

DRAFT REGISTRATION REPORT

Part B

Section 6

Mammalian Toxicology

Detailed summary of the risk assessment

Product code: A12916B

Product name: Amistar Max

Chemical active substance(s):

Azoxystrobin: 93.5g/L

Folpet: 500g/L

Central Zone

Zonal Rapporteur Member State: Germany

NATIONAL ADDENDUM - POLAND

(authorization)

Applicant: Syngenta Polska Sp. z o.o.

Submission date: June 2024

MS Assessment: 12/08/2024

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Version history

When	What
August 2024	MS assessment

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6 Mammalian Toxicology (KCP 7)

This is the National Addendum for Poland and should be reviewed in conjunction with the Core Assessment prepared by zRMS Germany.

6.1 Summary

Table 6.1-1: Information on A12916B *

Product name and code	A12916B
Formulation type	Suspension Concentrate (SC)
Active substance(s) (incl. content)	Azoxystrobin : 93.5g/L Folpet : 500g/L
Function	Fungicide
Product already evaluated as the 'representative formulation' during the approval of the active substance(s)	No
Product previously evaluated in another MS according to Uniform Principles	No

* Information on the detailed composition of A12916B can be found in the confidential dRR Part C of Core Assessment.

Justified proposals for classification and labelling

According to the criteria given in Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008, the following classification and labelling with regard to toxicological data is proposed for the preparation:

Table 6.1-2: Justified proposals for classification and labelling for A12916B according to Regulation (EC) No 1272/2008

Hazard class(es), categories	Acute Tox. 4 (oral) Skin Sens. 1 Acute Tox. 3 (inhalation) Carc. 2 STOT RE 1 (respiratory tract)
Hazard pictograms or Code(s) for hazard pictogram(s)	GHS07, GHS08
Signal word	Warning Danger
Hazard statement(s)	H302, H317, H331, H351, H372
Precautionary statement(s)	P101, P102, P261, P270, P271, P280, P301 + P312 P302+P352, P304+P340, P308+P310, P313, P362+P364, P405, P501
Additional labelling phrases	Repeated exposure may cause skin dryness or cracking. [EUH066]
	Product identifiers: Contains: "1,2-benzisothiazole-3(2H)-one (CAS 2634-33-5)"
	To avoid risks to human health and the environment, comply with the instructions for use. [EUH401]

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Table 6.1-3: Summary of risk assessment for operators, workers, residents and bystanders for A12916B

	Result	PPE / Risk mitigation measures*
Operators	Acceptable	None. Recommended: Workwear (arms, body and legs covered), and protective gloves and face protection during mixing/loading and during application (due to the fact that the product is classified as Skin Sens. 1 H317 and the spray dilution should be considered as potentially sensitizing).
Workers	Acceptable	None. Workwear (arms, body and legs covered) during field activities and additionally gloves when handling the treated crops (resulting from exposure assessment and due to the fact that the spray dilution should be considered as potentially sensitizing).
Residents	Acceptable	None. Recommended: Drift reducing technology (due to the fact that the spray dilution should be considered as potentially sensitizing).
Bystanders	Acceptable	

* Classification and labelling as well as exposure estimations are considered when selecting PPE and/or risk mitigation measures.

No unacceptable risk for operators, workers, residents and bystanders was identified when the product is used as intended and provided that the PPE/ risk mitigation measures stated in Table 6.1-3 are applied.

A summary of the critical uses and the overall conclusion regarding exposure for operators, workers and residents/bystanders is presented in the following table.

Table 6.1-4: Critical uses and overall conclusion of exposure assessment

1	2	3	4	5	6	7	8	9	10			
Use- No.*	Crops and situation (e.g. growth stage of crop)	F, Fn, Fpn G, Gn, Gpn or I **	Application		Application rate		PHI (d)	Remarks: (e.g. safener/synergist (L/ha)) critical gap for operator, worker, resident or bystander exposure based on [Exposure model]	Acceptability of exposure assessment			
			Method / Kind (incl. application technique ***)	Max. number (min. interval between applications) a) per use b) per crop/season	Max. application rate kg as/ha a) per application b) per crop and season	Water L/ha min / max			Operator	Worker	Residents	Bystander
	Cereals (BBCH 30-69)	F	Spraying, LCTM	a) 1 b) 1	a) Azoxystrobin: 0.14 Folpet: 0.75 b) Azoxystrobin: 0.14 Folpet: 0.75	100 - 400	NA	Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products; EFSA Journal 2022;20(1):7032				
	Grasses (ornamental & for seed production) (BBCH 30-59)	F	Spraying, LCTM	a) 1 b) 1	a) Azoxystrobin: 0.14 Folpet: 0.75 b) Azoxystrobin: 0.14 Folpet: 0.75	100 - 400	NA					

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

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

*** e.g. LC: low crop, HC: high crop, TM: tractor-mounted, HH: hand-held

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Explanation for column 10 “Acceptability of exposure assessment”

A	Exposure acceptable without PPE / risk mitigation measures
R	Further refinement and/or risk mitigation measures required
N	Exposure not acceptable/ Evaluation not possible

Data gaps

Data gaps should be listed in the summary to give an overview (especially for cMS).

