen
[5] HDPE/PA = high density polyethylene / Polyamide
[6] HDPE/EVOH = high density polyethylene / *E*thylene vinyl alcohol

Restrictions related to identity	-
Mandatory tank mixtures	None
Recommended tank mixtures	None

2.2 Conclusion

The evaluation of the application for PENTIUM FLO (AG-P4-400 SC)resulted in the decision **to grant** the authorisation.

2.3 Substances of concern for national monitoring

Refer to 5.1.1.

2.4 Classification and labelling

2.4.1 Classification and labelling under Regulation (EC) No 1272/2008

The following classification is proposed in accordance with Regulation (EC) No 1272/2008:

Hazard class(es), categories:	Reproductive toxicity, category 2 Hazardous to the aquatic environment, Acute Hazard, Category 1. Hazardous to the aquatic environment, Chronic Hazard, Category 1.
Hazard pictograms:	 SGH09
Signal word:	Warning
Hazard statement(s):	H361d : Suspected of damaging the unborn child. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects.
Precautionary statement(s):	***For the P phrases, refer to the existing legislation***
Additional labelling phrases:	To avoid risks to man and the environment, comply with the instructions for use. [EUH401]
	Contains 1,2-Benzisothiazolin-3-one (CAS No. 2634-33-5). May produce an allergic reaction.[EUH208]

See Part C for justifications of the classification and labelling proposals.

2.4.2 Standard phrases under Regulation (EU) No 547/2011

SP 1	Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads).
	For other restrictions refer to 2.5

2.4.3 Other phrases (according to Article 65 (3) of the Regulation (EU) No 1107/2009)

None.

2.5 Risk management

According to the French law and procedures, specific conditions of use are set out in the Decision letter. The French Order of 4 May 2017 [7] provides that:

- unless otherwise stated in the product authorisation, the pre harvest interval (PHI) is at least 3 days;
- unless otherwise stated in the product authorisation, the minimum buffer zone alongside a water body is 5 metres;
- unless otherwise stated in the product authorisation, the minimum re-entry period is 6 hours for field uses and 8 hours for indoor uses.

Drift reduction measures such as low-drift nozzles are not considered within the decision-making process in France. However, non-spraying buffer zones may be reduced under some circumstances as explained in appendix 3 of the above-mentioned French Order.

Finally, the French Order of 12 April 2021[8] provides that:

- an authorisation granted for a "reference" crop applies also for "linked" crops, unless formally stated in the Decision
- the "reference" and "linked" crops are defined in Appendix 1 of that French Order.

Thus, at French national level, possible extrapolation of submitted data and the corresponding assessment from "reference" crops to "related" ones are undertaken even if not clearly requested by the applicant in their dRR, and a conclusion is also reached on the acceptability of the intended uses on those "related" crops. The aim of this Order, mainly based on the EU document on residue data extrapolation[9] is to supply "minor" crops with registered plant protection products.

Therefore the GAP table (Section 2.3) and Decision may include uses on crops not originally requested by the applicant.

The Decision, as reproduced in Appendix 1, takes also into account national provisions, including national mitigation measures.

2.5.1 Restrictions linked to the PPP

The authorisation of the PPP is linked to the following conditions:

Operator protection:	
-	Refer to the Decision in Appendix 1 for the details
Worker protection:	

[7] Arrêté du 4 mai 2017 relatif à la mise sur le marché et à l'utilisation des produits phytopharmaceutiques et de leurs adjuvants visés à l'article L. 253-1 du code rural et de la pêche maritime https://www.legifrance.gouv.fr/eli/arrete/2017/5/4/AGRG1632554A/jo/texte

[8] https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000043401456

[9] SANCO document "guidance document:- Guidelines on comparability, extrapolation, group tolerances and data requirements for setting MRLs": SANCO/ 7525/VI/95 - rev.9

-	Refer to the Decision in Appendix 1 for the details
Bystander and resident protection	
-	Respect an unsprayed zone of 3 meters from the extremity of the boom and : - areas where bystanders are present during treatment - areas where residents could be present
Integrated pest management (IPM)/sustainable use:	
	-
Environmental protection	
SPe 3	To protect aquatic organisms, respect an unsprayed buffer zone of 20 metres with a 20-metre permanent planted buffer strip to surface water bodies for the use on salsify and spring crops of protein seeds, fresh shelled beans and peas and dry vegetable legumes
SPe 3	To protect aquatic organisms, respect an unsprayed buffer zone of 50 metres with a 20-metre permanent planted buffer strip to surface water bodies for uses on wheat, barley, rye, tobacco and inflorescence cabbage.
SPe 8	To protect bees and other pollinating insects, do not use in presence of bees and other pollinating insects.
Other specific restrictions	
Re-entry period	6 hours
Storage	The formulation must be stored at a temperature below 35 °C.
Risk mitigation measure	To prevent any possible risk of phytotoxicity, specify the optimum conditions for application in relation to adjacent crops.
	To prevent any possible risk of phytotoxicity, specify the optimum conditions for inplanting following or replacement crops
Agricultural recommendations	

2.5.2 Specific restrictions linked to the intended uses

Some of the authorised uses are linked to the following conditions in addition to those listed under point 2.5.1 (mandatory labelling):

None.

2.6 Intended uses (only NATIONAL GAP)

Please note: The GAP Table below reports the intended uses proposed by the applicant, and possible extrapolation according to French Order of 12 April 2021 (highlighted in green), evaluated and concluded as safe uses by France as zRMS. Those uses are then granted in France.
When the conclusion is "not acceptable", the intended use is highlighted in grey and the main reason(s) reported in the remarks.
When a use is "acceptable" with GAP restrictions, the modifications of the GAP are in bold.
Use should be crossed out when the applicant no longer supports this use.

GAP rev. 1, date: 2026-01-27

PPP (product name/code):	PENTIUM FLO/AG-P4-400 SC	Formulation type:	Suspension concentrate (SC)[a, b]
Active substance 1:	pendimethalin	Conc. of a.s. 1:	400 g/L[c]
Applicant:	ADAMA FRANCE S.A.S.	Professional use:	☒
Zone(s):	Southern Zone [d]	Non-professional use:	☐
Verified by MS:	**Yes**		

Field of use: herbicide

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. [e]	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [f]
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
Zonal uses (field or outdoor uses, certain types of protected crops)													
118	France	Winter Fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-jan/ BBCH 00-07	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Not acceptable** (aquatic organisms, ground-water)
118	France	Winter Fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-jan/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	F	**Not acceptable** (efficacy)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. [e]	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [f]
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
119	France	Winter Fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-mar/ BBCH 12-16	a) 1 b) 1	n/a	a) 1 L/ha b) 1 L/ha	a) 400 b) 400	80-400	F	**Not acceptable** (efficacy in early post-emer-gence, selectivity level)
120	France	Winter Fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-mar/ 00-07 then 12-16	a) 2 b) 2	15	a) 2 L/ha b) 3 L/ha	a) 800 b) 1200	80-400	F	**Not acceptable** (groundwater, efficacy in early post-emer-gence, selectivity level)
121	France	Winter Fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-mar/ BBCH 12, then BBCH 16	a) 2 b) 2	15	a) 0.5 L/ha b) 1 L/ha	a) 200 b) 400	80-400	F	**Not acceptable** (groundwater, selectivity level)
122	France	Winter Horse bean	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-mar/ BBCH 00-07	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Not acceptable** (aquatic organisms, ground-water)
122b	France	Winter Horse bean	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-mar/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	F	**Not acceptable** (efficacy)
123	France	Winter Horse bean	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-mar/ BBCH 12-16	a) 1 b) 1	n/a	a) 1 L/ha b) 1 L/ha	a) 400 b) 400	80-400	F	**Not acceptable** (efficacy in early post-emer-gence, selectivity level)
124	France	Winter Horse bean	F	grass and annual broad-leaved weeds	foliar, spraying, overall	nov-mar/ 00-07 then 12-16	a) 2 b) 2	15	a) 2 L/ha b) 3 L/ha	a) 800 b) 1200	80-400	F	**Not acceptable** (groundwater, efficacy in early post-emergence, selec-tivity level)
125	France	Carrot	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Feb-Sep/ BBCH 00-07	a) 1 b) 1	n/a	a) 2 L/ha b) 2 L/ha	a) 800 b) 800	80-400	n/a	**Not acceptable** (minimal dose for efficacy)
126	France	Carrot	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Feb-Sep/ BBCH 00-07 > 11-12	a) 2b) 2	10	a) 1 L/ha b) 2 L/ha	a) 400 b) 800	80-400	n/a	**Not acceptable** (efficacy in early post-emer-gence)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. [e]	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [f]
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
127	France	Carrot	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Feb-Sep/ BBCH '11-12	a) 1 b) 1	n/a	a) 1 L/ha b) 1 L/ha	a) 400 b) 400	80-400	n/a	**Not facceptable** (groundwater)
128	France	Soybean	F	grass and annual broad-leaved weeds	soil, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	a) 2.3 L/ha b) 2.3 L/ha	a) 920 b) 920	80-400	F	**Not acceptable** (minimal dose for efficacy)
129	France	Sorghum	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-May/ BBCH 00-07 or 11-13	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	80-400	F	**Not acceptable** (ground water, aquatic organ-isms, selectivity level)
129b	France	Sorghum	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-May/ BBCH 00-07 or 11-13	a) 1 b) 1	n/a	**a) 2.5 L/ha** **b) 2.5 L/ha**	a) 1000 b) 1000	80-400	F	**Not acceptable** (ground water, selectivity level)
130	France	Wheat, spring (soft and durum)	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Sep-May/ 00-07 or 11-25	a) 1 b) 1	n/a	a) 2.5 L/ha b) 2.5 L/ha	a) 1000 b) 1000	80-400	F	**Not acceptable** (selectivity level for spring ce-reals)
130	France	Wheat and triticale winter (soft and du-rum)	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Sep-May/ 00-07 or 11-25	a) 1 b) 1	n/a	a) 2.5 L/ha b) 2.5 L/ha	a) 1000 b) 1000	80-400	F	**Acceptable**
131	France	Barley, spring & winter	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Sep-May/ 00-07 or 11-25	a) 1 b) 1	n/a	a) 2.5 L/ha b) 2.5 L/ha	a) 1000 b) 1000	80-400	F	**Acceptable**
132	France	Triticale spring	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Sep-May/ 00-07 or 11-25	a) 1 b) 1	n/a	a) 2.5 L/ha b) 2.5 L/ha	a) 1000 b) 1000	80-400	F	**Not acceptable** (selectivity level for spring ce-reals)
133	France	Rye winter	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Sep-May/ 00-07 or 11-25	a) 1 b) 1	n/a	a) 2.5 L/ha b) 2.5 L/ha	a) 1000 b) 1000	80-400	F	**Acceptable**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. [e]	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [f]
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
134	France	Maize	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-May/ BBCH 00-07 or 11-13	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	80-400	F	**Not acceptable** (ground water, aquatic organ-isms)
134b	France	Maize	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-May/ BBCH 00-07 or 11-13	a) 1 b) 1	n/a	**a) 2.5 L/ha** **b) 2.5 L/ha**	a) 1000 b) 1000	80-400	F	**Not acceptable** (ground water, efficacy)
135	France	Sunflower	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-May/ BBCH 00-07	a) 1 b) 1	n/a	a) 3.3 L/ha b) 3.3 L/ha	a) 1320 b) 1320	80-400	F	**Not acceptable** (aquatic organisms)
135b	France	Sunflower	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-May/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	F	**Not acceptable** (efficacy)
136	France	canned spring peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Acceptable**
136b	France	canned spring peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	F	**Not acceptable** (efficacy)
137	France	canned spring peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12-16	a) 1 b) 1	n/a	a) 1 L/ha b) 1 L/ha	a) 400 b) 400	80-400	F	**Not acceptable** (efficacy in early post-emer-gence, selectivity level)
138	France	canned spring peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ 00-07 then 12-16	a) 2 b) 2	15	a) 2 L/ha b) 3 L/ha	a) 800 b) 1200	80-400	F	**Not acceptable** (groundwater, efficacy in early post-emergence, selec-tivity level)
139	France	canned spring peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12, then BBCH 16	a) 2 b) 2	10	a) 0.5 L/ha b) 1 L/ha	a) 300 b) 600	80-400	F	**Not acceptable** (groundwater, selectivity level)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. [e]	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [f]
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
136a	France	Fresh beans with-out pods	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Acceptable**
136b	France	Fresh beans with-out pods	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	F	**Not acceptable** (efficacy)
137a	France	Fresh beans with-out pods	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12-16	a) 1 b) 1	n/a	a) 1 L/ha b) 1 L/ha	a) 400 b) 400	80-400	F	**Not acceptable** (efficacy in early post-emer-gence, selectivity level)
138a	France	Fresh beans with-out pods	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ 00-07 then 12-16	a) 2 b) 2	10	a) 2 L/ha b) 3 L/ha	a) 800 b) 1200	80-400	n/a	**Not acceptable** (groundwater, efficacy in early post-emergence, selec-tivity level)
139a	France	Fresh beans with-out pods	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12, then BBCH 16	a) 2 b) 2	10	a) 0.5 L/ha b) 1 L/ha	a) 300 b) 600	80-400	n/a	**Not acceptable** (groundwater, selectivity level)
140	France	Lupin	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Acceptable**
140b	France	Lupin	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	n/a	**Not acceptable** (efficacy)
141	France	spring fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Acceptable**
141b	France	spring fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	n/a	**Not acceptable** (efficacy)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. (e)	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha (f)
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
142	France	spring fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12-16	a) 1 b) 1	n/a	a) 1 L/ha b) 1 L/ha	a) 400 b) 400	80-400	n/a	**Not acceptable** (efficacy in early post-emer-gence, selectivity level)
143	France	spring fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ 00-07 then 12-16	a) 2 b) 2	15	a) 2 L/ha b) 3 L/ha	a) 800 b) 1200	80-400	n/a	**Not acceptable** (groundwater, efficacy in early post-emergence, selec-tivity level)
144	France	spring fodder peas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12, then BBCH 16	a) 2 b) 2	15	a) 0.5 L/ha b) 1 L/ha	a) 200 b) 400	80-400	n/a	**Not acceptable** (groundwater, selectivity level)
141a	France	lentils, chickpeas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Acceptable**
141b	France	lentils, chickpeas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	n/a	**Not acceptable** (efficacy)
142a	France	lentils, chickpeas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12-16	a) 1 b) 1	n/a	a) 1 L/ha b) 1 L/ha	a) 400 b) 400	80-400	n/a	**Not acceptable** (efficacy in early post-emer-gence, selectivity level)
143a	France	lentils, chickpeas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ 00-07 then 12-16	a) 2 b) 2	15	a) 2 L/ha b) 3 L/ha	a) 800 b) 1200	80-400	F	**Acceptable**
144a	France	lentils, chickpeas	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12, then BBCH 16	a) 2 b) 2	15	a) 0.5 L/ha b) 1 L/ha	a) 200 b) 400	80-400	n/a	**Not acceptable** (selectivity level)
145	France	spring horse bean	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Acceptable**

