FINAL REGISTRATION REPORT

Part B

Section 6

Mammalian Toxicology

Detailed summary of the risk assessment

Product code: DNT-162OD-R-CPd

Product name(s): EVRITELL 162 OD

Chemical active substance(s):

dicamba, 110 g/L
nicosulfuron, 40 g/L
thifensulfuron-methyl, 12 g/L

Central Zone

Zonal Rapporteur Member State: POLAND

CORE ASSESSMENT

(authorization)

Applicant: QEMETICA Agricultural Solutions Poland S.A. (formerly: CIECH Sarzyna S.A.).

Submission date: 01/2024

MS Finalisation date: 07/2024, 03/2025

Version history

When	What
January 2024	First submission to zRMS
July 2024	ZRMs evaluated initial dRR submitted by Applicant.
March 2025	RMS update after commenting

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6 Mammalian Toxicology (KCP 7)

6.1 Summary

Table 6.1-1: Information on DNT-162OD-R-CPd / EVRITELL 162 OD*

Product name and code	DNT-162OD-R-CPd / EVRITELL 162 OD
Formulation type	Oil-based suspension concentrate (OD)
Active substance(s) (incl. content)	dicamba, 110 g/L nicosulfuron, 40 g/L thifensulfuron-methyl, 12 g/L
Function	herbicide
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 DNT-162OD-R-CPd / EVRITELL 162 OD can be found in the confidential dRR Part C.

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 DNT-162OD-R-CPd / EVRITELL 162 OD according to Regulation (EC) No 1272/2008

Hazard class(es), categories	None
Hazard pictograms or Code(s) for hazard pictogram(s)	None
Signal word	None
Hazard statement(s)	None
Precautionary statement(s)	WARNING SECTION OF THE LABEL (first page) None Other section of the label: ~~P270~~ Do not eat, drink or smoke when using this product. ~~And P280 as follows:~~ „*Stosować rękawice ochronne oraz odzież roboczą (kombinezon) w trakcie przygotowywania cieczy roboczej oraz odzież roboczą w trakcie wykonywania zabiegu*." "Wear protective gloves and work wear during mixing/loading and work wear during application". Section First Aid: ~~P308+P313~~ IF exposed or concerned: Get medical advice/attention
Additional labelling phrases	To avoid risks to man and the environment, comply with the instructions for use. [EUH401]

Table 6.1-3: Summary of risk assessment for operators, workers, residents and bystanders for DNT-162OD-R-CPd / EVRITELL 162 OD

	Result	PPE / Risk mitigation measures
Operators	Acceptable	Workwear and gloves during mixing/loading. Workwear during application.
Workers	Acceptable	None
Residents	Acceptable	None
Bystanders	Acceptable	None

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) a.s. 1** **b) a.s. 2**	**Water L/ha** **min / max**			**Operator**	**Worker**	**Residents**	**Bystander**
1	Maize ZEAMX (BBCH 12-16)	F	Spraying, broadcast LCTM	a) 1 b) 1	as 1: 110 g /ha as 2: 40 g /ha as 3: 12 g /ha	100 - 300	n.a.	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				

* 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 crops, HC: high crop, TM: tractor-mounted, HH: hand-held

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).

Noticed data gaps are:

- data gap 1
- data gap 2
- data gap 3

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)

	Active substance 1	Active substance 2	Active substance 3
Common Name	Dicamba	Nicosulfuron	Thifensulfuron-methyl
CAS-No.	1918-00-9	111991-09-4	79277-27-3

	Active substance 1	Active substance 2	Active substance 3
Classification and proposed labelling			
With regard to toxicological endpoints (according to the criteria in Reg. 1272/2008, as amended)	Hazard classes (s), categories: Acute Tox. 4 Acute Tox. 4 Eye Dam. 1 STOT SE 3 STOT SE 3 Codes for hazard pictograms: GHS05 GHS07 Signal word: DANGER Hazard statements: H302 - Harmful if swallowed. H332 - Harmful if inhaled. H318 - Causes serious eye damage. H335 - May cause respiratory irritation. H336 - May cause drowsiness or dizziness. Precautionary statements: P280 - Wear protective gloves/protective clothing/eye/face protection. P301+P312 - IF SWALLOWED: If unwell, contact with a POISON CENTER or with your doctor. P305+P351+P338 - IF IN EYES: Rinse gently with water for several minutes. Remove contact lenses if they are and can be easily removed. Keep rinsing. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing **Dicamba in the form of sodium salt** (CAS1982-69-0) Classification: none	Hazard classes, categories: None Codes for hazard pictograms: None Signal word: None Hazard statement: None Precautionary statements: None	Hazard classes, categories: None Codes for hazard pictograms: None Signal word: None Hazard statement: None Precautionary statements: None
Additional C&L proposal	No additional C&L are proposed.	No additional C&L are proposed.	No additional C&L are proposed.