6.2 Toxicological Information on Active Substance(s)

Information regarding classification of the active substances and on EU endpoints and critical areas of concern identified during the EU review are given in Table 6.2-1.

Table 6.2-1: Information on active substance(s)

	Azoxystrobin	Folpet
Common Name	Azoxystrobin	Folpet
CAS-No.	131860-33-8	133-07-3
Classification and proposed labelling		
With regard to toxicological endpoints (according to the criteria in Reg. 1272/2008, as amended)	Hazard classes, categories: Acute Tox. 3 Codes for hazard pictograms: GHS06 Signal word: Danger Hazard statement: H331	Hazard classes, categories: Skin Sens. 1, Eye Irrit. 2, Acute Tox. 4, Carc. 2 Codes for hazard pictograms: GHS07, GHS08 Signal word: Warning Hazard statement: H317, H319, H332, H351
Additional C&L proposal	Please refer to Core Assessment. None	Please refer to Core Assessment. RAC opinion adopted on 08/06/2023 (CLH-O-0000007326-73-01/F) proposed a classification of folpet as following: Skin Sens. 1A, H317 SCL = 0.001% Acute Tox. 2, H330 ATE = 0.3 mg/L STOT RE 1, H372 (respiratory tract) Eye Dam. 1, H318. Furthermore, labelling with EUH066 is proposed in the RAC opinion. The RAC opinion is available on the ECHA website: https://echa.europa.eu/documents/10162/c446ef0a-d6ce-cca1-77d2-b70afb2c63d0
Agreed EU endpoints		
AOEL systemic	0.2 mg/kg bw/d (Oral absorption: 100%)	0.1 mg/kg bw/d (Oral absorption: 100%)
Reference	EFSA Journal 2010; 8(4):1542	EFSA Scientific Report (2009) 297, 1-80*
Conditions to take into account/critical areas of concern with regard to toxicology		
Review Report/EFSA Conclusion for active	-	Folpet is severely irritating to eyes, is a skin sensitizer and has carcinogenic properties (Cat 3

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	Azoxystrobin	Folpet
substance		proposed). A classification for reproduction toxicity might be justified (EFSA Scientific Report (2009) 297, 40-80)

* A new EFSA conclusion for folpet has been published on 18 August 2023 (EFSA Journal 2023;21(8):8139). Considering the data of application, the previous report (published 2009) is considered as the relevant and legally binding source of information on reference values and agreed endpoints. The new EFSA conclusion should be considered after the renewal of the approval of the active substance folpet.

6.3 Toxicological Evaluation of Plant Protection Product

Please refer to core assessment.

6.4 Toxicological Evaluation of Groundwater Metabolites

Please refer to core assessment.

6.5 Dermal Absorption (KCP 7.3)

A summary of the dermal absorption rates used in the exposure assessment of the present application are presented in the following table.

Table 6.5-1: Dermal absorption rates for active substances in A12916B

Azoxystrobin		
	Value	Reference
Concentrate	0.26%	Study described in Core Assessment (Noakes (2013); ASB2014-3801)
Dilution (1:700)	8.5%	
Folpet		
Concentrate	0.66%	Study described in Core Assessment (Noakes (2013); ASB2014-3801)
Dilution (1:700)	17%	

6.5.1 Justification for proposed values - Azoxystrobin

Proposed dermal absorption rates for azoxystrobin are based on a dermal absorption study conducted with the current product/formulation. The study results are summarized in the following table. A full summary of the study on the dermal absorption of Azoxystrobin/A12916B is described in detail in Core AssessmentAppendix 2.

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Table 6.5-2: Summary of the results of submitted dermal absorption studies

Test	Concen- trate	Spray dilu- tion	Formula- tion in study	Acceptability of study	Justification pro- vided on repre- sentativity of study formulation for current prod- uct	Acceptabil- ity of justi- fication	Reference*
<i>In vitro</i> (human)	0.26% (93.5 g/L)	4.3% (1.039 g/L) 8.5% (0.134 g/L)	A12916B	Acceptable*	Study with formulation identical to product	No justification required	Study described in Core Assessment (Noakes (2013); ASB2014- 3801)

* Acceptability of the study has been already evaluated in Core Assessment

6.5.2 Justification for proposed values - Folpet

Proposed dermal absorption rates for folpet are based on a dermal absorption study conducted with the current product/formulation. The study results are summarized in the following table. A full summary of the study on the dermal absorption of Folpet/A12916B is described in detail in Core Assessment.

