SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006, Annex II and its amendments.

AQUINO™

Version	Revision Date:	SDS Number:	Date of last issue: 09.04.2024
1.2	09.04.2024	800080005581	Date of first issue: 05.04.2024

Corteva Agriscience™ encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container. This Safety Data Sheet adheres to the standards and regulatory requirements of Ireland and may not meet the regulatory requirements in other countries.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : AQUINO™

Unique Formula Identifier (UFI) : 9059-M0XQ-2002-81QX

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture : Plant Protection Product, Fungicide

1.3 Details of the supplier of the safety data sheet

COMPANY IDENTIFICATION
Manufacturer/importer
Corteva Agriscience UK Limited
Melbourn Science Park - Cambridge Road - Unit H4, Building H
Melbourn Cambridgeshire - SG8 6HB
UNITED KINGDOM

Customer Information Number : +44 8006 89 8899
E-mail address : SDS@corteva.com

1.4 Emergency telephone number

SGS : +353 818 663 627

National Poisons Information Centre (Beaumont Hospital): 01 809 2166 (8 AM - 10 PM)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.

Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314 Get medical advice/ attention if you feel unwell.

Disposal:

P501 Dispose of contents/container to a licensed waste disposal contractor or collection site except for empty clean triple rinsed containers which can be disposed of as non-hazardous waste.

Additional Labelling

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. REACH Registration number	Classification	Concentration (% w/w)
Fenpicoxamid	517875-34-2	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100	4.92
Benzyl acetate	140-11-4 205-399-7	Aquatic Chronic 3; H412	>= 40 - < 50
Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide	Not Assigned 909-125-3 01-2119974115-37	Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system)	>= 10 - < 20
cyclohexanone	108-94-1 203-631-1 606-010-00-7 01-2119453616-35, 01-2119453616-35-0017	Flam. Liq. 3; H226 Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 3; H311 Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 3 - < 10
Polyether modified trisiloxane	134180-76-0 603-798-4	Acute Tox. 4; H332 Eye Irrit. 2; H319 Acute toxicity esti-mate Acute inhalation tox-icity (dust/mist): 1.08 mg/l	>= 3 - < 10
Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts	90194-26-6 290-635-1	Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	>= 3 - < 10
Alcohols, C11-14-iso-, C13-rich, ethoxylated	78330-21-9	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 3 - < 10

Ethylhexanol	104-76-7 203-234-3 01-2119487289-20	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system)	>= 1 - < 3

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection).
If potential for exposure exists refer to Section 8 for specific personal protective equipment.

If inhaled : Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.
If breathing is difficult, oxygen should be administered by qualified personnel.

In case of skin contact : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Suitable emergency safety shower facility should be available in work area.

In case of eye contact : Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.
Suitable emergency eye wash facility should be immediately available.

If swallowed : Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help.
Maintain adequate ventilation and oxygenation of the patient.

Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist.
Because rapid absorption may occur through the lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician.
If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach.
No specific antidote.
Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.
Repeated excessive exposure may aggravate preexisting lung disease.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2)
Unsuitable extinguishing media	:	Do not use direct water stream. High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Exposure to combustion products may be a hazard to health. Vapours may form explosive mixtures with air. Do not allow run-off from fire fighting to enter drains or water courses. Flash back possible over considerable distance.
Hazardous combustion products	:	Nitrogen oxides (NOx) Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.
Specific extinguishing methods	:	Remove undamaged containers from fire area if it is safe to do so. Evacuate area. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.
Further information	:	Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Do not use a solid water stream as it may scatter and spread

fire.
Use a water spray to cool fully closed containers.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.
Use personal protective equipment.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

6.2 Environmental precautions

Environmental precautions : If the product contaminates rivers and lakes or drains inform respective authorities.
Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.
Prevent from entering into soil, ditches, sewers,underwater.
See Section 12, Ecological Information.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Clean up remaining materials from spill with suitable absorbant.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped,
Recovered material should be stored in a vented container.
The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to overpressurization of the container.
Keep in suitable, closed containers for disposal.
Wipe up with absorbent material (e.g. cloth, fleece).
Non-sparking tools should be used.
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Suppress (knock down) gases/vapours/mists with a water spray jet.