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. [e]	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [f]
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
145b	France	spring horse bean	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 00-07	a) 1 b) 1	n/a	**a) 2 L/ha** **b) 2 L/ha**	a) 800 b) 800	80-400	n/a	**Not acceptable** (efficacy)
146	France	spring horse bean	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ BBCH 12-13	a) 1 b) 1	n/a	a) 1 L/ha b) 1 L/ha	a) 400 b) 400	80-400	n/a	**Not acceptable** (efficacy in early post-emer-gence, selectivity level)
147	France	spring horse bean	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Mar-May/ 00-07 then 12-13	a) 2 b) 2	15	a) 2 L/ha b) 3 L/ha	a) 800 b) 1200	80-400	n/a	**Not acceptable** (groundwater, efficacy in early post-emergence, selec-tivity level)
148	France	vineyard	F	grass and annual broad-leaved weeds	foliar, spraying, in rows	Oct-Apr/ BBCH 95-57 (starting after harvest)	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	80-400	n/a	**Not acceptable** (groundwater, aquatic organ-isms, efficacy)
148b	France	vineyard	F	grass and annual broad-leaved weeds	foliar, spraying, in rows	00-15	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	80-400	n/a	**Not acceptable** (aquatic organisms, efficacy)
148c	France	vineyard	F	grass and annual broad-leaved weeds	foliar, spraying, in rows	00-15	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	n/a	**Not acceptable** (efficacy)
149	France	Apple, pear, quince, nashi	F	grass and annual broad-leaved weeds	foliar, spraying, in rows	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	80-400	n/a	**Not acceptable** (groundwater, aquatic organ-isms, efficacy)
149b	France	Apple, pear, quince, nashi	F	grass and annual broad-leaved weeds	foliar, spraying, in rows	**00-15**	a) 1 b) 1	n/a	**a) 3 L/ha** **b) 3 L/ha**	a) 1200 b) 1200	80-400	n/a	**Not acceptable** (efficacy)
151	France	Peach	F	grass and annual broad-leaved weeds	soil, spraying, overall	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	100-500	F	**Not acceptable** (groundwater, aquatic organ-isms, efficacy, selectivity level)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. [e]	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha [f]
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
151b	France	Peach	F	grass and annual broad-leaved weeds	soil, spraying, overall	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	**a) 3 L/ha** **b) 3 L/ha**	a) 1200 b) 1200	100-500	F	**Not acceptable** (efficacy, selectivity level)
152	France	Plum	F	grass and annual broad-leaved weeds	soil, spraying, overall	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	100-500	F	**Not acceptable** (groundwater, aquatic organ-isms, efficacy, selectivity level)
152b	France	Plum	F	grass and annual broad-leaved weeds	soil, spraying, overall	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	**a) 3 L/ha** **b) 3 L/ha**	a) 1200 b) 1200	100-500	F	**Not acceptable** (efficacy, selectivity level)
153	France	Apricot	F	grass and annual broad-leaved weeds	soil, spraying, overall	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	100-500	F	**Not acceptable** (groundwater, aquatic organ-isms, efficacy, selectivity level)
153b	France	Apricot	F	grass and annual broad-leaved weeds	soil, spraying, overall	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	**a) 3 L/ha** **b) 3 L/ha**	a) 1200 b) 1200	100-500	F	**Not acceptable** (efficacy, selectivity level)
154	France	Cherry	F	grass and annual broad-leaved weeds	soil, spraying, overall	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	a) 4 L/ha b) 4 L/ha	a) 1600 b) 1600	100-500	F	**Not acceptable** (groundwater, aquatic organ-isms, efficacy, selectivity level)
154b	France	Cherry	F	grass and annual broad-leaved weeds	soil, spraying, overall	Oct-Jun/ BBCH 90-75	a) 1 b) 1	n/a	**a) 3 L/ha** **b) 3 L/ha**	a) 1200 b) 1200	100-500	F	**Not acceptable** (efficacy, selectivity level)
155	France	Onion	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Oct-Apr/ BBCH 00-15 (pre em) or post plantation	a) 1 b) 1	n/a	a) 3.3 L/ha b) 3.3 L/ha	a) 1320 b) 1320	80-400	n/a	**Not acceptable** (aquatic organisms)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. (e)	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha (f)
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
155b	France	Onion	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Oct-Apr/ BBCH 00-15 (pre em) or post plantation	a) 1 b) 1	n/a	**a) 2.5 L/ha** **b) 2.5 L/ha**	a) 1000 b) 1000	80-400	n/a	**Not acceptable** (efficacy)
156	France	Shallot	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Oct-Apr/ BBCH 00-15 (pre em) or post plantation	a) 1 b) 1	n/a	a) 3.3 L/ha b) 3.3 L/ha	a) 1320 b) 1320	80-400	n/a	**Not acceptable** (aquatic organisms)
156b	France	Shallot	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Oct-Apr/ BBCH 00-15 (pre em) or post plantation	a) 1 b) 1	n/a	**a) 2.5 L/ha** **b) 2.5 L/ha**	a) 1000 b) 1000	80-400	n/a	**Not acceptable** (efficacy)
157	France	garlic	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Oct-Apr/ BBCH 00-07 (pre em)	a) 1 b) 1	n/a	a) 3.3 L/ha b) 3.3 L/ha	a) 1320 b) 1320	80-400	n/a	**Not acceptable** (aquatic organisms)
157b	France	garlic	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Oct-Apr/ BBCH 00-07 (pre em)	a) 1 b) 1	n/a	**a) 2.5 L/ha** **b) 2.5 L/ha**	a) 1000 b) 1000	80-400	n/a	**Not acceptable** (efficacy)
158	France	leek	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Jan-Apr/ pre transplantation	a) 1 b) 1	n/a	a) 3.3 L/ha b) 3.3 L/ha	a) 1320 b) 1320	80-400	n/a	**Not acceptable** (MRL, aquatic organisms)
158b	France	leek	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Jan-Apr/ pre transplantation	a) 1 b) 1	n/a	**a) 2.5 L/ha** **b) 2.5 L/ha**	a) 1000 b) 1000	80-400	n/a	**Not acceptable** (MRL, efficacy)
159	France	Tomato	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-Jun/ pre transplantation	a) 1 b) 1	n/a	a) 3.3 L/ha b) 3.3 L/ha	a) 1320 b) 1320	80-600	F	**Not acceptable** (efficacy)
160	France	Tobacco	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-Jun/ BBCH 00 Pre-trans-planting (incor-porated)	a) 1 b) 1	n/a	a) 3.3 L/ha b) 3.3 L/ha	a) 1320 b) 1320	80-400	n/a	**Not acceptable** (aquatic organisms)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use-No. (e)	**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: develop-mental stages of the pest or pest group)	**Application**				**Application rate**			**PHI** (days)	**Remarks:** e.g. g safener/synergist per ha (f)
					Method / Kind	Timing / Growth stage of crop & season	Max. num-ber a) per use b) per crop/ season	Min. interval between ap-plications (days)	kg or L prod-uct / 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		
160b	France	Tobacco	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Apr-Jun/ BBCH 00 Pre-trans-planting (incor-porated)	a) 1 b) 1	n/a	**a) 3 L/ha** **b) 3 L/ha**	a) 1320 b) 1320	80-400	n/a	**Acceptable**
161	France	salsify (scorsonère, salsifis)	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Feb-Sep/ BBCH 00-07	a) 1 b) 1	n/a	a) 2 L/ha b) 2 L/ha	a) 800 b) 800	80-400	F	**Acceptable**
162	France	Head cabbage, brussels sprouts	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Feb-Sep/ pre transplantation	a) 1 b) 1	n/a	a) 3.3 L/ha b) 3.3 L/ha	a) 1320 b) 1320	80-400	F	**Not acceptable** (aquatic organisms)
162b	France	Head cabbage, brussels sprouts	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Feb-Sep/ pre transplantation	a) 1 b) 1	n/a	**a) 2.5 L/ha** **b) 2.5 L/ha**	a) 1000 b) 1000	80-400	F	**Not acceptable** (efficacy)
162c	France	Broccoli, cauli-flower	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Feb-Sep/ pre transplantation	a) 1 b) 1	n/a	a) 3 L/ha b) 3 L/ha	a) 1200 b) 1200	80-400	F	**Not acceptable** (aquatic)
162d	France	Broccoli, cauli-flower	F	grass and annual broad-leaved weeds	foliar, spraying, overall	Feb-Sep/ pre transplantation	a) 1 b) 1	n/a	**a) 2.5 L/ha** **b) 2.5 L/ha**	a) 1000 b) 1000	80-400	F	**Not acceptable** (efficacy)

Remarks table heading:

(a) e.g. wettable powder (WP), emulsifiable concentrate (EC), granule (GR)
(b) Catalogue of pesticide formulation types and international coding system CropLife International Technical Monograph n°2, 6th Edition Revised May 2008
(c) g/kg or g/l
(d) Select relevant
(e) Use number(s) in accordance with the list of all intended GAPs in Part B, Section 0 should be given in column 1
(f) No authorisation possible for uses where the line is highlighted in grey, Use should be crossed out when the notifier no longer supports this use.

Remarks columns:

1 Numeration necessary to allow references
2 Use official codes/nomenclatures of EU Member States
3 For crops, the EU and Codex classifications (both) should be used; when relevant, the use situation should be described (e.g. fumigation of a structure)
4 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
5 Scientific names and EPPO-Codes of target pests/diseases/ weeds or, when relevant, the common names of the pest groups (e.g. biting and sucking insects, soil born insects, foliar fungi, weeds) and the developmental stages of the pests and pest groups at the moment of application must be named.
6 Method, e.g. high volume spraying, low volume spraying, spreading, dusting, drench
Kind, e.g. overall, broadcast, aerial spraying, row, individual plant, between the plants - type of equipment used must be indicated.
7 Growth stage at first and last treatment (BBCH Monograph, Growth Stages of Plants, 1997, Blackwell, ISBN 3-8263-3152-4), including where relevant, information on season at time of application
8 The maximum number of application possible under practical conditions of use must be provided.
9 Minimum interval (in days) between applications of the same product
10 For specific uses other specifications might be possible, e.g.: g/m³ in case of fumigation of empty rooms. See also EPPO-Guideline PP 1/239 Dose expression for plant protection products.
11 The dimension (g, kg) must be clearly specified. (Maximum) dose of a.s. per treatment (usually g, kg or L product/ha).
12 If water volume range depends on application equipments (e.g. ULVA or LVA) it should be mentioned under “application: method/kind”.
13 PHI - minimum pre-harvest interval
14 Remarks may include: Extent of use/economic importance/restrictions

3 Background of authorisation decision and risk management

3.1 Physical and chemical properties (Part B, Section 2)

All studies have been performed in accordance with the current requirements and the results are deemed to be acceptable. The appearance of the product is that of a yellowish brown suspension with a slight aromatic odour. It has no explosive and no oxidising properties. The product is not flammable, with a flash point >98 °C. The auto-ignition temperature is 390 °C. The pH of an aqueous solution (1% v/v) and of the neat formulation is respectively 6.6 and 6.4. There is no effect of low and high temperature on the stability of the formulation, since after 7 days at 0 °C and 12 weeks at 35 °C, neither the active ingredient content nor the technical properties were significantly changed. The stability data indicate a shelf life of at least 2 years at ambient temperature when stored in HDPE/EVOH containers. This stability can be extrapolated to the other claimed packaging made of HDPE/PA.