Table 6.5-2: Summary of the results of submitted dermal absorption studies

Test	Concen- trate	Spray dilu- tion	Formula- tion in study	Acceptability of study	Justification pro- vided on repre- sentativity of study formulation for current product	Acceptabil- ity of justi- fication	Refer- ence*
<i>In vitro</i> (human)	0.66% (500 g/L)	11% (5.5 g/L) 17% (0.7 g/L)	A12916B	Acceptable*	Study with formulation identical to product	No justification required	Study described in Core Assessment (Noakes (2013); ASB2014- 3801)

* Acceptability of the study has been already evaluated in Core Assessment

6.6 Exposure Assessment of Plant Protection Product (KCP 7.2)

Table 6.6-1: Product information and toxicological reference values used for exposure assessment

Product name and code	A12916B
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Formulation type	Suspension Concentrate (SC)	
Category	Fungicide	
Active substance(s) (incl. content)	Azoxystrobin 93.5 g/L	Folpet 500 g/L
AOEL systemic	0.2 mg/kg bw/d	0.1 mg/kg bw/d
Inhalation absorption	100%	100%
Oral absorption	100%	100%
Dermal absorption	Concentrate: 0.26% Dilution: 8.5% (0.134 g/L) Based on product (A12916B)	Concentrate: 0.66% Dilution: 17% (0.7 g/L) Based on product (A12916B)

6.6.1 Selection of critical use(s) and justification

The critical GAP used for the exposure assessment of the plant protection product is shown in Table 6.1-4. A list of all intended uses within the zone is given in Part B, Section 0.

Justification

The application rate and the number of applications is similar for all intended uses. Thus, the exposure estimations presented below cover all GAPs with regard to operators and residents/bystanders.

Intended uses cereals and ornamentals (grasses) are identical in terms of numbers of application and application rate. However, different crop specific tasks for workers should be considered, which results in different levels of exposure. Therefore, both crop scenarios are presented.

6.6.2 Operator exposure (KCP 7.2.1)

6.6.2.1 Estimation of operator exposure

A summary of the exposure model used for estimation of operator exposure to the active substances during application of A12916B according to the critical use is presented in Table 6.6-2. The outcome of the estimation is presented in Table 6.6-3. Detailed calculations are in 0.

Table 6.6-2: Exposure models for intended uses

Critical use	Cereals (max. 1.5 L product/ha)
Models	Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products; EFSA Journal 2022;20(1):7032) OPEX version: 1.0.2

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Table 6.6-3: Estimated operator exposure

		Azoxystrobin		Folpet	
Model data	Level of PPE	Total absorbed dose (mg/kg/day)	% of systemic AAOEL	Total absorbed dose (mg/kg/day)	% of systemic AAOEL
Cereals Field crops/Outdoor/Downward spraying/Vehicle-mounted/Drift reduction: 0 %/75th percentile Crop density: Normal					
Application rate		1 x 0.14 kg a.s./ha		1 x 0.75 kg a.s./ha	
Spray application (AOEM; 75 th percentile) Body weight: 60 kg OPEX version: 1.0.2	Potential exposure	0.004	2.2	0.04	40.5
	M/L: Workwear App: Workwear	0.003	1.5	0.03	26.1

Conclusion

The performed exposure calculations do not indicate the presence of unacceptable risk for the operator, when the product is used according to GAP table. However, it's recommended for operator to wear workwear (arms, body and legs covered) and protective gloves during mixing/loading and during application.

6.6.2.2 Measurement of operator exposure

Since the operator exposure estimations carried out indicated that the acceptable operator exposure level (AOEL) will not be exceeded under conditions of intended uses and consideration of the above mentioned personal protective equipment (PPE), a study to provide measurements of operator exposure was not necessary and was therefore not performed.

Comments of zRMS study comment 6.6.2	The applicant presented calculations for operator exposure during mixing & loading and the application of Amistar Max (A12916B) on cereals, max dose 1.5 L product/ha (Field). The exposure calculations were conducted using the EFSA online calculator v. 1.0.2 (OPEX). The calculations provided by the applicant were done correctly.
agreed endpoints 6.6.2	According to EFSA OPEX calculations, it can be concluded that the risk of operator exposure during mixing & loading and application using the tractor-mounted on field is acceptable in the absence of PPP. Due to the fact that the product is classified as Skin Sens. 1 and the spray dilution should be considered as potentially sensitizing (SCL for folpet is 0.001%), the operator should wear workwear, gloves and face protection during mixing/loading and application operations.

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6.6.3 Worker exposure (KCP 7.2.3)

6.6.3.1 Estimation of worker exposure

Table 6.6-4 shows the exposure model used for estimation of worker exposure after entry into a previously treated area or handling a crop treated with A12916B according to the critical use(s). Outcome of the estimation is presented in and Table 6.6-5. Detailed calculations are in 0.

Table 6.6-4: Exposure models for intended uses

Critical uses	Cereals (max. 1.5 L product/ha) Ornamentals (max. 1.5 L product/ha)
Model	Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products; EFSA Journal 2022;20(1):7032) OPEX version: 1.0.2