	Active substance 1	Active substance 2	Active substance 3
Agreed EU endpoints			
AOEL systemic	0.3 mg/kg bw (Oral absorption: 100%)	0.8 mg/kg bw/d (Oral absorption: 40%)	0.07 mg/kg bw per day (Oral absorption: >80%)
Reference	EFSA Scientific Report (2011)9(1):1965	EFSA Scientific Report (2007) 120, 1-91	EFSA Journal 2015;13(7):4201

6.3 Toxicological Evaluation of Plant Protection Product

A summary of the toxicological evaluation for DNT-162OD-R-CPd / EVRITELL 162 OD is given in the following tables. Full summaries of studies on the product that have not been previously considered within an EU peer review process are described in detail in Appendix 2.

Table 6.3-1: Summary of evaluation of the studies on acute toxicity including irritancy and skin sensitisation for DNT-162OD-R-CPd / EVRITELL 162 OD

Type of test, species, model system (Guideline)	Result	Acceptability	Classification (acc. to the criteria in Reg. 1272/2008)	Reference
LD_{50} oral, rat	No study submitted	Yes	No classification based on composition of the product (estimation method - additivity formula)	Appendix 2
LD_{50} dermal, rat	No study submitted	Yes	No classification based on composition of the product (estimation method - additivity formula)	Appendix 2
LC_{50} inhalation, rat	No study submitted	Yes	No classification based on composition of the product (estimation method -additivity formula)	Appendix 2
Skin irritation, model system	No study submitted	Yes	No classification based on composition of the product (estimation method - additivity formula)	Appendix 2
Eye irritation, model system	No study submitted	Yes	No classification based on composition of the product (estimation method - additivity formula)	Appendix 2
Skin sensitisation, guinea pig/mouse	Estimation based on composition of the product (additivity formula)	Yes	No classification based on composition of the product (estimation method - additivity formula)	Appendix 2

Supplementary studies for combinations of plant protection products	No data – not required	-	-	-

Table 6.3-2: Additional toxicological information relevant for classification/labelling of DNT-162OD-R-CPd / EVRITELL 162 OD

	Substance (concentration in product, % w/w)	Classification of the substance (acc. to the criteria in Reg. 1272/2008)	Reference	Classification of product (acc. to the criteria in Reg. 1272/2008)
Toxicological properties of active substance(s) (relevant for classification of product)	dicamba (10.8 % (w/w) pure) 110 g/l Additionally, it must be considered that dicamba after formulation of the product, is present in the form of Dicamba-Na salt, and salt properties are considered for classification.	STOT SE 3, H335 (Concentration ≥ 20 %) STOT SE 3, H336 (Concentration ≥ 20 %)	Reg. 1272/2008	None
Toxicological properties of non-active substance(s) (relevant for classification of product)	Information concerning toxiclogical properties of non-active substance are presented can be found in the confidential dossier of this submission (Registration Report - Part C).			
Further toxicological information	No data – not required			

* Please use concentration range or concentration limit (e.g. 1-10% or > 1%) as provided in MSDS.
** Material safety data sheet by the applicant

6.4 Toxicological Evaluation of Groundwater Metabolites

Comments of ZRMs:	Nicosulfuron: Taking into account the toxicological data, the metabolites: HMUD, AUSN, UCSN, ASDN and MU-466 are considered toxicologically non-relevant. The results of consumer risk calculations indicate that the use of DNT-162OD-R-CPd/ EVRITELL 162 OD according to the list of intended uses presented in GAP Table, causes no risk for health for the adults, toddlers and infants. Thifensulfuron-methyl:

	Taking into account the toxicological data, the metabolites IN-L9223 and IN-JZ789 are considered toxicologically non-relevant. The results of consumer risk calculations indicate that the use of DNT-162OD-R-CPd/ EVRITELL 162 OD according to the list of intended uses presented in GAP Table, causes no risk for health for the adults, toddlers and infants.