Its technical characteristics are acceptable for a suspension concentrate formulation.

The formulation should be stored at a temperature below 35 °C.

3.2 Efficacy (Part B, Section 3)

The efficacy level of the product PENTIUM FLO (AG-P4-400 SC) applied pre-emergence at 2 L/ha for annual broadleaf weed control in salsify is considered acceptable.

The efficacy level of the product PENTIUM FLO (AG-P4-400 SC) applied pre-emergence at 2 L/ha for annual broadleaf weed control in carrot is considered acceptable. **Nevertheless, the minimum dose has not been demonsrated. Thus, the data submitted do not allow to finalize the evaluation for this use.** The efficacy level of the product used in a programme based on one application at pre-emergence (1 L/ha) and one application at early post-emergence (1 L/ha) is considered acceptable in carrot. **As the efficacy data supporting the use of PENTIUM FLO (AG-P4-400 SC) at 1 L/ha in early post-emergence in carrot have not been presented, the evaluation of its efficacy level cannot be finalized for this use**.

The efficacy level of the product PENTIUM FLO (AG-P4-400 SC) applied pre-emergence at 2.3 L/ha for annual broadleaf weed control in soyabean is considered acceptable. **Nevertheless, the minimum dose has not been demonsrated. Thus, the data submitted do not allow to finalize the evaluation for this use.**

The efficacy level of the product PENTIUM FLO (AG-P4-400 SC) applied pre-emergence or early post-emergence at 2.5 L/ha for annual broadleaf weed control in cereal crops (wheat, barley, rye) is considered acceptable.

The efficacy level of the product PENTIUM FLO (AG-P4-400 SC) applied pre-emergence at 3 L/ha for annual broadleaf weed control in fodder peas/beans, fresh peas/ beans and dry pulses is considered acceptable. The efficacy level of the product used in a programme based on one application at pre-emergnce (2 L/ha) and one application at early post-emergence (1 L/ha) is considered acceptable for these uses. **As the efficacy data supporting the use of PENTIUM FLO (AG-P4-400 SC) at 1 L/ha in early post-emergence in these proteaginous crops have not been presented, the evaluation of its efficacy level cannot be finalized for the corresponding uses.**

Similarly, in absence of data on these crops for a pre-emergence treatment at the reduced rate of 2 L/ha proposed by the applicant, the assessment of the efficacy level cannot be finalised.

The efficacy level of the product PENTIUM FLO (AG-P4-400 SC) applied pre-plantation at 3.3 L/ha for annual broadleaf weed control in tobacco, tomato, leek, head cabbages and cauliflowers is considered acceptable. The efficacy level of the product PENTIUM FLO (AG-P4-400 SC) applied pre-emergence at 3.3 L/ha for annual broadleaf weed control in onion and sunflower is considered acceptable as well. **However, as new reduced rates have been proposed by the applicant on tomato, leek and cabbage without specific data, the assessment of the efficacy level of the product cannot be finalised**.

The efficacy level of the product PENTIUM FLO (AG-P4-400 SC) applied pre-emergence or early post-emergence at 4 L/ha for annual broadleaf weed control in maize and sorghum is considered acceptable.
However, without data on these crops for applications at the reduced rate of 2.5 L/ha for ecotoxicological reasons, the assessment of the efficacy level cannot be finalised.

In the absence of data supporting the effectiveness of PENTIUM FLO (AG-P4-400 SC) at the reduced dose of 4 L/ha for annual broadleaf weed control in pome fruits and grapevine, the evaluation of the efficacy level of the product cannot be finalized for these uses. Likewise, in the absence of data and any possible extrapolation, the efficacy level of PENTIUM FLO (AG-P4-400 SC) applied at 4 L/ha for annual broadleaf weed control in stone fruits cannot be finalized.

3.2.1 Information on the occurrence or possible occurrence of the development of resistance

The risk of resistance apparition and development to pendimethalin does not require any monitoring for the requested uses.

3.2.2 Adverse effects on treated crops

The selectivity level of the product PENTIUM FLO (AG-P4-400 SC) is considered acceptable for **the requested uses except for spring durum wheat, spring soft wheat, stone fruits and sorghum for which no specific data have been submitted.**

In the absence of data supporting the use of the product in a programme, the evaluation of its selectivity level cannot be finalized for the related uses in fodder peas and beans, fresh peas and beans and dry pulses.

According to the technical background on the behaviour of the active substance and its use, an enlargement of the application window to growth stages BBCH 05-57 in grapevine and BBCH 15-75 in pome fruits can be considered acceptable regarding phytotoxicity. **Nevertheless, the absence of unacceptable symptoms in case of application during vegetative growth should be confirmed by dedicated trials.**

The risks of negative impact on yields, quality and transformation processes are considered acceptable. **Nevertheless, in the absence of specific data, a risk cannot be excluded on spring durum wheat, spring soft wheat, sorghum, stone fruits and proteaginous crops (fodder peas/beans, fresh peas/beans, dry pulses) in case of use in a programme**.

The risk of negative impact on propagation is considered negligible.

3.2.3 Observations on other undesirable or unintended side-effects

The risk of negative impact on succeeding and adjacent crops is considered acceptable. Nevertheless, specific attention shall be paid to susceptible succeeding crops and to the conditions of application of the product next to susceptible adjacent crops.

Agronomic preconisation:
Regarding pendimethalin volatility, a risk of phytotoxicity in grapevine and pome fruits cannot be excluded if the product is applied during the vegetative period.

3.3 Methods of analysis (Part B, Section 5)

3.3.1 Analytical method for the formulation

Analytical methods for the determination of the active substance and the relevant impurities in the formulation are available and validated.

3.3.2 Analytical methods for residues

Analytical methods are available in the Renewal Assessment Report/this dossier and validated for the determination of residues of Pendimethalin in plants (high water content, high acidic content, high oil content, high starch content and dry matrices), food of animal origin, soil, water (surface and drinking), air and body fluids and tissues.Mammalian toxicology (Part B, Section 6).

3.4 Mammalian toxicology (Part B, Section 6)

3.4.1 Acute toxicity

AG-P4-400 SC containing 400 g/L Pendimethalin has a low toxicity in respect to acute oral, inhalation and dermal toxicity and is not irritating to the rabbit skin or eye and is not a skin sensitiser.

3.4.2 Operator exposure

Formulation type	SC
Active substance(s) (incl. content)	**Pendimethalin** 400 g/L
AOEL systemic AAOEL	0.17 mg/kg bw/d none
Inhalation absorption	100%
Oral absorption	57 %
Dermal absorption	Concentrate: 1.70%

	Dilution: 31%
Model	EFSA model [EFSA, 2014. Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products. EFSA Journal 2014, 12(10):3874, 55pp., doi:10.2903/j.efsa.2014.3874]

Results of operator exposure are presented in the table below:

Single application uses (Worst case scenarios used)

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Cereals) Application rate: 1.6 kg a.s. / ha			
EFSA Model Application volume: 100 L/ha 1.6 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	94.66 %
	Work wear (arms and body covered)	0.1808	62.30 %
	+ (Gloves mixing/loading and application)	0.0116	4.11 %

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Oilseeds) Application rate: 1.32 kg a.s. / ha			
EFSA Model Application volume: 80 L/ha 1.6 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	79.62 %
	Work wear (arms and body covered)	0.1808	52.30 %
	+ (Gloves mixing/loading and application)	0.0116	3.53 %

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Grapes : Covers Tobaco uses) Application rate: 1.6 kg a.s. / ha			
EFSA Model Application volume: 80 L/ha 1.6 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	198.99 %
	Work wear (arms and body covered)	0.1808	88.11 %
	+ (Gloves mixing/loading and application)	0.0116	2.81 %

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Pome fruit covers stone fruit) Application rate: 1.2 kg product / ha (1.6 kg a.s. / ha)			
EFSA Model Application volume: 80 L/ha 1.2 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	588.68%
	Work wear (arms and body covered)	0.1808	161.45%
	+ (Gloves mixing/loading and application)	0.0116	66.91%

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Brassica vegetables) Application rate: 1.32 kg a.s. / ha			
EFSA Model Application volume: 80 L/ha 1.32 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	79.62%
	Work wear (arms and body covered)	0.1808	52.30%
	+ (Gloves mixing/loading and application)	0.0116	3.53%

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Legume vegetables) Application rate: 1.6 kg a.s. / ha			
EFSA Model Application volume: 80 L/ha 1.6 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	94.66%
	Work wear (arms and body covered)	0.1808	62.30%
	+ (Gloves mixing/loading and application)	0.0116	4.11%

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Bulb vegetables : Onions) Application rate: 1.32 kg a.s. / ha			
EFSA Model Application volume: 80 L/ha 1.32 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	79.62%
	Work wear (arms and body covered)	0.1808	52.30%
	+ (Gloves mixing/loading and application)	0.0116	3.53%

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Leaf vegetables and fresh herbs : Leek) Application rate: 1.32 kg a.s. / ha			
EFSA Model Application volume: 80 L/ha 1.32 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	79.62%
	Work wear (arms and body covered)	0.1808	52.30%
	+ (Gloves mixing/loading and application)	0.0116	3.53%

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Root and tuber vegetables : Carrots and peas and Salsifis) Application rate: 0.8 kg a.s. / ha			
EFSA Model Application volume: 80 L/ha 1.32 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	79.62%
	Work wear (arms and body covered)	0.1808	52.30%
	+ (Gloves mixing/loading and application)	0.0116	3.53%

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Fruiting vegetables : Tomato) Application rate: 1.2 kg a.s. / ha			
EFSA Model Application volume: 80 L/ha 1.2 kg a.s./ha Body weight: 60 kg	Potential exposure	0.2936	79.62%
	Work wear (arms and body covered)	0.1808	52.30%
	+ (Gloves mixing/loading and application)	0.0116	3.53%

Split applications uses (Worst case scenarios used)

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Oilseeds) Application rate: 2 applications of 0.8 kg a.s./ha with 15 days interval			
EFSA Model Application volume: 80 L/ha 2 applications of 0.8 kg a.s./ha with 15 days interval Body weight: 60 kg	Potential exposure	0.2936	50.91 %
	Work wear (arms and body covered)	0.1808	33.26 %
	+ (Gloves mixing/loading and application)	0.0116	2.39 %

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Root and tuber vegetables) Application rate: 2 applications of 0.4 kg a.s./ha with 10 days interval			
EFSA Model Application volume: 80 L/ha 2 applications of 0.4 kg a.s./ha with 10 days interval Body weight: 60 kg	Potential exposure	0.2936	27.61 %
	Work wear (arms and body covered)	0.1808	17.88 %
	+ (Gloves mixing/loading and application)	0.0116	1.44 %

		Pendimethalin	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted outdoors to low crops (Root and tuber vegetables) Application rate: 2 applications of 0.8 kg a.s./ha with 15 days interval			
EFSA Model Application volume: 80 L/ha 2 applications of 0.8 kg a.s./ha with 15 days interval Body weight: 60 kg	Potential exposure	0.2936	50.91 %
	Work wear (arms and body covered)	0.1808	33.26 %
	+ (Gloves mixing/loading and application)	0.0116	2.39 %

The operator exposure when using AG P4 400 SC is lower than 100 % of the AOEL for all uses, for both single and split applications. For the use Pome fruit, the use of protective equipment and gloves is necessary, for the use Grapevine and Tobacco, the use of protective equipment is necessary.

According to the model calculations, it can be concluded that the risk for the operator using AG-P4-400 SC is acceptable for all uses without PPE, except with a working coverall for Grapevine and Tobacco and with gloves for Pome fruit applicartions during mixing/loading and application.

3.4.3 Worker exposure

Workers may have to enter treated areas after treatment for crop inspection/irrigation or cutting, sorting, bundling, carrying or hand harvesting or maintenance or reaching, picking or searching, reaching, picking activities. Therefore, estimation of worker exposure was calculated according to AOEM model. Exposure is estimated to 73.27 % of the AOEL of Pendimethalin with PPE.
It is concluded that there is no unacceptable risk anticipated for the worker.