See Section 13, Disposal Considerations, for additional information.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Local/Total ventilation	:	Use with local exhaust ventilation.
Advice on safe handling	:	To avoid spills during handling keep bottle on a metal tray. Avoid formation of aerosol. Provide sufficient air exchange and/or exhaust in work rooms. Do not breathe vapours/dust. Do not smoke. Handle in accordance with good industrial hygiene and safety practice. Avoid exposure - obtain special instructions before use. Smoking, eating and drinking should be prohibited in the application area. Do not get on skin or clothing. Do not breathe vapours or spray mist. Do not get in eyes. Avoid contact with skin and eyes. Keep container tightly closed. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store in a closed container. No smoking. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers. Store in accordance with the particular national regulations.
Advice on common storage	:	Do not store near acids. Strong oxidizing agents Explosives Gases
Packaging material	:	Unsuitable material: None known.

7.3 Specific end use(s)

Specific use(s)	:	Plant protection products subject to Regulation (EC) No 1107/2009.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Benzyl acetate	140-11-4	Occupational exposure limit value (8-hour reference period)	10 ppm	IE OEL
cyclohexanone	108-94-1	Short term exposure limit	20 ppm 81.6 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		Limit Value - eight hours	10 ppm 40.8 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		Occupational exposure limit value (8-hour reference period)	10 ppm 40.8 mg/m3	IE OEL
	Further information: Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body			
		Occupational exposure limit value (15-minute reference period)	20 ppm 81.6 mg/m3	IE OEL
	Further information: Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body			
Ethylhexanol	104-76-7	Limit Value - eight hours	1 ppm 5.4 mg/m3	2017/164/EU
	Further information: Indicative			
		Occupational exposure limit value (8-hour reference period)	1 ppm 5.4 mg/m3	IE OEL
		8-hr TWA	2 ppm	Corteva OEL

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Benzyl acetate	Workers	Inhalation	Long-term systemic effects	21.9 mg/m3
	Workers	Inhalation	Acute systemic effects	43.8 mg/m3
	Workers	Skin contact	Long-term systemic effects	6.25 mg/kg bw/day
	Workers	Skin contact	Acute systemic effects	12.5 mg/kg bw/day

	Consumers	Inhalation	Long-term systemic effects	5.5 mg/m3
	Consumers	Inhalation	Acute systemic effects	11 mg/m3
	Consumers	Skin contact	Long-term systemic effects	3.125 mg/kg bw/day
	Consumers	Skin contact	Acute systemic effects	6.25 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	3.125 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	6.25 mg/kg bw/day
cyclohexanone	Workers	Inhalation	Long-term systemic effects	40 mg/m3
	Workers	Inhalation	Acute systemic effects	80 mg/m3
	Workers	Inhalation	Long-term local effects	40 mg/m3
	Workers	Inhalation	Acute local effects	80 mg/m3
	Workers	Skin contact	Long-term systemic effects	4 mg/kg bw/day
	Workers	Skin contact	Acute systemic effects	4 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	10 mg/m3
	Consumers	Inhalation	Acute systemic effects	20 mg/m3
	Consumers	Inhalation	Long-term local effects	20 mg/m3
	Consumers	Inhalation	Acute local effects	40 mg/m3
	Consumers	Skin contact	Long-term systemic effects	1 mg/kg bw/day
	Consumers	Skin contact	Acute systemic effects	1 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	1.5 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	1.5 mg/kg bw/day
Ethylhexanol	Workers	Inhalation	Long-term systemic effects	12.8 mg/m3
	Workers	Inhalation	Long-term local effects	53.2 mg/m3
	Workers	Inhalation	Acute local effects	53.2 mg/m3
	Workers	Skin contact	Long-term systemic effects	23 mg/kg bw/day
	Workers	Inhalation	Acute local effects	106.4 mg/m3
	Consumers	Inhalation	Long-term systemic effects	2.3 mg/m3
	Consumers	Inhalation	Long-term local effects	26.6 mg/m3
	Consumers	Inhalation	Acute local effects	26.6 mg/m3
	Consumers	Skin contact	Long-term systemic	11.4 mg/kg