Table 6.6-5: Estimated worker exposure

		Azoxystrobin		Folpet	
Model data	Level of PPE	Total absorbed dose (mg/kg bw/day)	% of systemic AOEL	Total absorbed dose (mg/kg bw/day)	% of systemic AOEL
Cereals Inspection, irrigation / Outdoor Work rate: 2 hours/day Interval: NA Body weight: 60 kg TC (potential): 12500 cm ² /h TC (workwear (arms, body and legs covered)): 1400 cm ² /h TC (workwear (arms, body and legs covered) and gloves): 1250 cm ² /h TC (gloves): NA cm ² /h					
Application rate		1 x 0.14 kg a.s./ha		1 x 0.75 kg a.s./ha	
Body weight: 60 kg OPEX version: 1.0.2	Potential	0.01	7.5	0.2	159
	Workwear	0.002	0.8	0.02	17.9
	Workwear and gloves	0.001	0.7	0.02	15.9
Ornamentals Cutting, sorting, bundling, carrying / Outdoor Work rate: 8 hours/day Interval: NA Body weight: 60 kg TC (potential): 14000 cm ² /h TC (workwear (arms, body and legs covered)): 5000 cm ² /h TC (workwear (arms, body and legs covered) and gloves): 1400 cm ² /h TC (gloves): NA cm ² /h					
Application rate		1 x 0.14 kg a.s./ha		1 x 0.75 kg a.s./ha	
Body weight: 60 kg OPEX version: 1.0.2	Potential	0.07	33.4	0.7	714
					Safe re-entry interval: 86 days

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	Workwear	0.02	11.9	0.3	255 Safe re-entry interval: 41 days
	Workwear and gloves	0.007	3.3	0.07	71.4

Conclusion

The results of the performed exposure calculations show that the use of product according to the GAP Table, causes no health risk for the worker using workwear (arms, body and legs covered) and gloves during field activities (when handling the treated crops).

As a standard rule, it should be mentioned on the label that treated crops should not be re-entered before spray deposits on leaf surfaces have completely dried.

6.6.3.2 Refinement of generic DFR value (KCP 7.2)

No refinement required.

6.6.3.3 Measurement of worker exposure

Since the worker exposure estimations carried out indicated that the acceptable operator exposure level (AOEL) will not be exceeded under conditions of intended uses and considering above mention PPE, a study to provide measurements of worker exposure was not necessary and was therefore not performed.

Comments of zRMS study comment 6.6.3	The applicant presented calculations for worker exposure after entry into a previously treated area with of Amistar Max (A12916B) on cereals and ornamentals (grasses), max dose 1.5 L product/ha. The exposure calculations were conducted using the EFSA online calculator v. 1.0.2 (OPEX). The calculations provided by the applicant were done correctly.
agreed endpoints 6.6.3	According to EFSA OPEX calculations, it can be concluded that the risk of worker exposure during re-entry activities on area treated with Amistar Max (A12916B) is acceptable under conditions of intended use when the workwear (long sleeved shirt, long trousers) during field activities and additionally gloves are worn when handling the treated crops. Also due to the fact that the spray dilution should be considered as potentially sensitizing workwear and gloves are recommended. As a standard rule, it should be mentioned on the label that treated crops should not be re-entered before spray deposits on leaf surfaces have completely dried.

6.6.4 Resident and bystander exposure (KCP 7.2.2)

6.6.4.1 Estimation of resident and bystander exposure

The acute exposure assessment for bystanders covers the exposure that a resident could reasonably be expected to incur in a single day. Therefore, there is no need for a separate acute risk assessment for residents.

No bystander risk assessment is required for PPPs that do not have significant acute toxicity or the potential

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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.

Table 6.6-6 shows the exposure model used for estimation of resident exposure to azoxystrobin and folpet. The outcome of the estimations is presented in Table 6.6-7. Detailed calculations are in 0.

Table 6.6-6: Exposure models for intended uses

Critical use	Cereals (max. 1.5 L product/ha)
Model	Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products; EFSA Journal 2022;20(1):7032) OPEX version: 1.0.2

Table 6.6-7: Estimated resident exposure

		Azoxystrobin		Folpet	
Model data		Total absorbed dose (mg/kg bw/day)	% of systemic AOEL	Total absorbed dose (mg/kg bw/day)	% of systemic AOEL
Cereals Season: Not relevant Buffer zone: 2-3 m Drift reduction technology: 0 % Interval between treatments: NA Minimum volume of water: 100 L DFR: 3 µg/cm ² foliage per kg a.s./ha DT50: 30 days					
Number of applications and application rate		1 x 0.140 kg a.s./ha		1 x 0.750 kg a.s./ha	
Resident child Body weight: 10 kg OPEX version: 1.0.2	Drift (75 th perc.)	0.003	1.6	0.03	34.6
	Vapour (75 th perc.)	0.0008	0.4	0.0008	0.8
	Deposits (75 th perc.)	0.0003	0.1	0.002	2.5
	Re-entry (75 th perc.)	0.002	1	0.02	21.5
	Sum (mean)	0.004	2.2	0.04	38.7
Resident adult Body weight: 60 kg OPEX version: 1.0.2	Drift (75 th perc.)	0.0008	0.4	0.008	8.2
	Vapour (75 th perc.)	0.0003	0.1	0.0003	0.3
	Deposits (75 th perc.)	8e-05	0.04	0.0009	0.9
	Re-entry (75 th perc.)	0.001	0.6	0.01	12
	Sum (mean)	0.002	0.8	0.01	14.3

Conclusion

The exposure of bystander and resident (children and adult) to active substances contained in the formulation A12916B causes no risk to human health if the product is used in accordance with the intended uses listed in the GAP Table.