3.4.4 Bystander and resident exposure

Bystander exposure:
In the absence of AAOEL determined for benfluralin, it is considered that the risk assessment for the bystander is covered by the resident risk assessment.
Indeed, only resident exposure is provided since, according to EFSA Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products (EFSA Journal 2014;12(10):3874): *"No bystander risk assessment is required for PPPs that do not have significant acute toxicity or the potential to exert toxic effects after a single exposure. Exposure in this case will be determined by average exposure over a longer duration, and higher exposures on one day will tend to be offset by lower exposures on other days. Therefore, exposure assessment for residents also covers bystander exposure."*

Resident exposure:

Single application exposure worst cases :

Critical use(s)	Pome fruit (1 x 1.6 kg a.s/ha)
Model	EFSA model [EFSA, 2014. Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products. EFSA Journal 2014, 12(10):3874, 55pp., doi:10.2903/j.efsa.2014.3874]

		Benfluralin	
Model data		**Total absorbed dose (mg/kg bw/day)**	**% of systemic AOEL**
Tractor mounted boom spray application outdoors to Pome fruit (Covers all other uses except for split applications) Buffer zone: 2-3 m Drift reduction technology: no DT_{50}: 30 days DFR: 3 µg/cm^2/kg a.s./ha Interval between treatments: 365 days			
Number of applications and application rate		1 x 1.6 kg a.s./ha	
Resident child Body weight: 10 kg	Drift (75th perc.)	0.1333494	78.44%
	Vapour (75th perc.)	0.0010700	0.63%
	Deposits (75th perc.)	0.0340673	20.04%
	Re-entry (75th perc.)	0.0837000	49.24%
	Sum (mean)	0.1682465	98.97%
Resident adult Body weight: 60 kg	Drift (75th perc.)	0.0318864	18.76%
	Vapour (75th perc.)	0.0002300	0.14%
	Deposits (75th perc.)	0.0144591	8.51%
	Re-entry (75th perc.)	0.0465000	27.35%
	Sum (mean)	0.0639004	37.59%

Split applications exposure (Worst case)

		Benfluralin	
Model data		**Total absorbed dose (mg/kg bw/day)**	**% of systemic AOEL**
Tractor mounted boom spray application outdoors to Oilseeds (covers all split applications uses exposure) Buffer zone: 2-3 m Drift reduction technology: no DT_{50}: 30 days DFR: 3 µg/cm²/kg a.s./ha Interval between treatments: 365 days			
Number of applications and application rate		1 x 1.6 kg a.s./ha	
Resident child Body weight: 10 kg	Drift (75th perc.)	0.0833434	49.03%
	Vapour (75th perc.)	0.0010700	0.63%
	Deposits (75th perc.)	0.0072731	4.28%
	Re-entry (75th perc.)	0.0714424	42.02%
	Sum (mean)	0.1092844	64.28%
Resident adult Body weight: 60 kg	Drift (75th perc.)	0.0199290	11.72%
	Vapour (75th perc.)	0.0002300	0.14%
	Deposits (75th perc.)	0.0028845	1.70%
	Re-entry (75th perc.)	0.0396902	23.35%
	Sum (mean)	0.0434586	25.56%

For all uses, the resident exposure is below 100 % of AOEL, therefore exposition of residents and bystander is considered acceptable for all uses.

3.5 Residues and consumer exposure (Part B, Section 7)

The data available are considered sufficient for risk assessment. **An exceedance of the current EU-MRLs for pendimethalin as laid down in Reg. (EU) 396/2005 is not expected, except on leeks.**

The chronic and the short-term intakes of pendimethalin residues are unlikely to present a public health concern.

As far as consumer health protection is concerned, zRMS France, agrees with the authorization of the intended uses on bulb vegetables (onions, garlics, shallots), root vegetables (carrot, salsify, celeriacs/ turnip, parsnip, horseradish, Jerusalem artichokes, parsley roots), cereals (barley, wheat, rye and triticale), legume vegetables (peas, beans, lentils and lupins), pulses (peas, beans, lentils and lupins), orchard crops (pome and stone fruit), wine grape and table grape, tomatoes, brassica vegetables (broccoli, cauliflower, head cabbage, brussels sprouts), maize (maize forage and grain, sorghum, millet), oilseeds (sunflower, soybean).

According to available data, no specific mitigation measures should apply.

Data gaps

None.

Summary for AG-P4-400 SC

Crop	PHI for AG-P4-400 SC proposed by applicant	PHI sufficiently supported for	PHI for AG-P4-400 SC proposed by zRMS	zRMS Comments (if different PHI proposed)
		Pendimethalin		
Bulb vegetables (onions, garlics, shallots)	NR	Yes	F (BBCH 15)	
Stem vegetables (leeks)	MRL exceedance cannot be excluded			
Root vegetables (carrot, salsify, celeriac/turnip, parsnip, horseradishe, Jerusalem artichoke, parsley root)	NR	Yes	F (BBCH 12)	
Cereals (barley, wheat, rye and triticale)	NR	Yes	F (BBCH 25)	
Legume vegetables (peas, beans, lentils and lupins)	NR	Yes	F (BBCH 16)	
Pulses (peas, beans, lentils and lupins)	NR	Yes	F (BBCH 16)	
Orchard crops (pome and stone fruit)	NR	Yes	F (BBCH 75)	
Grapes	NR	Yes	F (BBCH 57)	
Tomatoes	NR	Yes	F (BBCH 00)	
Brassica vegetables (head cabbage, brussels sprouts)	NR	Yes	F (BBCH 00)	
Brassica vegetables (broccoli, cauliflower)	NR	Yes	F (BBCH 00)	
Maize (maize forage and grain, sorghum, millet)	NR	Yes	F (BBCH 13)	
Sunflower, soyabean	NR	Yes	F (BBCH 09)	
Tobacco	Not an alimentary crop			

NR: not relevant: PHI is defined by the application stage at last treatment (time elapsing between last treatment and harvest of the crop, PHI F).

3.6 Environmental fate and behaviour (Part B, Section 8)

The fate and behaviour in the environment have been evaluated according to the requirements of Regulation (EC) No 1107/2009. Appropriate endpoints from the EU conclusions were used to calculate PEC values for the active substance and its metabolites for the intended use patterns. In cases where deviations from the EU agreed endpoints were considered appropriate (for example when additional studies are provided), such deviations were highlighted and justified accordingly.

The PEC of active substance pendimethalin and its metabolites in soil, surface water and groundwater have been assessed according to FOCUS guidance documents, with standard FOCUS scenarios to obtain outputs from the FOCUS models, and the endpoints established in the EU conclusions or agreed in the assessment based on new data provided.

3.6.1 Predicted environmental concentrations in soil (PEC_{soil})

PEC soil derived for pendimethalin and its metabolites are used for the ecotoxicological risk assessment.

3.6.2 Predicted environmental concentrations in groundwater (PEC_{gw})

For uses on winter peas/beans, the calculations are available for a maximum intended rate of 2.5 L/ha for which PECgw for pendimethalin and its metabolites do not occur at levels exceeding those mentioned in regulation EC 1107/2009. Therefore, no unacceptable risk of groundwater contamination is expected for these uses at 2 L/ha.
However, at an application rate of 3 L/ha, the risk assessment of groundwater contamination cannot be finalised for these uses.

No PECgw calculations considering multiple applications (split applications) were made available by the applicant. Therefore, no risk assessment exposure can be validated for this condition of use.

For uses on sorghum and maize, PECgw for pendimethalin and its metabolite M455H033 (P48) do not occur at levels exceeding those mentioned in regulation EC 1107/2009. However, PECgw for metabolite M455H001 (P44) exceed 0.1µg/L. Since there is no sufficient information to assess its non relevance according to SANCO/221/2000, the risk assessment of groundwater contamination cannot be finalised for uses on sorghum and maize.

For uses on apples and stone fruits (with treatment of 50% of the surface), PECgw for pendimethalin and its metabolite M455H033 (P48) do not occur at levels exceeding those mentioned in regulation EC 1107/2009. However, PECgw for metabolite M455H001 (P44) exceed 0.1µg/L at the application rate of 4 L/ha. No sufficient information to assess its non relevance according to SANCO/221/2000 is available. Therefore the risk assessment of groundwater contamination cannot be finalised. Further calculations at a reduced application rate of 3 L/ha at BBCH 00-15 shows that PECgw for metabolite M455H001 (P44) do not occur at levels exceeding those mentioned in regulation EC 1107/2009. Therefore, no unacceptable risk of groundwater contamination is expected for these uses at an application rate of 3 L/ha at BBCH 00-15.

For uses on vines, (with treatment of 50% of the surface), PECgw for pendimethalin and its metabolite M455H033 (P48) do not occur at levels exceeding those mentioned in regulation EC 1107/2009. For an application at BBCH 00-05, PECgw for pendimethalin and its metabolite M455H001 (P44) do not occur at levels exceeding those mentioned in regulation EC 1107/2009. For an application outside BBCH 00-05, PECgw for metabolite M455H001 (P44) exceed 0.1µg/L. **No sufficient information to assess its non relevance according to SANCO/221/2000 is available. Therefore the risk assessment of groundwater contamination cannot be finalised for vine uses, except for BBCH 00-05.**

For other uses intended, PECgw for pendimethalin and its metabolites do not occur at levels exceeding those mentioned in regulation EC 1107/2009. Therefore, no unacceptable risk of groundwater contamination is expected for these uses.

3.6.3 Predicted environmental concentrations in surface water (PEC_{sw})

PECsw/sed derived for pendimethalin are used for the ecotoxicological risk assessment and mitigation measures are proposed.

3.7 Ecotoxicology (Part B, Section 9)

3.7.1 Effects on terrestrial vertebrates

An acceptable acute and long-term risk is presented with all TER values above the corresponding trigger values for dietary exposure of birds under consideration of appropriate refinements.
Furthermore, no unacceptable risks are expected arising from other routes of direct exposure or secondary poisoning (residue uptake from drinking water or bioaccumulation in food chains).
In conclusion, an acceptable overall risk for birds is indicated for all intended uses of PENTIUM FLO (AG-P4-400 SC).

An acceptable risk for mammals is also expected for acute or long-term exposure to contaminated food indicated by TER_A and TER_{LT} values above the corresponding trigger values under consideration of appropriate refinements for of the intended uses.
Furthermore, no unacceptable risks are expected to arise from other routes of direct exposure or secondary poisoning (residue uptake from drinking water or bioaccumulation in food chains).
In conclusion, an acceptable overall risk for mammals is indicated for all intended uses of PENTIUM FLO (AG-P4-400 SC).

3.7.2 Effects on aquatic species

The risk assessment for aquatic organisms was carried out according to the Guidance on tiered risk assessment for plant protection products for aquatic organisms in edge-of-field surface waters (EFSA Journal 2013;11(7):3290).

For the intended uses winter cereals, spring cereals, soybeans, inflorescence cabbage, salsify, carrots, spring protein seeds, fresh shelled spring peas, dry spring legumes and fresh shelled beans the risk is acceptable for the proposed application pattern in consideration of appropriate risk mitigation measures (please refer to 2.5.1).

For other uses, at the maximum rates claimed, the exposure levels of pendimethalin estimated by the applicant for aquatic non-target species are higher than the Regulatory Acceptable Concentration (RAC), even considering the maximum management measures proposed by the applicant. This concerns the uses maize and sorghum vines, stone fruits and apple trees at the rate of 4 L/ha and the uses sunflower, head cabbage, onion, leek, tobacco and tomato at the rate of 3.3 L/ha, the uses winter protein seeds, winter shelled peas, and winter pulses and fresh shelled beans at the rate of 3 L/ha.
Rate reductions are proposed by the applicant and have been taken into account in the assessment. The reduced application rates leading to ean acceptable risk in consideration of appropriate risk mitigation measures (please refer to 2.5.1) are:

- 3 L/ha for tobacco, grapevine, stone fruit and apple,
- 2.5 L/ha for maize, sorghum, head cabbage, onion, leek and tomato uses,
- 2 L/ha for sunflower, winter protein seeds, winter shelled peas, and winter legumes and fresh shelled beans.
- For multiple applications: 2 L/ha + 1 L/ha on winter protein seeds, fresh winter shelled peas, and winter dry pulses and fresh shelled beans and 2×1 L/ha on carrot.

3.7.3 Effects on bees

The evaluation of the risk for bees was performed in accordance with the recommendations of the Guidance Document on Terrestrial Ecotoxicology (SANCO/10329/2002 rev.2 (final), October 17, 2002). Both, $HQ_{contact}$ and HQ_{oral} did not indicate any unacceptable acute risk through active substance pendimethalin or the product AG-P4-400 SC. Chronic adult toxicity tests indicate that adverse effects on populations and communities are not expected in consideration of the intended GAP uses of AG-P4-400 SC.
According to new requirements of Reg. No. 284/2013, information on chronic effects on the development of bees should have been submitted for the formulation, as exposure of bees to the formulation cannot be excluded. In absence of these data, the risk for bee larvae cannot be finalized.