The toxicological relevance assessment of the metabolites of nicosulfuron and thifensufuron-methyl with the potential to reach the groundwater in concentrations above 0.1µg/L is reported in Part B, Section 10 of this dRR.

6.5 Dermal Absorption (KCP 7.3)

A summary of the dermal absorption rates for the active substances in DNT-162OD-R-CPd / EVRITELL 162 OD are presented in the following table.

Table 6.5-1: Dermal absorption rates for active substances in DNT-162OD-R-CPd / EVRITELL 162 OD

	Dicamba		Nicosulfuron		Thifensulfuron-methyl	
	Value	**Reference**	**Value**	**Reference**	**Value**	**Reference**
Concentrate	25%	EFSA Guidance on dermal absorption (EFSA Journal 2017;15(6):4873)	70%	EFSA Guidance on dermal absorption (EFSA Journal 2017;15(6):4873)	70%	EFSA Guidance on dermal absorption (EFSA Journal 2017;15(6):4873)
Dilution	70%	EFSA Guidance on dermal absorption (EFSA Journal 2017;15(6):4873)	70%	EFSA Guidance on dermal absorption (EFSA Journal 2017;15(6):4873)	70%	EFSA Guidance on dermal absorption (EFSA Journal 2017;15(6):4873)

6.5.1 Justification for proposed values - dicamba

No data on dermal absorption for dicamba in DNT-162OD-R-CPd / EVRITELL 162 OD is available. Justifications for default values according to EFSA Guidance on dermal absorption (EFSA Journal 2017;15(6):4873) are presented in the following table.

Table 6.5-2: Default dermal absorption rates for dicamba

	Value	Justification for value	Acceptability of justification
Concentrate	25%	The concentration of the active substance in the undiluted product is > 5%.	accepted
Dilution	70%	The concentration of the active substance in dilution is ≤ 5%.	accepted

6.5.2 Justification for proposed values - nicosulfuron

Table 6.5-3: Default dermal absorption rates for nicosulfuron

	Value	Justification for value	Acceptability of justification
Concentrate	70%	The formulation is organic-solvent based product. The concentration of the active substance in the undiluted product is ≤ 5%	accepted
Dilution	70%	The formulation is organic-solvent based product. The concentration of the active substance in dilution is ≤ 5%.	accepted

6.5.3 Justification for proposed values - thifensulfuron-methyl

Table 6.5-3: Default dermal absorption rates for thifensulfuron-methyl

	Value	Justification for value	Acceptability of justification
Concentrate	70%	The formulation is organic-solvent based product. The concentration of the active substance in the undiluted product is ≤ 5%	accepted
Dilution	70%	The formulation is organic-solvent based product. The concentration of the active substance in dilution is ≤ 5%.	accepted

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	DNT-162OD-R-CPd / EVRITELL 162 OD		
Formulation type	OD		
Category	Herbicide		
Active substance(s) (incl. content)	**Dicamba** 110 g/L	**Nicosulfuron** 40 g/L	**Thifensulfuron-methyl** 12 g/L
AOEL systemic	0.3 mg/kg bw (Oral absorption: 100%)	0.8 mg/kg bw/d (Oral absorption: 40%)	0.07 mg/kg bw per day (Oral absorption: >80%)
Inhalation absorption	100%	100%	100%
Oral absorption	100%	40%	>80%
Dermal absorption	Concentrate: 25% Dilution: 70% (Default)	Concentrate: 70% Dilution: 70% (Default)	Concentrate: 70% Dilution: 70% (Default)

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 critical GAPs have been defined following evaluation of the individual GAPs for each crop and take into account the appropriate crop scenario and the maximum application rate applied in the minimum water volume as relevant for this zone.