			effects	bw/day
	Consumers	Ingestion	Long-term systemic effects	1.1 mg/kg bw/day

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Benzyl acetate	Fresh water	0.004 mg/l
	Marine water	0.0004 mg/l
	Intermittent use/release	0.04 mg/l
	Sewage treatment plant	8.55 mg/l
	Fresh water sediment	0.114 mg/kg
	Marine sediment	0.0114 mg/kg
	Soil	0.0205 mg/kg
cyclohexanone	Fresh water	0.0329 mg/l
	Marine water	0.00329 mg/l
	Intermittent use/release	0.329 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	0.168 mg/kg
	Marine sediment	0.0168 mg/kg
	Soil	0.0143 mg/kg
Ethylhexanol	Fresh water	0.017 mg/l
	Intermittent use/release	0.17 mg/l
	Marine water	0.002 mg/l
	Sewage treatment plant	10 mg/l
	Fresh water sediment	0.284 mg/kg dry weight (d.w.)
	Marine sediment	0.028 mg/kg dry weight (d.w.)
	Soil	0.047 mg/kg dry weight (d.w.)
	Oral (Secondary Poisoning)	55 mg/kg food

8.2 Exposure controls

Engineering measures

Use engineering controls to maintain airborne level below exposure limit requirements or guidelines.
If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation.
Local exhaust ventilation may be necessary for some operations.

Personal protective equipment

Eye/face protection : Use chemical goggles.
Chemical goggles should be consistent with EN 166 or equivalent.

Hand protection

Remarks : Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex").

Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent on the specific composition of the material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief contact is expected. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Skin and body protection : Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection : Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator.
Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material.
For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.
In confined or poorly ventilated areas, use an approved self-contained breathing apparatus or positive pressure air line with auxiliary self-contained air supply.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Colour : Clear, light yellow

Odour : Fruity

Odour Threshold	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	80.5 °C Method: Pensky-Martens Closed Cup ASTM D 93
Auto-ignition temperature	:	382 °C Method: EC Method A15
pH	:	4.35 (20 °C) Method: pH Electrode 1% solution
Viscosity		
Viscosity, dynamic	:	7.52 mPa,s (20 °C) Method: OECD Test Guideline 114
Viscosity, kinematic	:	4.53 mm2/s (40 °C)
Solubility(ies)		
Water solubility	:	emulsifies in water
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	1.016 g/mL

9.2 Other information

Explosives	:	Not explosive Method: EC Method A.14
Oxidizing properties	:	No Method: EC Method A.21
Flammability (liquids)	:	Not expected to be a static-accumulating flammable liquid.
Substances and mixtures, which in contact with water, emit flammable gases	:	The substance or mixture does not emit flammable gases in contact with water.
Evaporation rate	:	No data available

Molecular weight : Not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

No decomposition if stored and applied as directed.
Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.
No hazards to be specially mentioned.
Vapours may form explosive mixture with air.
May form explosive dust-air mixture.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid : Strong acids
Strong bases

10.6 Hazardous decomposition products

Carbon oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat, female): > 5,000 mg/kg
Remarks: Information source: Internal study report

Acute inhalation toxicity : LC50 (Rat, male and female): > 5.38 mg/l
Exposure time: 4 h
Test atmosphere: Aerosol
Method: OECD Test Guideline 436
Remarks: Information source: Internal study report

Acute dermal toxicity : LD50 (Rat, female): > 2,000 mg/kg
Remarks: Information source: Internal study report

Components:

Fenpicoxamid:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg

Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): > 0.53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Maximum attainable concentration.

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Benzyl acetate:

Acute oral toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC0 (Rat, male and female): > 0.766 mg/l
Exposure time: 4 h
Method: OECD Test Guideline 403
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 3.551 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

cyclohexanone:

Acute oral toxicity : LD50 (Rat): 1,890 mg/kg

Acute inhalation toxicity : Remarks: Vapor concentrations are attainable which could be hazardous on single exposure.
May cause central nervous system effects.
Excessive exposure may cause severe irritation to upper respiratory tract (nose and throat) and lungs.

LC50 (Rat): > 6.2 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Symptoms: No deaths occurred at this concentration.

Assessment: The component/mixture is moderately toxic after short term inhalation.