3.7.4 Effects on other arthropod species other than bees

Based on the results of standard laboratory tests with *Pardosa spec.*, *A. bilineata* and *P. cupreus* and Stomp 400 SC (formulation of the old dossier submission of pendimethalin) and extended laboratory tests with *A. rhopalosiphi and T. pyri* and product AG-P4-400 SC, an acceptable risk for non-target arthropods in both in-field and off-field habitats could be concluded considering the GAP uses intended for AG-P4-400 SC. Risk mitigation measures are therefore not required.

3.7.5 Effects on soil organisms

Chronic TER values based on tier-1 earthworm toxicity data of pendimethalin and its metabolites M455H001 and M455H033, indicated an acceptable chronic risk for earthworms through the use of product AG-P4-400 SC. Furthermore, chronic TER values for product AG-P4-400 SC and *F. candida* and *H. aculeifer* were well below the respective trigger, thus indicating an acceptable risk for non-target soil organisms. The same was proven for metabolites M455H001 and M455H033, for which a 10-fold lower endpoint (based on the product endpoint for most sensitive soil microorganism *F. candida*) was used for TER calculation. Hence, it can be concluded that the chronic risk of earthworms and non-target soil organisms through the use of product AG-P4-400 SC in all intended uses is acceptable.

With regard to the risk assessment of soil microorganisms, effects within a range of ± 25 % compared to the control were observed at exposure levels which clearly exceed the maximum PEC values in soil calculated in consideration of the worst-case exposure scenario for AG-P4-400 SC (i.e. 1 × 4.0 L prod./ha applied to orchard crops at BBCH 90-75). Thus, an acceptable overall risk for soil microorganisms is indicated for all uses of AG-P4-400 SC.

3.7.6 Effects on non-target terrestrial plants

Based on a deterministic approach, an acceptable risk for terrestrial non-target plants can be concluded for the uses intended for AG-P4-400 SC. No mitigation measures (buffer zones or drift reducing techniques) need to be applied.

3.7.7 Effects on other terrestrial organisms (Flora and Fauna)

Further data/studies/calculations on non-target species other than those species mentioned above are not required and thus not provided

3.8 Relevance of metabolites (Part B, Section 10)

An assessment was conducted according to the SANCO/221/2000 guidance document. Please refer to Environmental fate and behaviour for conclusion on the risk of groundwater contamination.

4 Conclusion of the national comparative assessment (Art. 50 of Regulation (EC) No 1107/2009)

PENTIUM FLO (AG-P4-400 SC) contains pendimethalin, which is approved as a candidate for substitution because it fulfills two of PBT criteria (Persistant and Toxic).

Step 1 (French guidance document 27 July 2015):

- Taking into account minor uses:

In accordance with Articles 50(1)(d) of Regulation (EC) N 1107/2009, in the framework of taking consequences on minor uses into account, substitution will not be considered for the uses: tobacco and salsify (scorzonera, salsify).

- Taking into account the management of resistance:

In accordance with Article 50(1)(c) of Regulation (EC) N 1107/2009, in the framework of taking the prevention of the appearance of resistance into account, the candidate a.s. for substitution is an important part of the resistance management strategy and there are too few modes of action available, substitution will not be considered for the uses: weed control on cereals (wheat, triticale, rye and barley), maize, sorghums, sunflower, fodder peas, canned spring peas, horse bean, fresh beans with-out pods carrot, onion, shallot, garlic, leek, Broccoli, cauliflower, head cabbage, Brussels sprouts tomato, soybean, lupin, faba, lentils, chickpeas, Apple, pear, quince, nashi, peach, plum, apricot, cherry, vineyard.

5 Further information to permit a decision to be made or to support a review of the conditions and restrictions associated with the authorisation

When the conclusions of the assessment is « Not acceptable », please refer to relevant summary under point 3 “Background of authorisation decision and risk management”.

5.1.1 Post-authorisation monitoring

None.

5.1.2 Post-authorisation data requirements

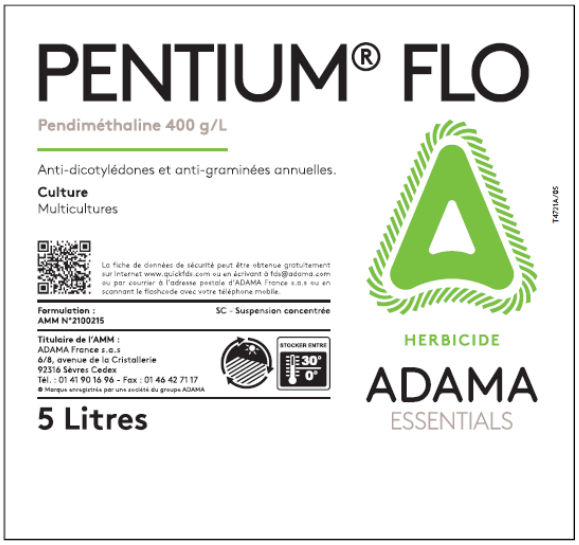
None.

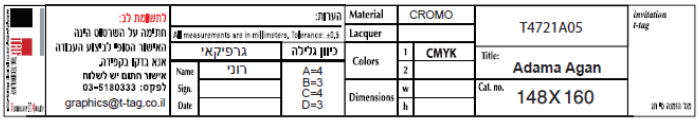
Appendix 1 Copy of the product authorisation

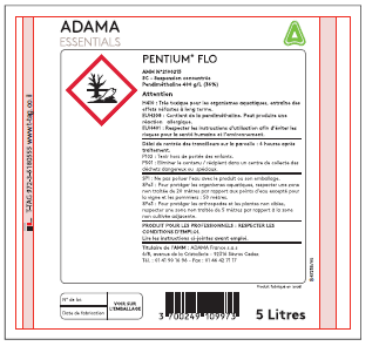
PENTIUMFLO_PREX_
2017-3324_D3.pdf

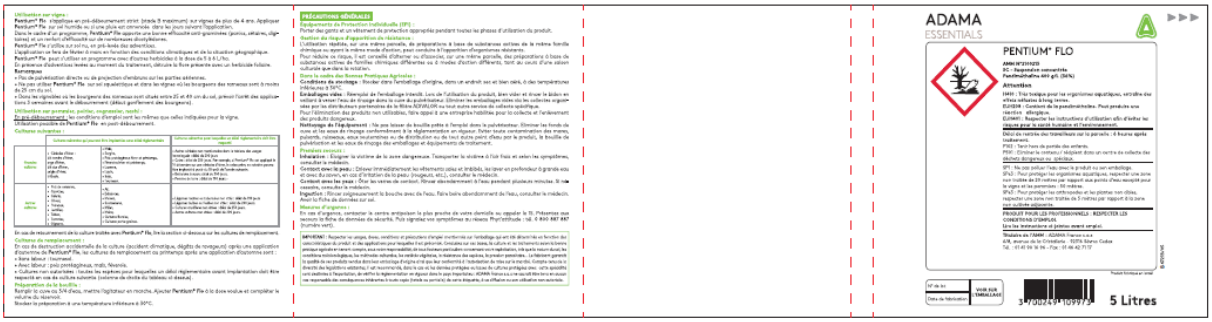
Appendix 2 Copy of the product label

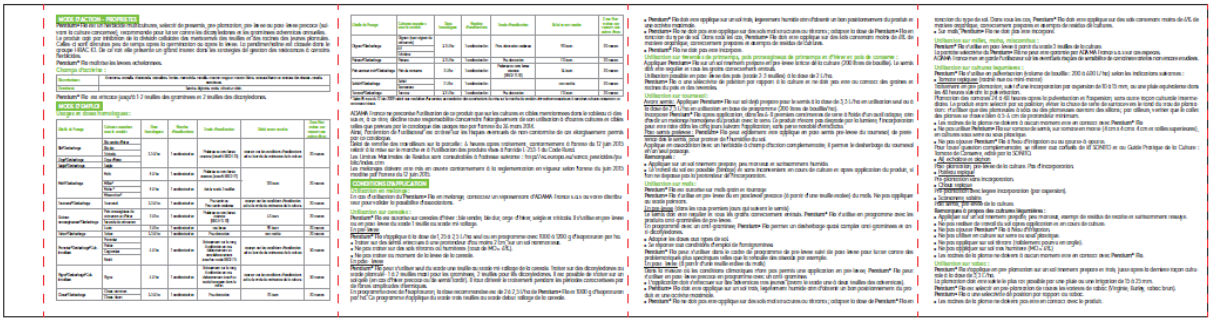
The draft product label as proposed by the applicant is reported below. The draft label may be corrected with consideration of any new element. The label shall reflect the detailed conditions stipulated in the Decision.

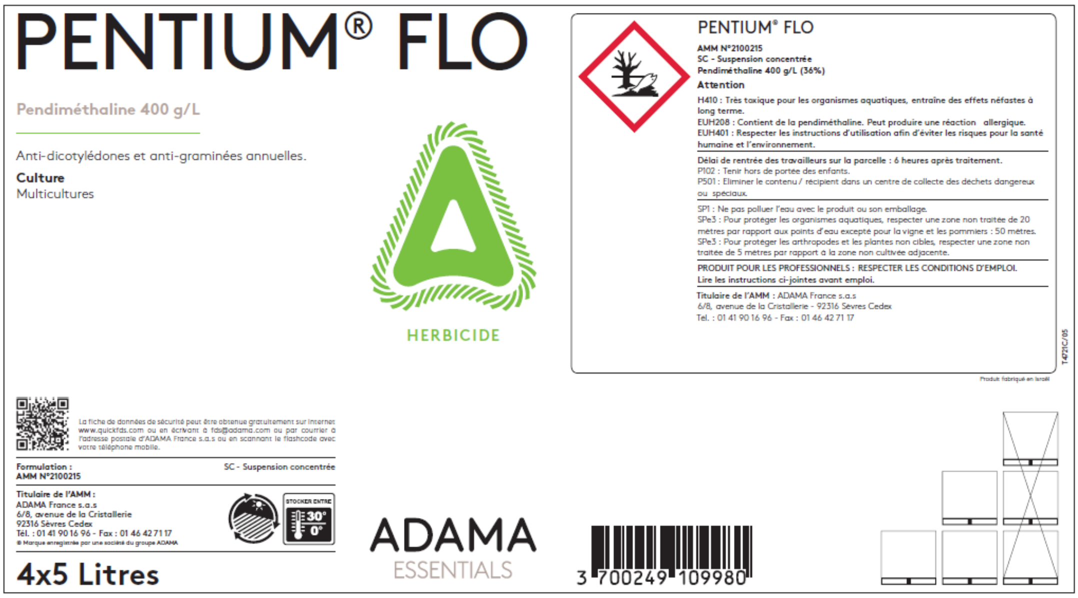


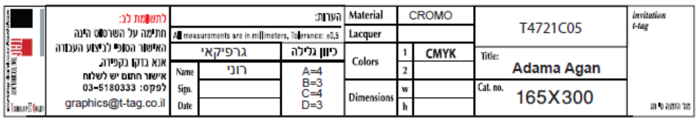



ADAMA
ESSENTIALS
PENTIUM® FLO
5 Litres


ADAMA
ESSENTIALS
PENTIUM® FLO
5 Litres




PENTIUM® FLO
Pendiméthaline 400 g/L
Anti-dicotylédones et anti-graminées annuelles.
Culture
Multicultures
HERBICIDE
PENTIUM® FLO
AMM N°2100215
SC - Suspension concentrée
Pendiméthaline 400 g/L (36%)
Attention
H410 : Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
EUH208 : Contient de la pendiméthaline. Peut produire une réaction allergique.
EUH401 : Respecter les instructions d'utilisation afin d'éviter les risques pour la santé humaine et l'environnement.
Délai de rentrée des travailleurs sur la parcelle : 6 heures après traitement.
P102 : Tenir hors de portée des enfants.
P501 : Eliminer le contenu / récipient dans un centre de collecte des déchets dangereux ou spéciaux.
SP1 : Ne pas polluer l'eau avec le produit ou son emballage.
SPe3 : Pour protéger les organismes aquatiques, respecter une zone non traitée de 20 mètres par rapport aux points d'eau excepté pour la vigne et les pommiers : 50 mètres.
SPe3 : Pour protéger les arthropodes et les plantes non cibles, respecter une zone non traitée de 5 mètres par rapport à la zone non cultivée adjacente.
PRODUIT POUR LES PROFESSIONNELS : RESPECTER LES CONDITIONS D'EMPLOI.
Lire les instructions ci-jointes avant emploi.
Titulaire de l'AMM : ADAMA France s.a.s
6/8, avenue de la Cristallerie - 92316 Sèvres Cedex
Tel. : 01 41 90 16 96 - Fax : 01 46 42 71 17
T4721C/05
Produit fabriqué en Israël
La fiche de données de sécurité peut être obtenue gratuitement sur Internet www.quickfds.com ou en écrivant à fds@adama.com ou par courrier à l'adresse postale d'ADAMA France s.a.s ou en scannant le flashcode avec votre téléphone mobile.
Formulation :
AMM N°2100215
SC - Suspension concentrée
Titulaire de l'AMM :
ADAMA France s.a.s
6/8, avenue de la Cristallerie
92316 Sèvres Cedex
Tél. : 01 41 90 16 96 - Fax : 01 46 42 71 17
® Marque enregistrée par une société du groupe ADAMA
STOCKER ENTRE
30°
0°
4x5 Litres
ADAMA
ESSENTIALS
3 700249 109980


לתשומת לב:
חתימה על השרטוט הינה
האישור הסופי לביצוע העבודה
אנא בדקו בקפידה.
אישור חתום יש לשלוח
לפקס: 03-5180333
graphics@t-tag.co.il
הערות:
All measurements are in millimeters, Tolerance: ±0,5
גרפיקאי
כיוון גלילה
Name
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ADAMA
ESSENTIALS

PENTIUM® FLO

AMM N°2100215
SC - Suspension concentrée
Pendiméthaline 400 g/L (36%)

Attention

H410 : Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
EUH208 : Contient de la pendiméthaline et de la benzisothiazolin-3-one. Peut produire une réaction allergique.
EUH401 : Respecter les instructions d'utilisation afin d'éviter les risques pour la santé humaine et l'environnement.