Relevant crop scenario	**Maximum application rate applied in the minimum water volume**
Field crops - Maize	1 x 1 L product/ha in 100 L water/ha

6.6.2 Operator exposure (KCP 7.2.1)

Comments of zRMS:	The estimations of operator exposure to active substances contained in DNT-162OD-R-CPd / EVRITELL 162 OD performed by the Applicant are accepted. Conclusions: According to the estimation based on Calculator OPEX version v.1.0.1, the use of DNT-162OD-R-CPd / EVRITELL 162 OD containing dicamba (110 g/kg), nicosulfuron (40 g/L), thifensulfuron-methyl (12 g/L) **causes unacceptable health risk for the unprotected operator due to results of exposure to thifensulfuron-methyl** that exceeds AOEL for this substance**.** Operator exposure to the product is safe when an operator is **equipped with protective gloves and work wear** (arms, body, and legs covered) during mixing/loading and work wear during application. Consequently, the following sentence regarding the use of PPE is recommended by the evaluator to be placed on the label. „*Stosować rękawice ochronne, oraz odzież roboczą (kombinezon) w trakcie przygotowywania cieczy roboczej oraz odzież roboczą w trakcie wykonywania zabiegu.*" "Wear protective gloves, and work wear (coverall) during mixing/loading and work wear during application".

6.6.2.1 Estimation of operator exposure

A summary of the exposure models used for estimation of operator exposure to the active substances during application of DNT-162OD-R-CPd / EVRITELL 162 OD according to the critical use(s) is presented in Table 6.6-2. The outcome of the estimation is presented in **Błąd! Nie można odnaleźć źródła odwołania.** (longer term exposure). Detailed calculations are in Appendix 3.

Table 6.6-2: Exposure models for intended uses

Critical use(s)	Field crops -maize (max. 1 L product/ha)

Model(s)	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: 1.0.1

Table 6.6-3: Estimated operator exposure (longer term exposure)

		Dicamba		Nicosulfuron		Thifensulfuron-methyl	
Model data	**Level of PPE**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**	**Total absorbed dose (mg/kg/day)**	**% of systemic AOEL**
Vehicle-mounted spray application outdoors to low crops							
Application rate		0.110 kg a.s./ha		0.040 kg a.s./ha		0.012 kg a.s./ha	
Spray application outdoor (AOEM**;** 95th percentile) Body weight: 60 kg	Work wear (arms, body and legs covered) M/L and A	0.1	37.6	0.2	19.2	0.082	**100.6**
	Work wear (arms, body and legs covered) M/L and A + gloves M/L	0.011	4.2	0.009	0.9	0.003	3.7

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.

6.6.3 Worker exposure (KCP 7.2.3)

Comments of zRMS:	The estimations of worker exposure to active substances contained in DNT-162OD-R-CPd / EVRITELL 162 OD performed by the Applicant are accepted. According to the estimation results, the use of DNT-162OD-R-CPd / EVRITELL 162 OD **causes acceptable health risk for an unprotected worker** taking assuming that the work rate does not exceed 2 hours (inspection, irrigation). However, considering the hygienic rules, the use of work wear and protective gloves is recommended when entering a treated area. Following sentence <u>is recommended</u> by the evaluator to be placed in the **section on precautions for the workers**:

	„*Stosować rękawice ochronne oraz odzież roboczą podczas wchodzenia na teren poddany opryskowi* .” “Wear protective gloves and work wear when entering treated area.”

6.6.3.1 Estimation of worker exposure

Table 6.6- shows the exposure model(s) used for estimation of worker exposure after entry into a previously treated area or handling a crop treated with DNT-162OD-R-CPd / EVRITELL 162 OD according to the critical use(s). Outcome of the estimation is presented in Table 6.6- (longer term exposure). Detailed calculations are in Appendix 3.

Table 6.6-4: Exposure models for intended uses

Critical use(s)	Field crops - maize (max. 1 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: 1.0.1

Table 6.6-5: Estimated worker exposure (longer term exposure)

		Dicamba		**Nicosulfuron**		**Thifensulfuron-methyl**	
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**	**Total absorbed dose (mg/kg bw/day)**	**% of systemic AOEL**
Inspection, irrigation Outdoor Work rate: 2 hours/day, DT_{50}: 30 days DFR: 3 µg/cm²/kg a.s./ha Interval between treatments: n.a.							
Number of applications and application rate		1 x 0.110 kg a.s./ha		1 x 0.040 kg a.s./ha		1 x 0.012 kg a.s./ha	
Body weight: 60 kg	Potential TC: 12500 cm²/person/h	0.1	32.1	0.04	4.4	0.01	15
	Work wear (arms, body and legs covered) TC: 1400 cm²/person/h	0.01	3.6	0.004	0.5	0.001	1.7

6.6.3.2 Refinement of generic DFR value (KCP 7.2)

Not 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.