However, considering the classification of product and fact that there are neither EU harmonized approach nor Polish specific requirements available yet on how to conduct a quantitative risk assessment for exposure towards potentially sensitising spray dilutions of plant protection products, the existing modelling with

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EFSA model is deemed to be acceptable and sufficient for positive evaluation. No specific risk mitigations measures are required.

6.6.4.2 Measurement of resident and/or bystander exposure

Since the resident and/or bystander exposure estimations carried out indicated that the acceptable operator exposure level (AOEL) for azoxystrobin and folpet will not be exceeded under conditions of intended uses and considering above mentioned risk mitigation measures, a study to provide measurements of resident/by-stander exposure was not necessary and was therefore not performed.

Comments of zRMS study comment 6.6.4	The evaluator agrees with the estimation of resident exposure after application of Amistar Max (A12916B) provided by the applicant. The exposure estimation of resident (adult and child) to active substances, applied on a field at dose of 1x1.5 L product/ha using tractor-mounted, calculated with the EFSA online calculator v 1.0.2. (OPEX) demonstrates that such an exposure for adult and child resident is 0.8% to 2.2% of respective AOEL for azoxystrobin For folpet exposure for adult and child resident is 14.3 % to 38.7% of respective AOEL thus risk is acceptable. The calculations provided by the applicant were done correctly.
agreed endpoints 6.6.4	The exposure assessment for residents also covers bystander exposure. According to calculations, it can be concluded that there is no unacceptable risk to any resident (child and adult) and bystander after application of Amistar Max (A12916B). Due to the fact that the product is classified as Skin Sens. 1 and the spray dilution should be considered as potentially sensitizing (SCL for folpet is 0.001%), qualitative approach should be followed in order to minimize health risk for residents and bystanders. Since residents and bystanders cannot be protected by PPE, the use of drift reducing technology is recommended in order to minimise the exposure towards spray drift.

6.6.5 Combined exposure

The product is a mixture of two active substances.

6.6.5.1 Exposure assessment of Azoxystrobin and Folpet in product A12916B

Note: The combined toxicological effect of these active substances has not been investigated with regard to repeated dose toxicity.

At the first tier, combined exposure is calculated as the sum of the component exposures without regard to the mode of action or mechanism/target of toxicity. Initially, the individual Hazard Quotients (HQ) are calculated for all active substances in the PPP by assessing the exposure according to appropriate models and dividing the individual exposure levels by the respective systemic AOEL. This is equivalent to the predicted exposure as % of systemic AOEL converted to decimal. The Hazard Index (HI) is the sum of the individual HQs.

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Table 6.6-8: Risk assessment from combined exposure (OPEX version: 1.0.2)

azoxystrobin + folpet		
Application scenario	Hazard index	
Operators (Field crops/Outdoor/Downward spraying/Vehicle-mounted) <i>M/L: Workwear</i> <i>App: Workwear</i>	0.276	
Workers (Field crops/Outdoor/Inspection, irrigation) <i>Work wear</i>	0.2	
Workers (Ornamentals/Outdoor/ Cutting, sorting, bundling, carrying) <i>Work wear and gloves</i>	0.7	
Resident child Body weight: 10 kg	Drift (75th perc.)	0.4
	Vapour (75th perc.)	0.01
	Deposits (75th perc.)	0.03
	Re-entry (75th perc.)	0.2
	Sum (mean)	0.4
Resident adult Body weight: 60 kg	Drift (75th perc.)	0.09
	Vapour (75th perc.)	0.004
	Deposits (75th perc.)	0.009
	Re-entry (75th perc.)	0.1
	Sum (mean)	0.2

The Hazard Index is < 1. Thus, combined exposure to all active substances in A12916B is not expected to present a risk for operators, workers, residents and bystanders. No further refinement of the assessment is required.

Comments of zRMS study comment 6.6.5	<p>Since the product is a mixture of two active substances, the applicant presented calculations for combined operator exposure during mixing & loading and the application of Amistar Max (A12916B) on cereals. Moreover, the applicant presented calculations for combined worker exposure after entry into a previously treated area with of Amistar Max (A12916B) on cereals and ornamentals (grasses). The estimation of combined resident exposure after application of Amistar Max (A12916B) was also provided by the applicant.</p> <p>The exposure calculations were conducted using the EFSA online calculator v. 1.0.2 (OPEX).</p> <p>The calculations provided by the applicant were done correctly.</p>
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<p>agreed endpoints 6.6.5</p>	<p>According to EFSA OPEX calculations, it can be concluded that the risk of combined operator exposure during mixing & loading and application using the tractor-mounted on field is acceptable in the absence of PPP.</p> <p>Due to the fact that the product is classified as Skin Sens. 1 and the spray dilution should be considered as potentially sensitizing (SCL for folpet is 0.001%), the operator should wear workwear, gloves and face protection during mixing/loading and application operations. According to EFSA OPEX calculations of combined exposure it can be concluded that the risk of worker exposure during re-entry activities on area treated with Amistar Max (A12916B) is acceptable under conditions of intended use when the workwear (long sleeved shirt, long trousers) during field activities and gloves are worn when handling the treated crops. Also due to the fact that the spray dilution should be considered as potentially sensitizing workwear and gloves are recommended.</p> <p>As a standard rule, it should be mentioned on the label that treated crops should not be re-entered before spray deposits on leaf surfaces have completely dried.</p> <p>The combined exposure assessment for residents also covers bystander exposure. According to calculations, it can be concluded that there is no unacceptable risk to any resident (child and adult) and bystander after application of Amistar Max (A12916B).</p> <p>Due to the fact that the product is classified as Skin Sens. 1 and the spray dilution should be considered as potentially sensitizing (SCL for folpet is 0.001%), qualitative approach should be followed in order to minimize health risk for residents and bystanders.</p> <p>Since residents and bystanders cannot be protected by PPE, the use of drift reducing technology is recommended in order to minimise the exposure towards spray drift.</p>
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Appendix 1 Lists of data considered in support of the evaluation