Délai de rentrée des travailleurs sur la parcelle : 6 heures après traitement.
P102 : Tenir hors de portée des enfants.
P501 : Éliminer le contenu / récipient dans un centre de collecte des déchets dangereux ou spéciaux.

SP1 : Ne pas polluer l'eau avec le produit ou son emballage. [Ne pas nettoyer le matériel d'application près des eaux de surface. / Éviter la contamination via les systèmes d'évacuation des eaux à partir des cours de ferme ou des routes.]
SPe3 : Pour protéger les organismes aquatiques, respecter une zone non traitée de 20 mètres comportant un dispositif végétalisé permanent non traité d'une largeur de 20 mètres en bordure des points d'eau.

RÉSERVÉ À UN USAGE EXCLUSIVEMENT PROFESSIONNEL.
Consulter le livret avant toute utilisation.

Titulaire de l'AMM : ADAMA France s.a.s - 33 rue de Verdun
92156 Suresnes Cedex - Tél. : 01 41 47 33 33

Produit fabriqué en Israël

N° de lot	VOIR SUR L'EMBALLAGE
Date de fabrication	

5 L

PREMIERS SECOURS

- Inhalation : Transporter la victime à l'air frais. En cas de respiration irrégulière ou d'absence de respiration, pratiquer la respiration artificielle. Consulter un médecin.
- Contact cutané : Rincer immédiatement au savon et à grande eau en retirant les chaussures et vêtements contaminés. Consulter un médecin.
- Contact avec les yeux : Rincer immédiatement et abondamment avec de l'eau. Après le rinçage initial, retirer les éventuelles lentilles de contact et continuer à rincer pendant au moins 15 minutes. Maintenir l'œil grand ouvert pendant le rinçage. Si les symptômes persistent, consulter un médecin.
- Ingestion : Rincer la bouche. Boire beaucoup d'eau. Si les symptômes persistent, consulter un médecin.

Mesures d'urgence :
En cas d'urgence, contacter le centre antipoison le plus proche de votre domicile ou appeler le 15.

Présentez aux secours la fiche de données de sécurité. Puis signalez vos symptômes au réseau Phyt'attitude : tél. 0 800 887 887 (numéro vert).

DESCRIPTIF DU PRODUIT

Tableau des usages autorisés :

Libellé de l'usage	Cultures associées pour le produit	Dose homologuée	Nombre d'applications	Stade d'application	Délai avant récolte	Zone Non traitée par rapport aux points d'eau
Blé*Désherbage	Blé tendre d'hiver et de printemps	2,5 L/ha	1 application/an	Prélevée ou post levée précoce (BBCH 11-29)	BBCH 29 max	20 mètres comportant un dispositif végétalisé
	Blé dur d'hiver et de printemps					
	Triticale					
Orge*Désherbage	Orge d'hiver et de printemps					
Seigle*Désherbage	Seigle					
Maïs*Désherbage	Maïs	4 L/ha	1 application/an	Prélevée ou post levée précoce (BBCH 11-13)	BBCH 13 max	20 mètres comportant un dispositif végétalisé
	Sorgho					
	Millet*					
	Maha *					
	Miscanthus*					
Tournesol*Désherbage	Tournesol	3,3 L/ha	1 application/an	Pré-semis ou post semis prélevée (BBCH 00-07)	BBCH 07 max	20 mètres comportant un dispositif végétalisé
Graines protéagineuses*Désherbage	Pois protéagineux de printemps et d'hiver Féverole de printemps et d'hiver Lupin	3 L/ha	1 application/an	Prélevée	BBCH 16 max	20 mètres comportant un dispositif végétalisé
			Fractionné en 2 applications/an	Prélevée + post levée précoce (BBCH 12-16)		
		1 L/ha	1 application/an	Post levée précoce (BBCH 12-16)		
			Fractionné en 2 applications/an			
Tabac*Désherbage	Tabac	3,3 L/ha	1 application/an	Pré-plantation	couvert par les conditions d'application et/ou le cycle de croissance de la culture	20 mètres comportant un dispositif végétalisé
Pommier*Désherbage*Cult. Installées	Pommier	4 L/ha	1 application/an	Uniquement sur le rang Application en pré-débourrement ou post-débourrement (BBCH 00-15)	BBCH 15 max	20 mètres comportant un dispositif végétalisé
	Poirier					
	Cognassier					
	Nashi					
Vigne*Désherbage*Cult. Installées	Vigne	4 L/ha	1 application/an	Uniquement sur le rang Application en pré-débourrement jusqu'au stade bourgeon dans le coton (BBCH 00-05)	BBCH 05 max	20 mètres comportant un dispositif végétalisé

Libellé de l'usage	Cultures associées pour le produit	Dose homologuée	Nombre d'applications	Stade d'application	Délai avant récolte	Zone Non traitée par rapport aux points d'eau
Choux*Désherbage	Choux pommés	3,3 L/ha	1 application/an	Pré-plantation	couvert par les conditions d'application et/ou le cycle de croissance de la culture	20 mètres comportant un dispositif végétalisé
	Choux-fleurs					
	Brocoli					
	Chou de Bruxelles					
Oignon*Désherbage	Oignon (sauf oignon de printemps)	3,3 L/ha	1 application/an	Prélevée ou post-plantation (BBCH 10-15)	BBCH 15 max	20 mètres comportant un dispositif végétalisé
	Ail					
	Echalote					
Poireau*Désherbage	Poireau	3,3 L/ha	1 application/an	Pré-plantation	couvert par les conditions d'application et/ou le cycle de croissance de la culture	20 mètres comportant un dispositif végétalisé
Pois écossés frais*Désherbage	Pois de conserve	3 L/ha	1 application/an	Prélevée	BBCH 16 max	20 mètres comportant un dispositif végétalisé
			Fractionné en 2 applications/an	Prélevée + post levée précoce (BBCH 12-16)		
		1 L/ha	1 application/an	Post levée précoce (BBCH 12-16)		
			Fractionné en 2 applications/an			
Salsifis*Désherbage	Salsifis	2 L/ha	1 application/an	Prélevée ou post levée précoce (BBCH 11-12)	BBCH 12 max	20 mètres comportant un dispositif végétalisé
	Scorsonère					
Tomate*Désherbage	Tomate	3,3 L/ha	1 application/an	Pré-plantation	couvert par les conditions d'application et/ou le cycle de croissance de la culture	20 mètres comportant un dispositif végétalisé

* Selon l'Arrêté du 12 juin 2009 relatif aux modalités d'extension-extrapolation des autorisations de mise sur le marché de produits phytopharmaceutiques à certaines cultures présentant un caractère mineur.

ADAMA France ne préconise l'utilisation de ce produit que sur les cultures et cibles mentionnées dans le tableau ci-dessus et, à ce titre, décline toute responsabilité concernant l'élargissement de son utilisation à d'autres cultures et cibles telles que prévues par le catalogue des usages fixé par l'arrêté du 26 mars 2014.
Ainsi, l'attention de l'utilisateur est attirée sur les risques éventuels de non-conformité de cet élargissement permis par ce catalogue.
Délai de rentrée des travailleurs sur la parcelle : 6 heures après traitement, conformément à l'arrêté du 4 mai 2017.
Limites maximales de résidus : se reporter aux LMR définies au niveau de l'Union Européenne, consultables à l'adresse : http://ec.europa.eu/food/plant/pesticides/eu-pesticides-database

Mode d'action :

Pentium® Flo est un herbicide multicultures, sélectif de présemis, pré-plantation, pré-levée ou post-levée précoce (suivant la culture concernée), recommandé pour lutter contre les dicotylédones et les graminées adventices annuelles.
Le produit agit par inhibition de la division cellulaire des méristèmes des feuilles et des racines des jeunes plantules. Celles-ci sont détruites peu de temps après la germination ou après la levée. La pendiméthaline est classée dans le groupe HRAC K1. De ce fait elle présente un grand intérêt dans les stratégies de gestion des résistances à certains herbicides.
Pentium® Flo maîtrise les levées échelonnées.

Spectre d'efficacité :

Dicotylédones	Amarante, capselle, chénopode, coquelicot, lamier, mercuriale, morelle, mouron rouge et mouron blanc, renouée liseron et renouée des oiseaux, réséda, véroniques.
Graminées	Sétaire, digitaire, panic, pâturin, vulpin.

Pentium® Flo est efficace jusqu'à 1-2 feuilles des graminées et 2 feuilles des dicotylédones.

RECOMMANDATIONS D'EMPLOI

Conditions d'application :

Utilisation sur céréales :

Pentium® Flo est autorisé sur céréales d'hiver : blé tendre, blé dur, orge d'hiver, seigle et triticale. Il s'utilise en pré-levée ou en post-levée du stade 1 feuille au stade mi-tallage.

En pré-levée

- Traiter sur des semis effectués à une profondeur d'au moins 2 cm, sur un sol non motteux.
- Ne pas traiter sur des sols filtrants ou humifères (taux de MO > 6%).
- Ne pas traiter au moment de la levée de la céréale.

En post- levée

Pentium® Flo peut s'utiliser seul du stade une feuille au stade mi-tallage de la céréale. Traiter sur des dicotylédones au stade plantule–1 à 2 feuilles maxi pour les graminées, 2 feuilles pour les dicotylédones. Il est possible de traiter sur un sol gelé (en cas d'hiver précoce ou de semis tardif). Il faut différer le traitement pendant les périodes caractérisées par de fortes amplitudes thermiques.

- **Pentium® Flo** doit être appliqué sur un sol frais, légèrement humide afin d'obtenir un bon positionnement du produit et une activité maximale.
- **Pentium® Flo** ne doit pas être appliqué sur des sols mal structurés ou filtrants ; adapter la dose de **Pentium® Flo** en fonction du type de sol. Dans tous les cas, **Pentium® Flo** doit être appliqué sur des sols contenant moins de 6% de matière organique, correctement préparés et exempts de résidus de cultures.
- **Pentium® Flo** ne doit pas être incorporé.

Utilisation sur féveroles de printemps et d'hiver, pois protéagineux de printemps et d'hiver et pois de conserve :

Appliquer **Pentium® Flo** sur un sol finement préparé en pré-levée stricte de la culture (200 litres de bouillie). Le semis doit être régulier et tous les grains correctement enfouis.

Pentium® Flo a une sélectivité de position par rapport à la culture et ne doit pas être au contact des graines et racines du pois et des féveroles.

Utilisation sur tournesol :

Avant semis : Appliquer **Pentium® Flo** sur sol déjà préparé pour le semis à la dose de 3,3 L/ha en utilisation seul ou à la dose de 2,5 L/ha en utilisation en base de programme (200 litres de bouillie/ha).

Incorporer **Pentium® Flo** après application, dans les 6- 8 premiers centimètres de terre à l'aide d'un outil adapté, afin d'avoir un mélange homogène du produit avec la terre. Le produit n'étant pas dégradé par la lumière, l'incorporation peut être faite dans les cinq jours suivant l'application, sans perte notable d'efficacité.

Post-semis prélevée : **Pentium® Flo** peut également être appliqué en post-semis pré-levée du tournesol, de préférence dès le semis, pour profiter de l'humidité du sol.