6.6.4 Resident and bystander exposure (KCP 7.2.2)

Comments of zRMS:	The AAOEL values for dicamba, nicosulfuron, and thifensulfuron-methyl are not allocated. Consequently, it is assumed that the estimation of bystander exposure is covered by the calculation of resident exposure to the active substance. The results of exposure estimations demonstrate that the use of DNT-162OD-R-CPd / EVRITELL 162 OD, according to the list of intended uses presented in the GAP Table and anticipating the introduction of buffer zone presented (2-3m), **causes acceptable health risk for bystander/resident (adult and child).**

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 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- shows the exposure model(s) used for estimation of resident and bystander exposure to dicamba, nicosulfuron and thifensulfuron-methyl. The outcome of the estimation is presented in **Błąd! Nie można odnaleźć źródła odwołania.** (longer term resident exposure). Detailed calculations are in Appendix 3.

Table 6.6-6: Exposure models for intended uses

Critical use(s)	Field crops - maize (max. 1 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: 1.0.1

Table 6.6-7: Estimated resident exposure (longer term exposure)

	Dicamba		**Nicosulfuron**		**Thifensulfuron-methyl**	
Model data	**Total absorbed dose (mg/kg bw/day)**	**% of systemic AOEL**	**Total absorbed dose (mg/kg bw/day)**	**% of systemic AOEL**	**Total absorbed dose (mg/kg bw/day)**	**% of systemic AOEL**
Tractor mounted boom spray application outdoors to low crops Buffer zone: 2-3(m) Drift reduction technology: no DT_{50}: 30 days DFR: 3µg/cm^2/kg a.s./ha Interval between treatments: n.a.						
Number of applications	1 x 0.110 kg a.s./ha		1 x 0.040 kg a.s./ha		1 x 0.012 kg a.s./ha	

and application rate							
Resident child Body weight: 10 kg	Drift (75th perc.)	0.02	7	0.008	0.9	0.002	3.2
	Vapour (75th perc.)	0.0008	0.3	1e-07	1e-05	5e-06	0.007
	Deposits (75th perc.)	0.001	0.4	0.0004	0.05	0.0001	0.2
	Re-entry (75th perc.)	0.01	4.3	0.005	0.6	0.001	2
	Sum (mean)	0.02	7.8	0.008	1	0.002	3.5
Resident adult Body weight: 60 kg	Drift (75th perc.)	0.005	1.6	0.002	0.2	0.0005	0.8
	Vapour (75th perc.)	0.0003	0.09	4e-08	5e-06	2e-06	0.002
	Deposits (75th perc.)	0.0005	0.2	0.0002	0.02	6e-05	0.08
	Re-entry (75th perc.)	0.007	2.4	0.003	0.3	0.0008	1.1
	Sum (mean)	0.009	2.9	0.003	0.4	0.0009	1.3

6.6.4.2 Measurement of resident and/or bystander exposure

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

6.6.5 Combined exposure

Comments of zRMS:	The combined exposure to dicamba, nicosulfuron, and thifensulfuron-methyl contained in the DNT-162OD-R-CPd / EVRITELL 162 OD causes acceptable risks for the operator, worker, and resident/bystander. The Hazard Index does not exceed 1.

The product is a mixture of three active substances.

6.6.5.1 Exposure assessment of dicamba, nicosulfuron and thifensulfuron-methyl in DNT-162OD-R-CPd / EVRITELL 162 OD

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.