List of data submitted by the applicant and relied on

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner

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

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner

The following tables are to be completed by MS

List of data submitted by the applicant and not relied on

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner

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

Data point	Author(s)	Year	Title Company Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Owner

Appendix 2 Detailed evaluation of the studies relied upon

A 2.1 Statement on bridging possibilities

Please refer to Core Assessment.

A 2.2 Acute oral toxicity (KCP 7.1.1)

Please refer to Core Assessment.

A 2.3 Acute percutaneous (dermal) toxicity (KCP 7.1.2)

Please refer to Core Assessment.

A 2.4 Acute inhalation toxicity (KCP 7.1.3)

Please refer to Core Assessment.

A 2.5 Skin irritation (KCP 7.1.4)

Please refer to Core Assessment.

A 2.6 Eye irritation (KCP 7.1.5)

Please refer to Core Assessment.

A 2.7 Skin sensitisation (KCP 7.1.6)

Please refer to Core Assessment.

A 2.8 Supplementary studies for combinations of plant protection products (KCP 7.1.7)

A 2.9 Data on co-formulants (KCP 7.4)

A 2.9.1 Material safety data sheet for each co-formulant

Please refer to Core Assessment.

A 2.9.2 Available toxicological data for each co-formulant

Please refer to Core Assessment.

A 2.10 Studies on dermal absorption (KCP 7.3)

Please refer to Core Assessment.

A 2.11 Other/Special Studies

No other studies are submitted with this application.

Appendix 3 Exposure calculations

A 3.1 Operator exposure calculations (KCP 7.2.1.1)

A 3.1.1 Calculations for azoxystrobin and folpet





Table A 1: Input parameters considered for the estimation of operator exposure - azoxystrobin

Formulation type	Soluble concentrates, emulsifiable concentrate, etc.	Name of active substance	Azoxystrobin
Concentration of active substance [g a.s./l or kg]	93.5	Crops	Field crops
Area treated [ha/day]	50	Application method	Downward spraying
Dermal absorption [%] (concentrate)	0.26	Application technique	Vehicle-mounted
Dermal absorption [%] (dilution)	8.5	Indoor/outdoor	Outdoor
Oral absorption [%]	100	Drift reduction [%]	0
Inhalation absorption [%]	100	Type of cultivation	Normal
Body weight (kg)	60	-	-
AOEL [mg/kg bw/day]	0.2	-	-

Table A 2: Input parameters considered for the estimation of operator exposure - folpet

Formulation type	Soluble concentrates, emulsifiable concentrate, etc.	Name of active substance	Folpet
Concentration of active substance [g a.s./l or kg]	500	Crops	Field crops
Area treated [ha/day]	50	Application method	Downward spraying
Dermal absorption [%] (concentrate)	0.66	Application technique	Vehicle-mounted
Dermal absorption [%] (dilution)	17	Indoor/outdoor	Outdoor
Oral absorption [%]	100	Drift reduction [%]	0
Inhalation absorption [%]	100	Type of cultivation	Normal
Body weight (kg)	60	-	-
AOEL [mg/kg bw/day]	0.1	-	-

Table A 3: Estimation of longer term operator exposure towards azoxystrobin and folpet according to EFSA guidance

		Azoxystrobin (% AOEL)	Folpet (% AOEL)	Combined (hazard index)
Mixing/loading	Application	Normal & vehicle-mounted		
		2.2	40.5	0.427
		1.5	26.1	0.276

Model data	Level of PPE	Total absorbed dose [mg/kg bw per day]	% of systemic AOEL
Field crops/Outdoor/Downward spraying/Vehicle-mounted/Drift reduction: 0 %/75th percentile Crop density: Normal			
Azoxystrobin	Number of applications and application rate: 1 x 0.14025 kg a.s./ha Dermal absorption (concentrate): 0.26 % Dermal absorption (in-use dilution): 8.5 %		
	M/L: Workwear App: Workwear	0.003	1.5
Folpet	Number of applications and application rate: 1 x 0.75 kg a.s./ha Dermal absorption (concentrate): 0.66 % Dermal absorption (in-use dilution): 17 %		
	M/L: Workwear App: Workwear	0.03	26.1
Combined exposure	Hazard index		
	M/L: Workwear App: Workwear	0.276	

A 3.2 Worker exposure calculations (KCP 7.2.3.1)