Appliqué en association avec un herbicide à champ d'action complémentaire, il permet le désherbage du tournesol en un seul passage.

Remarques :

- Appliquer sur un sol finement préparé, peu motteux et suffisamment humide.
- Le travail du sol est possible (binage) et sans inconvénient en cours de culture et après application du produit, si l'on ne dépasse pas la profondeur de l'incorporation.

Utilisation sur maïs :

Pentium® Flo est autorisé sur maïs grain et fourrage

Pentium® Flo s'utilise en pré-levée ou en postlevée précoce (à partir d'une feuille étalée) du maïs. Ne pas appliquer au stade pointant.

En pré-levée : (dans les tous premiers jours qui suivent le semis)

Le semis doit être régulier et tous les grains correctement enfouis. **Pentium® Flo** s'utilise en programme avec les produits anti-graminées de pré-levée.

En programme avec un anti-graminée, **Pentium® Flo** permet un désherbage quasi complet anti-graminées et anti-dicotylédones.

- Adapter les doses aux types de sol.
- Se reporter aux conditions d'emploi de l'antigraminée.

Pentium® Flo peut s'utiliser dans le cadre de programme de pré-levée suivi de post-levée pour lutter contre des problématiques plus spécifiques telles que la renouée des oiseaux par exemple.

En post- levée : (à partir d'une feuille étalée du maïs)

Dans la mesure où les conditions climatiques n'ont pas permis une application en pré-levée, **Pentium® Flo** peut s'utiliser en post-levée précoce en programme avec un anti-graminée.

- L'application doit s'effectuer sur des adventices très jeunes (avant le stade une à deux feuilles des adventices).
- **Pentium® Flo** doit être appliqué sur un sol frais, légèrement humide afin d'obtenir un bon positionnement du produit et une activité maximale.
- **Pentium® Flo** ne doit pas être appliqué sur des sols mal structurés ou filtrants ; adapter la dose de **Pentium® Flo** en fonction du type de sol. Dans tous les cas, **Pentium® Flo** doit être appliqué sur des sols contenant moins de 6% de matière organique, correctement préparés et exempts de résidus de cultures.
- Sur maïs, **Pentium® Flo** ne doit pas être incorporé.

Utilisation sur millet, moha, miscanthus :

La parfaite sélectivité du **Pentium® Flo** ne peut être garantie par ADAMA France s.a.s sur ces espèces.

ADAMA France met en garde l'utilisateur sur les éventuels risques de sensibilité de certaines variétés non encore étudiées.

Utilisation sur cultures légumières :

Pentium® Flo s'utilise en pulvérisation selon les indications suivantes :

- Tomate repiquée (racine nue ou mini-motte)

Traitement en pré-plantation, suivi d'une incorporation par aspersion de 10 à 15 mm, ou une pluie équivalente dans les 48 heures suivant la pulvérisation.

Plantation des tomates 24 à 48 heures après la pulvérisation et l'aspersion, sans autre façon culturale intermédiaire. Le produit étant sélectif par sa position, éviter la chute de terre de surface vers le fond du trou de plantation : n'utiliser que des planteuses à socs ou des planteuses ouvrant des sillons ; par ailleurs, vérifier que le collet des plantes se trouve bien à 5-6 cm de profondeur minimum.

- Les racines de la plante ne doivent à aucun moment être en contact avec **Pentium® Flo**
- Ne pas utiliser **Pentium® Flo** sur tomate de semis, sur tomate en motte (4 cm x 4 cm x 4 cm et tailles supérieures), en cultures sous serre ou sous plastique.
- Ne pas ajouter **Pentium® Flo** à l'eau d'irrigation ou au goutte-à-goutte.

Pour toute question complémentaire, se référer aux conseils de la SONITO et au Guide Pratique de la Culture : Tomate de Conserve, édité par la SONITO.

- Ail, échalote et oignon

Post-plantation, pré-levée de la culture. Pas d'incorporation.

- Poireau repiqué

Pré-plantation sans incorporation.

- Choux repiqué

Pré-plantation avec légère incorporation (par aspersion).

- Scorsonère, salsifis

Pré-levée et post-levée précoce de la culture.

Remarques à propos des cultures légumières :

- Appliquer sur un sol finement préparé, peu motteux, exempt de résidus de récolte et suffisamment ressuyé.
- Ne pas réaliser de travail du sol après application et en cours de culture.
- Ne pas ajouter **Pentium® Flo** à l'eau d'irrigation.
- Ne pas utiliser en culture sur serre ou sous plastique.
- Ne pas appliquer sur sol filtrant (faiblement pourvu en argile).
- Ne pas appliquer sur sol très humifère (MO > 6%)
- Les racines de la plante ne doivent à aucun moment être en contact avec **Pentium® Flo**.

Utilisation sur tabac :

Pentium® Flo s'applique en pré-plantation sur un sol finement préparé et frais, juste après la dernière façon culturale à la dose de 3,3 L/ha. La plantation doit être suivie le plus tôt possible par une pluie ou une irrigation de 15 à 25 mm.

Pentium® Flo est sélectif en pré-plantation de toutes les variétés de tabac (Virginie, Burley, tabac brun).

Pentium® Flo a une sélectivité de position par rapport au tabac.

- Les racines de la plante ne doivent pas être en contact avec le produit.

Utilisation sur vigne :

Pentium® Flo s'applique en pré-débourrement strict (stade B maximum) sur vignes de plus de 4 ans. Appliquer Pentium® Flo sur sol humide ou si une pluie est annoncée dans les jours suivant l'application.

Dans le cadre d'un programme, Pentium® Flo apporte une bonne efficacité anti-graminées (panics, sétaires, digitaires) et un renfort d'efficacité sur de nombreuses dicotylédones.

Pentium® Flo s'utilise sur sol nu, en pré-levée des adventices.

L'application se fera de février à mars en fonction des conditions climatiques et de la situation géographique.

Pentium® Flo peut s'utiliser en programme avec d'autres herbicides à la dose de 3 à 4 L/ha.

En présence d'adventices levées au moment du traitement, détruire la flore présente avec un herbicide foliaire.

Remarques

- Pas de pulvérisation directe ou de projection d'embruns sur les parties aériennes.
- Ne pas utiliser Pentium® Flo sur sol squelettique et dans les vignes où les bourgeons des rameaux sont à moins de 25 cm du sol.
- Dans les vignobles où les bourgeons des rameaux sont situés entre 25 et 40 cm du sol, prévoir l'arrêt des applications 3 semaines avant le débourrement (début gonflement des bourgeons).

Utilisation sur pommier, poirier, cognassier, nashi :

En pré-débourrement : les conditions d'emploi sont les mêmes que celles indiquées pour la vigne.

Utilisation possible de Pentium® Flo en post-débourrement.

Mélanges extemporanés :

Les mélanges doivent être mis en œuvre conformément à la réglementation en vigueur selon l'arrêté du 7 avril 2010 modifié par l'arrêté du 12 juin 2015.

En cas d'utilisation du Pentium® Flo en mélange, contactez un représentant d'ADAMA France s.a.s ou votre distributeur pour valider la possibilité d'associations.

Préparation de la bouillie :

Remplir la cuve au 3/4 d'eau, mettre l'agitateur en marche. Ajouter Pentium® Flo à la dose voulue et compléter le volume du réservoir.

Cultures de remplacement :

En cas de destruction accidentelle de la culture (accident climatique, dégâts de ravageurs) après une application d'automne de Pentium® Flo, les cultures de remplacement au printemps après une application d'automne sont :

- Sans labour : tournesol.
- Avec labour : pois protéagineux, maïs, féverole.
- Cultures non autorisées : toutes les espèces pour lesquelles un délai réglementaire avant implantation doit être respecté en cas de culture suivante (colonne de droite du tableau ci-dessus).

Cultures suivantes :

	Cultures suivantes qui peuvent être implantées sans délai réglementaire		Cultures suivantes pour lesquelles un délai réglementaire doit être respecté
Grandes cultures	• Céréales d'hiver : blé tendre d'hiver, orge d'hiver, blé dur d'hiver, seigle d'hiver, triticale.	• Maïs, • Sorgho, • Pois protéagineux hiver et printemps, • Féveroles hiver et printemps, • Luzerne, • Lupin, • Soja, • Tournesol.	• Autres céréales non mentionnées dans le tableau des usages homologués : délai de 300 jours. • Colza : délai de 250 jours. Par exemple, si Pentium® Flo est appliqué le 10 décembre sur une céréales d'hiver, le colza prévu en rotation pourra être implanté à partir du 18 août de l'année suivante. • Betterave à sucre: délai de 300 jours. • Pomme de terre : délai de 190 jours.

	Cultures suivantes qui peuvent être implantées sans délai réglementaire		Cultures suivantes pour lesquelles un délai réglementaire doit être respecté
Autres cultures	• Pois de conserve, • Carottes, • Céleris, • Choux, • Poireaux, • Lentilles, • Tabac, • Tomates, • Oignons,	• Ail, • Echalotes, • Melons, • Scorsonères, • Millet, • Maïs, • Cultures florales, • Cultures porte-graines.	• Légumes racines ou tubercules non cités : délai de 190 jours • Légumes bulbes ou feuilles non cités : délai de 200 jours. • Cultures crucifères non citées : délai de 250 jours. • Autres cultures non citées : délai de 200 jours.

En cas de retournement de la culture traitée avec **Pentium® Flo**, lire la section ci-dessous sur les cultures de remplacement.

PRÉVENTION ET GESTION DE LA RÉSISTANCE

L'utilisation répétée, sur une même parcelle, de préparations à base de substances actives de la même famille chimique ou ayant le même mode d'action, peut conduire à l'apparition d'organismes résistants.

Pour réduire ce risque, il est conseillé d'alterner ou d'associer, sur une même parcelle, des préparations à base de substances actives de familles chimiques différentes ou à modes d'action différents, tant au cours d'une saison culturale que dans la rotation.

MISE EN ŒUVRE RÉGLEMENTAIRE ET BONNES PRATIQUES

Stockage du produit :

Conserver le produit uniquement dans son emballage d'origine, dans un local phytopharmaceutique conforme à la réglementation en vigueur, à l'écart des aliments et boisson, y compris ceux pour animaux. Conserver hors de la portée des enfants et des personnes non autorisées.

Stocker la préparation à une température inférieure à 35°C.

Protection de l'opérateur et du travailleur :

Il convient de rappeler que l'utilisation d'un matériel adapté et entretenu et la mise en œuvre de protections collectives constituent la première mesure de prévention contre les risques professionnels, avant la mise en place de protections complémentaires comme les protections individuelles.

En tout état de cause, le port de combinaison de travail dédiée ou d'équipement de protection individuelle (EPI) doit être associé à des réflexes d'hygiène (ex : lavage des mains, douche en fin de traitement) et à un comportement rigoureux (ex : procédure d'habillage/déshabillage). Les modalités de nettoyage et de stockage des combinaisons de travail et des EPI réutilisables doivent être conformes à leur notice d'utilisation.

Pour l'opérateur, porter :

Dans le cadre d'une application avec pulvérisateur à rampe :

Pendant le mélange/chargement :

- Gants en nitrile réutilisables conformes aux exigences de la directive EPI (89/686/CEE) notamment évalués selon la norme EN 374-1:2004 et EN 374-3:2004 ;
- EPI vestimentaire dédié aux traitements phytopharmaceutiques complété par une blouse ou un tablier à manches longues de type 3 ou PB3 conformes aux exigences de la directive EPI (89/686/CEE) évalué notamment selon la norme EN 14605+A1:2009 ou combinaison de type 3 ou 4 conforme aux exigences de la directive EPI (89/686/CEE), évaluée notamment selon la norme EN 14605+A1:2009.

Pendant l'application - pulvérisation vers le bas :

Si application avec tracteur avec cabine :

- Gants en nitrile à usage unique conformes aux exigences de la directive EPI (89/686/CEE) notamment évalués selon la norme EN 374-1 et EN 374-2 ou EN 374-1:2004 et EN 374-3:2004) en cas d'intervention à l'extérieur ; dans ce cas, les gants doivent être stockés et portés à l'extérieur de la cabine ;
- EPI vestimentaire dédié aux traitements phytopharmaceutiques .

Si application avec un tracteur sans cabine :

- Gants en nitrile à usage unique conformes aux exigences de la directive EPI (89/686/CEE) notamment évalués selon la norme EN 374-1 et EN 374-2 ou EN 374-1:2004 et EN 374-3:2004 ;
- EPI vestimentaire dédié aux traitements phytopharmaceutiques.