Table 6.6-8: Risk assessment from combined exposure (longer term exposure)

Application scenario	Active ingredient	Estimated exposure / AOEL (HQ)
Operators – Normal & vehicle-mounted application Work wear (arms, body and legs covered) M/L and A + gloves M/L	Dicamba	0.042
	Nicosulfuron	0.009
	Thifensulfuron-methyl	0.037
	Cumulative risk operators (HI)	**0.09**
Workers – inspection and irigation (with workwear)	Dicamba	0.036
	Nicosulfuron	0.005
	Thifensulfuron-methyl	0.017
	Cumulative risk workers (HI)	**0.06**
Resident - child	**Dicamba**	
	Drift	0.07
	Vapour	0.003
	Deposits	0.004
	Re-entry	0.043
	Sum of all pathways	0.078
	Nicosulfuron	
	Drift	0.009
	Vapour	0.0000001
	Deposits	0.0005
	Re-entry	0.006
	Sum of all pathways	0.01
	Thifensulfuron-methyl	
	Drift	0.032
	Vapour	0.00007
	Deposits	0.002
	Re-entry	0.02
	Sum of all pathways	0.035
	Cumulative risk resident – child (HI)	
	Drift	0.1
	Vapour	0.003
	Deposits	0.006

Application scenario	Active ingredient	Estimated exposure / AOEL (HQ)
	Re-entry	0.07
	Sum of all pathways	**0.1**
Resident - adult	**Dicamba**	
	Drift	0.016
	Vapour	0.0009
	Deposits	0.002
	Re-entry	0.024
	Sum of all pathways	0.029
	Nicosulfuron	
	Drift	0.002
	Vapour	0.00000005
	Deposits	0.0002
	Re-entry	0.003
	Sum of all pathways	0.004
	Thifensulfuron-methyl	
	Drift	0.008
	Vapour	0.00002
	Deposits	0.0008
	Re-entry	0.011
	Sum of all pathways	0.013
	Cumulative risk resident – adult (HI)	
	Drift	0.03
	Vapour	0.0009
	Deposits	0.003
	Re-entry	0.04
	Sum of all pathways	**0.05**

The Hazard Index is < 1. Thus, combined exposure to all active substances in DNT-162OD-R-CPd / EVRITELL 162 OD is not expected to present a risk for operators, workers, residents and bystanders. No further refinement of the assessment is required.

Appendix 1 Lists of data considered in support of the evaluation

Tables considered not relevant can be deleted as appropriate.

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

List of data submitted by the applicant and relied on

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

Appendix 2 Detailed evaluation of the studies relied upon

Comments of zRMS:	The product DNT-162OD-R-CPd / EVRITELL 162 contained dicamba in the form of sodium salt. We agree that the toxicological properties of Dicamba sodium salt (CAS No. 1982-69-0) should considered for the classification of concentrated formulation.

A 2.1 Statement on bridging possibilities

Bridging is not necessary since the toxicological potential of DNT-162OD-R-CPd / EVRITELL 162 OD can be predicted on the basis of toxicological data available for active substance and co-formulants included in composition of the product.

Comments of zRMS:	Toxicological proprieties of the product DNT-162OD-R-CPd / EVRITELL 162 OD are based on the classification of all ingredients, considering harmonised classification and data provided in the MSDS and ECHA notifications.

A 2.2 Acute oral toxicity (KCP 7.1.1)

Comments of zRMS:	There is one ingredient in the product that has been taken into account for the purpose of product classification: - Ingredient: Acute Tox. 4, H302, 4.9%. 100/ATEmix=4.9/500 ATEmix=10 204 mg/kg bw Conclusion: Taking into account the composition of the product, the formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification in regards to oral acute toxicity.

Acute oral toxicity value (ATE_{mix}) for DNT-162OD-R-CPd / EVRITELL 162 OD can be estimated according to principles of Regulation 1272/2008, p. 3.1.3.6.1 (additivity formula) as follows:

$$\frac{100}{ATE_{mix}} = \sum_n \frac{C_i}{ATE_i}$$

Where:

C_i – concentration of ingredient i (% w/w or % v/v)
i – the individual ingredient from 1 to n
n – the number of ingredients
ATE_i – Acute Toxicity Estimate of ingredient i.

Calculations takes account data for components which are classified to acute oral toxicity class. Only the one of active substances – dicamba – is classified as Acute Tox. 4 with hazard statement H302. The LD 50 for this substance is equal to 1581 mg/kg bw. However, it must be considered that dicamba after formulation of the product, is present in the form of Dicamba-Na salt, and salt properties are considered for classification.
Taking into consideration above, none of the co-formulants of DNT-162OD-R-CPd / EVRITELL 162 OD (according to submitted MSDs) is classified as Acute Tox. with hazard statements H300, H301, H302.

Assuming, the formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification in respect to oral acute toxicity. No additional studies are required.