A 3.2.1 Calculations for azoxystrobin and folpet

Table A 4: Input parameters considered for the estimation of worker exposure - azoxystrobin

Indoor/outdoor	Outdoor	AOEL [mg/kg bw/day]	0.2
Re-entry activity	Inspection, irrigation	Dermal transfer coefficient - Total potential exposure [cm ² /h]	12500
Crops	Field crops	Dermal transfer coefficient - Arm, body and legs covered [cm ² /h]	1400
Application method	Downward spraying	Dermal transfer coefficient - Hands, arm, body and legs covered [cm ² /h]	1250
Application technique	Vehicle-mounted	Dermal transfer coefficient - Hands covered, no work-wear [cm ² /h]	-
Max. application rate of the product [l or kg/ha]	1.5	DFR refined worker [µg/cm ² foliage per kg a.s./ha]	3
Max. no. of applications	1	DT50 foliar worker [days]	30
Interval between multiple applications [days]	NA	-	-
Multiple application factor	1	-	-
Body weight (kg)	60	-	-
Name of active substance	Azoxystrobin	-	-
Dermal absorption [%] (dilution)	8.5	-	-
Inhalation absorption [%]	100	-	-
Time [hours per day]	2	-	-

Table A 5: Input parameters considered for the estimation of worker exposure - folpet

Indoor/outdoor	Outdoor	AOEL [mg/kg bw/day]	0.1
Re-entry activity	Inspection, irrigation	Dermal transfer coefficient - Total potential exposure [cm ² /h]	12500
Crops	Field crops	Dermal transfer coefficient - Arm, body and legs covered [cm ² /h]	1400
Application method	Downward spraying	Dermal transfer coefficient - Hands, arm, body and legs covered [cm ² /h]	1250
Application technique	Vehicle-mounted	Dermal transfer coefficient - Hands covered, no work-wear [cm ² /h]	-

Max. application rate of the product [l or kg/ha]	1.5	DFR refined worker [µg/cm² foliage per kg a.s./ha]	3
Max. no. of applications	1	DT50 foliar worker [days]	30
Interval between multiple applications [days]	NA	-	-
Multiple application factor	1	-	-
Body weight (kg)	60	-	-
Name of active substance	Folpet	-	-
Dermal absorption [%] (dilution)	17	-	-
Inhalation absorption [%]	100	-	-
Time [hours per day]	2	-	-

Table A 6: Estimation of worker exposure towards azoxystrobin according to EFSA guidance

Level of PPE	Total absorbed dose [mg/kg bw per day]	% of systemic AOEL	Re-entry restriction [days]
Field crops Inspection, irrigation / Outdoor Work rate: 2 hours/day Interval: NA Body weight: 60 kg TC (potential): 12500 cm²/h TC (workwear (arms, body and legs covered)): 1400 cm²/h TC (workwear (arms, body and legs covered) and gloves): 1250 cm²/h TC (gloves): NA cm²/h			
Azoxystrobin	Number of applications & application rate: 1 x 0.14025 kg a.s./ha Dermal absorption: 8.5 % DFR: 3 µg/cm² foliage per kg a.s./ha DT50: 30 days		
Potential	0.01	7.5	0
Workwear	0.002	0.8	0
Workwear and gloves	0.001	0.7	0
Folpet	Number of applications & application rate: 1 x 0.75 kg a.s./ha Dermal absorption: 17 % DFR: 3 µg/cm² foliage per kg a.s./ha DT50: 30 days		
Potential	0.2	159	21
Workwear	0.02	17.9	0
Workwear and gloves	0.02	15.9	0
Combined exposure		Hazard index	
potential		1.7	23
Workwear		0.2	0
Workwear and gloves		0.2	0

Table A 7: Input parameters considered for the estimation of worker exposure - azoxystrobin

Indoor/outdoor	Outdoor	AOEL [mg/kg bw/day]	0.2
Re-entry activity	Cutting, sorting, bundling, carrying	Dermal transfer coefficient - Total potential exposure [cm ² /h]	14000
Crops	Low ornamentals	Dermal transfer coefficient - Arm, body and legs covered [cm ² /h]	5000
Application method	Downward spraying	Dermal transfer coefficient - Hands, arm, body and legs covered [cm ² /h]	1400
Application technique	Vehicle-mounted	Dermal transfer coefficient - Hands covered, no work-wear [cm ² /h]	-
Max. application rate of the product [l or kg/ha]	1.5	DFR refined worker [µg/cm ² foliage per kg a.s./ha]	3
Max. no. of applications	1	DT50 foliar worker [days]	30
Interval between multiple applications [days]	NA	Inhalation task specific factor [ha/h*10 ⁻³]	0.1
Multiple application factor	1	-	-
Body weight (kg)	60	-	-
Name of active substance	Azoxystrobin	-	-
Dermal absorption [%] (dilution)	8.5	-	-
Inhalation absorption [%]	100	-	-
Time [hours per day]	8	-	-

Table A 8: Input parameters considered for the estimation of worker exposure - folpet