Pendant le nettoyage du matériel de pulvérisation :

- Gants en nitrile réutilisables conformes aux exigences de la directive EPI (89/686/CEE) notamment évalués selon la norme EN 374-1:2004 et EN 374-3:2004 ;
- EPI vestimentaire dédié aux traitements phytopharmaceutiques complété par une blouse ou un tablier à manches longues de type 3 ou PB3 conformes aux exigences de la directive EPI (89/686/CEE) évalué notamment selon la norme EN 14605+A1:2009 ou combinaison de type 3 ou 4 conforme aux exigences de la directive EPI (89/686/CEE), évaluée notamment selon la norme EN 14605+A1:2009.

Nettoyage du pulvérisateur et gestion des fonds de cuve :

Ne pas laisser de bouillie prête à l'emploi dans le pulvérisateur. Éliminer les fonds de cuve et les eaux de rinçage conformément à la réglementation en vigueur. Éviter toute contamination des mares, puisards, ruisseaux, eaux souterraines ou de distribution ou de tout autre point d'eau par le produit, la bouillie de pulvérisation et les eaux de rinçage des emballages et équipements de traitement.

Élimination du produit, de l'emballage :

Réemploi de l'emballage interdit. Lors de l'utilisation du produit, bien vider et rincer le bidon en veillant à verser l'eau de rinçage dans la cuve du pulvérisateur. Éliminer les emballages vides via les collectes organisées par les distributeurs partenaires de la filière ADIVALOR ou tout autre service de collecte spécifique.

Pour l'élimination des produits non utilisables, faire appel à une entreprise habilitée pour la collecte et l'enlèvement des produits dangereux.

En cas de déversement accidentel :

Se protéger (EPI) et sécuriser la zone.

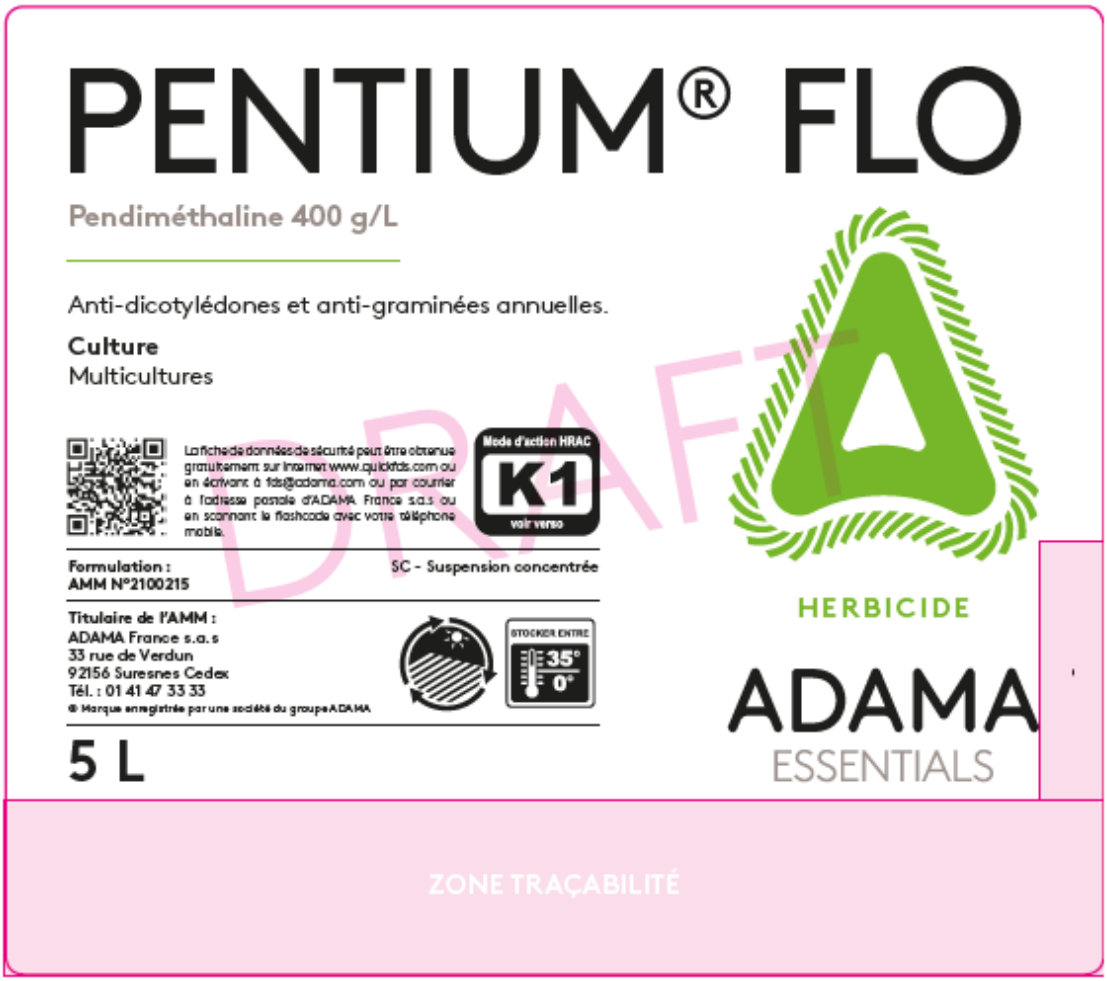
Prévenir les pompiers (18 ou 112) en cas de danger immédiat pour l'environnement que vous ne pouvez gérer avec vos propres moyens.

Collecter tout ce qui a pu être en contact avec le produit, terre souillée incluse. Nettoyer le site et le matériel utilisé, en prenant soin de confiner les effluents générés par l'opération de nettoyage. Les éliminer selon la réglementation en vigueur.

AVERTISSEMENT

Respecter les usages, doses, conditions et précautions d'emploi mentionnés sur l'emballage qui ont été déterminés en fonction des caractéristiques du produit et des applications pour lesquelles il est préconisé.

Conduire sur ces bases les traitements selon la bonne pratique agricole en tenant compte, sous votre responsabilité, de tous facteurs particuliers concernant votre exploitation, tels que la nature du sol, les conditions météorologiques, les méthodes culturales, les variétés végétales, la résistance des espèces, la pression parasitaire… Le fabricant garantit la qualité de ses produits vendus dans leur emballage d'origine ainsi que leur conformité à l'autorisation de mise sur le marché. Compte-tenu de la diversité des législations existantes, il est recommandé, dans le cas où les denrées protégées ou issues de cultures protégées avec cette spécialité sont destinées à l'exportation, de vérifier la réglementation en vigueur dans le pays importateur. ADAMA ne saurait être tenu en aucun cas responsable des conséquences inhérentes à toute copie (totale ou partielle) de cette étiquette, à sa diffusion ou son utilisation non autorisée.


PENTIUM® FLO
Pendiméthaline 400 g/L
Anti-dicotylédones et anti-graminées annuelles.
Culture
Multicultures
La fiche de données de sécurité peut être obtenue gratuitement sur internet www.quickfds.com ou en écrivant à fds@adama.com ou par courrier à l'adresse postale d'ADAMA France s.a.s ou en scannant le flashcode avec votre téléphone mobile.
Mode d'action HRAC
K1
voir verso
Formulation :
AMM N°2100215
SC - Suspension concentrée
Titulaire de l'AMM :
ADAMA France s.a.s
33 rue de Verdun
92156 Suresnes Cedex
Tél. : 01 41 47 33 33
® Marque enregistrée par une société du groupe ADAMA
STOCKER ENTRE
35°
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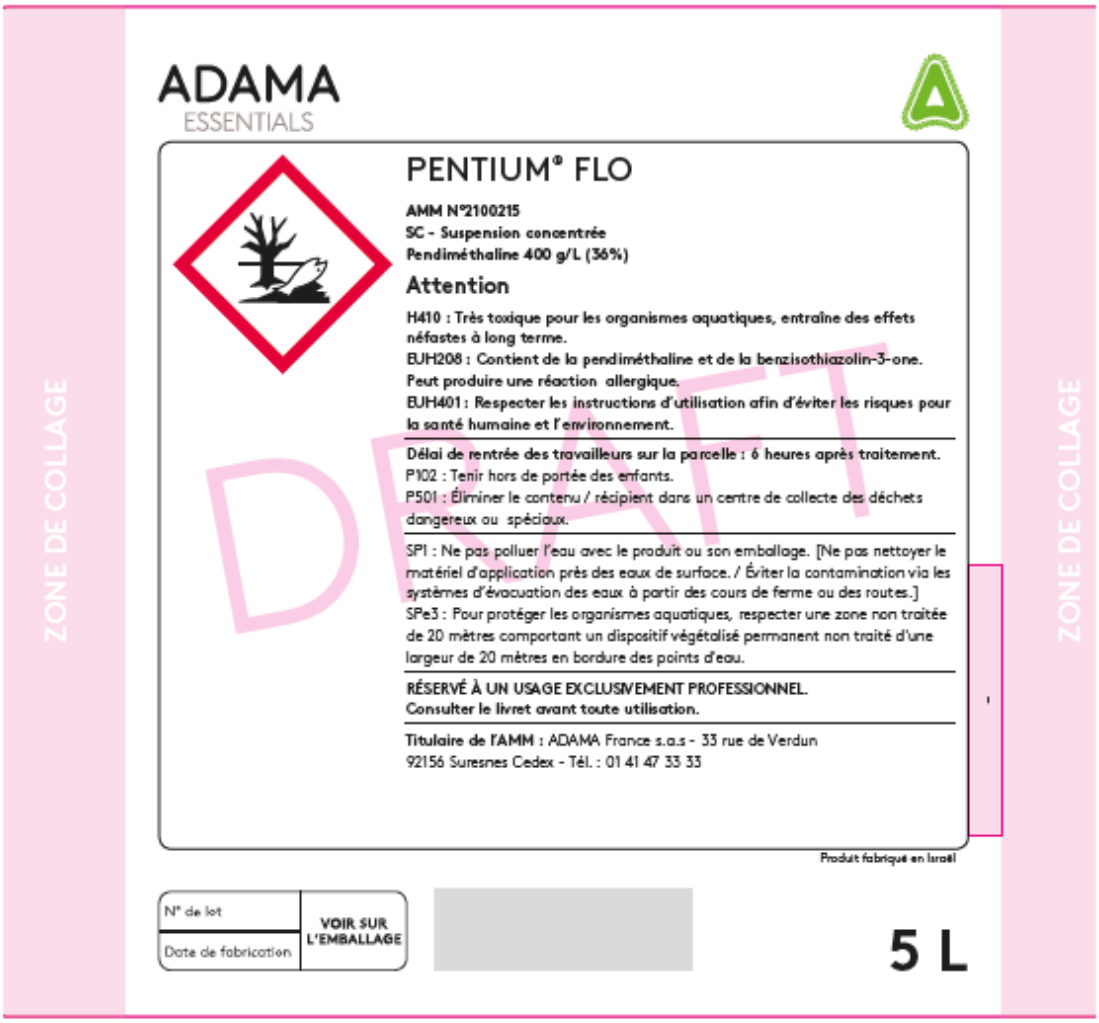
5 L
HERBICIDE
ADAMA
ESSENTIALS
ZONE TRAÇABILITÉ
DRAFT


ZONE DE COLLAGE
ADAMA
ESSENTIALS
PENTIUM® FLO
AMM N°2100215
SC - Suspension concentrée
Pendiméthaline 400 g/L (36%)
Attention
H410 : Très toxique pour les organismes aquatiques, entraîne des effets néfastes à long terme.
EUH208 : Contient de la pendiméthaline et de la benzisothiazolin-3-one. Peut produire une réaction allergique.
EUH401 : Respecter les instructions d'utilisation afin d'éviter les risques pour la santé humaine et l'environnement.
Délai de rentrée des travailleurs sur la parcelle : 6 heures après traitement.
P102 : Tenir hors de portée des enfants.
P501 : Éliminer le contenu / récipient dans un centre de collecte des déchets dangereux ou spéciaux.
SP1 : Ne pas polluer l'eau avec le produit ou son emballage. [Ne pas nettoyer le matériel d'application près des eaux de surface. / Éviter la contamination via les systèmes d'évacuation des eaux à partir des cours de ferme ou des routes.]
SPe3 : Pour protéger les organismes aquatiques, respecter une zone non traitée de 20 mètres comportant un dispositif végétalisé permanent non traité d'une largeur de 20 mètres en bordure des points d'eau.
RÉSERVÉ À UN USAGE EXCLUSIVEMENT PROFESSIONNEL.
Consulter le livret avant toute utilisation.
Titulaire de l'AMM : ADAMA France s.a.s - 33 rue de Verdun
92156 Suresnes Cedex - Tél. : 01 41 47 33 33
Produit fabriqué en Israël
N° de lot
Date de fabrication
VOIR SUR L'EMBALLAGE
5 L
DRAFT
ZONE DE COLLAGE

AG-P4-400 SC /PENTIUM FLO
Part A - National Assessment
FRANCE

Appendix 3 Letter of Access

Provided upon request.