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

Comments of zRMS:	There is one ingredient in the product that has been taken into account for the purpose of product classification: - Ingredient: Acute Tox. 4, H312, 4.9%. 100/ATEmix=4.9/1100 ATEmix=22 449 mg/kg bw Conclusion: Taking into account the composition of the product, the formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification in regards to dermal acute toxicity.

Acute dermal toxicity value (ATE_{mix}) for DNT-162OD-R-CPd / EVRITELL 162 OD can be estimated according to principles of Regulation 1272/2008, p. 3.1.3.6.1 (additivity formula) as follows:

$$\frac{100}{ATE_{mix}} = \sum_n \frac{C_i}{ATE_i}$$

Where:

C_i – concentration of ingredient i (% w/w or % v/v)
i – the individual ingredient from 1 to n
n – the number of ingredients
ATE_i – Acute Toxicity Estimate of ingredient i.

Calculations takes account data for components which are classified to acute dermal toxicity class and are in the appropriate concentration in the mixture. None of co-formulants DNT-162OD-R-CPd / EVRITELL 162 OD is classified as Acute Tox. with hazard statements H310, H311, H312 therefore none of them is relevant for calculation ATEmix for acute dermal toxicity category according to point 3.1.3.6.1 of Regulation 1272/2008.

Taking into account the composition of the product, the formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification in respect to dermal acute toxicity. No additional studies are required.

A 2.4 Acute inhalation toxicity (KCP 7.1.3)

Comments of zRMS:	There is one co-formulant in the product that has been taken into account for the purpose of product classification: - Co-formulant, 4.9%: Acute Tox. 4, H332 (results of the study for the mixture: 2 mg/L: aerosol) 100/ATEmix=4.9/1.5 ATEmix= 30.6 mg/L Conclusion: Taking into account the composition of the product, the formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification in regards to inhalation acute toxicity.

Acute inhalation toxicity value (ATE mix) for DNT-162OD-R-CPd / EVRITELL 162 OD can be estimated according to principles of Regulation 1272/2008, p. 3.1.3.6.1 (additivity formula) as follows:

$$\frac{100}{ATE_{mix}} = \sum_n \frac{C_i}{ATE_i}$$

Where:

C_i – concentration of ingredient i (% w/w or % v/v)
i – the individual ingredient from 1 to n
n – the number of ingredients
ATE_i – Acute Toxicity Estimate of ingredient i.

Calculations takes account data for components which are classified to acute inhalation toxicity class and are in the appropriate concentration in the mixture.

Calculations takes account data for components which are classified to acute inhalation toxicity class. Only the one of active substances – dicamba – is classified as Acute Tox. 4 with hazard statement H332. The LC 50 for this substance is equal to 4.07 mg/L. However, it must be considered that dicamba after formulation of the product, is present in the form of Dicamba-Na salt, and salt properties are considered for classification.
Therefore, only one of the co-formulants is classified as Acute Tox. 4 with hazard statement H332. The LC 50 (Rat, 4 h) for this component is equal to 2 mg/l (Aerosols). Its concentration in the product is equal to 4.9 %. None of the others co-formulants of DNT-162OD-R-CPd / EVRITELL 162 OD (according to submitted MSDs) is classified as Acute Tox. with hazard statements H330, H331, H332 therefore none of them is relevant for calculation ATEmix for acute inhalation toxicity category according to point 3.1.3.6.1 of Regulation 1272/2008.

Taking all above into account the ATE_{mix} for the whole formulation is therefore:

$$\text{The } ATE_{mix} = \frac{100}{\frac{4.9}{2}} = 40.8 \text{ mg/L}$$

The estimated value ATE_{mix} of acute oral toxicity for DNT-162OD-R-CPd / EVRITELL 162 OD is equal

to 40.65 mg/kg bw and does not require classification in respect to inhalation acute toxicity. No additional studies are required.

A 2.5 Skin irritation (KCP 7.1.4)

Comments of zRMS:	There is one ingredient in the product that has been taken into account for the purpose of product classification: - Ingredient: Skin Irrit. 2, H315, 4.9%. The concentration of the classified ingredient is below the generic concentration limit for classification of the mixture acc. to additivity formula. Conclusion: Taking into account the composition of the product, the formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification in regards to skin irritation.