Indoor/outdoor	Outdoor	AOEL [mg/kg bw/day]	0.1
Re-entry activity	Cutting, sorting, bundling, carrying	Dermal transfer coefficient - Total potential exposure [cm ² /h]	14000
Crops	Low ornamentals	Dermal transfer coefficient - Arm, body and legs covered [cm ² /h]	5000
Application method	Downward spraying	Dermal transfer coefficient - Hands, arm, body and legs covered [cm ² /h]	1400
Application technique	Vehicle-mounted	Dermal transfer coefficient - Hands covered, no work-wear [cm ² /h]	-
Max. application rate of the product [l or kg/ha]	1.5	DFR refined worker [µg/cm ² foliage per kg a.s./ha]	3
Max. no. of applications	1	DT50 foliar worker [days]	30
Interval between multiple applications [days]	NA	Inhalation task specific factor [ha/h*10 ⁻³]	0.1

Multiple application factor	1	-	-
Body weight (kg)	60	-	-
Name of active substance	Folpet	-	-
Dermal absorption [%] (dilution)	17	-	-
Inhalation absorption [%]	100	-	-
Time [hours per day]	8	-	-

Table A 9: Estimation of worker exposure towards azoxystrobin according to EFSA guidance

Level of PPE	Total absorbed dose [mg/kg bw per day]	% of systemic AOEL	Re-entry restriction [days]
Ornamentals Cutting, sorting, bundling, carrying / Outdoor Work rate: 8 hours/day Interval: NA Body weight: 60 kg TC (potential): 14000 cm ² /h TC (workwear (arms, body and legs covered)): 5000 cm ² /h TC (workwear (arms, body and legs covered) and gloves): 1400 cm ² /h TC (gloves): NA cm ² /h			
Azoxystrobin	Number of applications & application rate: 1 x 0.14025 kg a.s./ha Dermal absorption: 8.5 % DFR: 3 µg/cm ² foliage per kg a.s./ha DT50: 30 days		
Potential	0.07	33.4	0
Workwear	0.02	11.9	0
Workwear and gloves	0.007	3.3	0
Folpet	Number of applications & application rate: 1 x 0.75 kg a.s./ha Dermal absorption: 17 % DFR: 3 µg/cm ² foliage per kg a.s./ha DT50: 30 days		
Potential	0.7	714	86
Workwear	0.3	255	41
Workwear and gloves	0.07	71.4	0
Combined exposure		Hazard index	
Potential		7.5	88
Workwear		2.7	43
Workwear and gloves		0.7	0

A 3.3 Resident and bystander exposure calculations (KCP 7.2.2.1)

A 3.3.1 Calculations for azoxystrobin and folpet

Table A 10: Estimation of longer term resident exposure towards azoxystrobin according to EFSA guidance

Model data	Level of PPE	Total absorbed dose [mg/kg bw per day]	% of systemic AOEL
Field crops Season: Not relevant Buffer zone: 2-3 m Drift reduction technology: 0 % Interval between treatments: NA Minimum volume of water: 100 L			
Azoxystrobin	Number of applications and application rate: 1 x 0.14025 kg a.s./ha Dermal absorption: 8.5 % DFR: 3 µg/cm ² foliage per kg a.s./ha DT50: 30 days		
Resident child Body weight: 10 kg	Drift (75th perc.)	0.003	1.6
	Vapour (75th perc.)	0.0008	0.4
	Deposits (75th perc.)	0.0003	0.1
	Re-entry (75th perc.)	0.002	1
	Sum (mean)	0.004	2.2
Resident adult Body weight: 60 kg	Drift (75th perc.)	0.0008	0.4
	Vapour (75th perc.)	0.0003	0.1
	Deposits (75th perc.)	8e-05	0.04
	Re-entry (75th perc.)	0.001	0.6
	Sum (mean)	0.002	0.8
Folpet	Number of applications and application rate: 1 x 0.75 kg a.s./ha Dermal absorption: 17 % DFR: 3 µg/cm ² foliage per kg a.s./ha DT50: 30 days		
Resident child Body weight: 10 kg	Drift (75th perc.)	0.03	34.6
	Vapour (75th perc.)	0.0008	0.8
	Deposits (75th perc.)	0.002	2.5
	Re-entry (75th perc.)	0.02	21.5
	Sum (mean)	0.04	38.7
Resident adult Body weight: 60 kg	Drift (75th perc.)	0.008	8.2
	Vapour (75th perc.)	0.0003	0.3
	Deposits (75th perc.)	0.0009	0.9
	Re-entry (75th perc.)	0.01	12
	Sum (mean)	0.01	14.3
Combined exposure			Hazard index
Resident child Body weight: 10 kg	Drift (75th perc.)		0.4
	Vapour (75th perc.)		0.01

	Deposits (75th perc.)		0.03
	Re-entry (75th perc.)		0.2
	Sum (mean)		0.4
Resident adult Body weight: 60 kg	Drift (75th perc.)		0.09
	Vapour (75th perc.)		0.004
	Deposits (75th perc.)		0.009
	Re-entry (75th perc.)		0.1
	Sum (mean)		0.2

**Appendix 4 Detailed evaluation of exposure and/or DFR studies relied upon
(KCP 7.2, KCP 7.2.1.1, KCP 7.2.2.1, KCP 7.2.3.1)**

Not applicable.