A skin irritation potential of DNT-162OD-R-CPd / EVRITELL 162 OD can be estimated according to principles of Regulation 1272/2008 by using additivity approach.

None of ingredients of a product DNT-162OD-R-CPd / EVRITELL 162 OD is classified as Skin Corr. 1, H314 or Skin Irr.2, H315 therefore their influence on skin corrosion /irritation potential could be excluded.

Taking into account it is concluded that formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification for skin corrosion or irritation. No additional studies are required.

A 2.6 Eye irritation (KCP 7.1.5)

Comments of zRMS:	There are two ingredients in the product that have been taken into account for the purpose of product classification: - Ingredient 1: Eye Irrit. 2, ~~H315~~ H319, max. 4.9%; - Ingredient 2: Eye Dam. 1, H318, max. 0.5%. However, the maximum concentration of the co-formulant (the mixture of both ingredients) in the product amounts to 4.9%. Assuming that the maximum concentration of the ingredient 2 amounts to 0.5%, the conc. of the ingredient 1 is max. 4.4%. In such case, the concentration of the relevant ingredient (acc. to Tab. 3.2.3 in the Reg. 1272/2008) should be 10x0.5 + 4.4 = 9.4%. This concentration of the classified ingredient is below the generic concentration limit for the classification of the mixture acc. to the additivity formula. Conclusion: Taking into account the composition of the product, the formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification in regards to eye irritation.

An eye irritation potential of DNT-162OD-R-CPd / EVRITELL 162 OD can be estimated according to

principles of Regulation 1272/2008 by using additivity approach.

Only one of active substances – dicamba – is classified as Eye Dam. 1 with hazard statement H318. However, it must be considered that dicamba after formulation of the product, is present in the form of Dicamba-Na salt, and salt properties are considered for classification.

Therefore, it is concluded that, DNT-162OD-R-CPd / EVRITELL 162 OD does not contain any constituent classified as Eye Dam. 1, H318 but it contains one ingredient classified as Eye Irr. 2, H319 with concentration equal to 4.9%. This amount is well below the generic concentration limit of 10% for ingredients of a mixture classified for effects on the eye given in Table 3.3.3 in Regulation EC 1272/2008.

Taking into account it is concluded that formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification for eye effects according this criterion. No additional studies are required.

A 2.7 Skin sensitisation (KCP 7.1.6)

Comments of zRMS:	The product DNT-162OD-R-CPd / EVRITELL 162 OD does not contain ingredients classified in regards to skin sensitization. Conclusion: Taking into account the composition of the product, the formulation DNT-162OD-R-CPd / EVRITELL 162 OD does not require classification in regards to skin sensotization.

A skin or respiratory sensitisation potential of DNT-162OD-R-CPd / EVRITELL 162 OD can be estimated according to principles of Regulation 1272/2008 which indicate that if at least one ingredient has been classified as a respiratory or skin sensitiser and is present at or above the appropriate generic/specific concentration limit, the mixture shall be classified as a respiratory or skin sensitiser.

DNT-162OD-R-CPd / EVRITELL 162 OD does not contain any component which is classified as respiratory sensitizer with hazard statement H334 or skin sensitizer with hazard statement H317 , therefore the product will not be classified as respiratory/skin sensitizer. No additional studies are required.

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

Not relevant.

A 2.9 Data on co-formulants (KCP 7.4)

A 2.9.1 Material safety data sheet for each co-formulant

Information regarding material safety data sheets of the co-formulants can be found in the confidential dossier of this submission (Registration Report - Part C).

A 2.9.2 Available toxicological data for each co-formulant

Available toxicological data for each co-formulant can be found in the confidential dossier of this submission (Registration Report - Part C).

A 2.10 Studies on dermal absorption (KCP 7.3)

No study on dermal absorption was submitted, default values were used to risk assessment.

A 2.11 Other/Special Studies

No applicable.

Appendix 3 Exposure calculations

A 3.1 Operator exposure calculations (KCP 7.2.1.1)

A 3.2 Worker exposure calculations (KCP 7.2.3.1)

A 3.3 Resident and bystander exposure calculations (KCP 7.2.2.1)

A 3.4 Combined exposure calculations for dicamba, nicosulfuron and thifensulfuron-methyl


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DNT-162OD-R-CPd _20231108_09h32_o

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.