Acute dermal toxicity : LD50 (Rabbit): 950 mg/kg

Polyether modified trisiloxane:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 401
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity : LC50 (Rat): 1.08 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute toxicity estimate: 1.08 mg/l
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Acute oral toxicity : LD50 (Rat, female): 4,445 mg/kg

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Acute oral toxicity : LD50 (Rat): 500 - 2,000 mg/kg

Ethylhexanol:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Target Organs: Central nervous system

Acute inhalation toxicity : LC50 (Rat): 2.17 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

LC50 (Rat): 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 3,000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Mild skin irritation
Remarks : Information source: Internal study report

Components:

Fenpicoxamid:

Species : Rabbit
Result : No skin irritation

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Species : Rabbit
Result : Skin irritation

cyclohexanone:

Result : Skin irritation

Polyether modified trisiloxane:

Species : Rabbit
Result : No skin irritation

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Result : Skin irritation

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Species : Rabbit
Result : No skin irritation

Ethylhexanol:

Species : Rabbit
Result : Skin irritation

Serious eye damage/eye irritation

Product:

Method : OECD Test Guideline 405
Result : Eye irritation
Remarks : Information source: Internal study report

Components:

Fenpicoxamid:

Species : Rabbit

Result : No eye irritation

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Species : Rabbit
Result : Corrosive

cyclohexanone:

Result : Corrosive

Polyether modified trisiloxane:

Species : Rabbit
Result : Eye irritation

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Result : Corrosive

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Species : Rabbit
Result : Corrosive

Ethylhexanol:

Species : Rabbit
Result : Eye irritation

Respiratory or skin sensitisation

Product:

Test Type : Local lymph node assay (LLNA)
Species : Mouse
Remarks : Information source: Internal study report

Components:

Fenpicoxamid:

Species : Mouse
Assessment : Does not cause skin sensitisation.

Benzyl acetate:

Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Species : Guinea pig

Assessment : Does not cause skin sensitisation.
Remarks : For similar material(s):

cyclohexanone:

Assessment : Does not cause skin sensitisation.
Remarks : Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Remarks : For skin sensitization:
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Ethylhexanol:

Test Type : HRIPT (human repeat insult patch test)
Species : human
Assessment : Does not cause skin sensitisation.

Germ cell mutagenicity

Components:

Fenpicoxamid:

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were predominantly negative., Animal genetic toxicity studies were negative.

Benzyl acetate:

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were negative.

cyclohexanone:

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were negative in some cases and positive in other cases., Animal genetic toxicity studies were inconclusive

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

Ethylhexanol:

Germ cell mutagenicity- Assessment : In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

Carcinogenicity

Components:

Fenpicoxamid:

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

Benzyl acetate:

Carcinogenicity - Assessment : Did not cause cancer in laboratory animals.

cyclohexanone:

Carcinogenicity - Assessment : Carcinogenicity classification not possible from current data.

Available data are inadequate to evaluate carcinogenicity.

Ethylhexanol:

Carcinogenicity - Assessment : In laboratory animals, evidence of carcinogenic activity was observed., There is no evidence that these findings are relevant to humans.

Reproductive toxicity

Components:

Fenpicoxamid:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction.
Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

Benzyl acetate:

Reproductive toxicity - Assessment : Did not cause birth defects in laboratory animals.

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Reproductive toxicity - Assessment : For similar material(s):, Did not cause birth defects or any other fetal effects in laboratory animals.

cyclohexanone:

Reproductive toxicity - Assessment : Cyclohexanone caused reduced growth and survival of offspring in an animal reproduction study. Dose levels producing this effect also caused central nervous system effects in parental animals., In animal studies, has been shown to interfere with reproduction in males., Effects have been seen only at

doses that produced significant toxicity to the parent animals. Has been toxic to the fetus in laboratory animals at doses toxic to the mother., Did not cause birth defects in laboratory animals.

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction. Did not cause birth defects or any other fetal effects in laboratory animals.

Ethylhexanol:

Reproductive toxicity - Assessment : Has caused birth defects in laboratory animals only at doses toxic to the mother., Has been toxic to the fetus in laboratory animals at doses toxic to the mother., These concentrations exceed relevant human dose levels.

STOT - single exposure

Product:

Exposure routes : Inhalation
Assessment : Contains component(s) which are classified as specific target organ toxicant, single exposure, category 3.

Components:

Fenpicoxamid:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Benzyl acetate:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Exposure routes : Inhalation
Assessment : May cause respiratory irritation.

cyclohexanone:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Polyether modified trisiloxane:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Assessment : Evaluation of available data suggests that this material is not

an STOT-SE toxicant.

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Assessment : Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Ethylhexanol:

Exposure routes : Inhalation
Target Organs : Respiratory Tract
Assessment : May cause respiratory irritation.

Repeated dose toxicity

Components:

Fenpicoxamid:

Remarks : In animals, effects have been reported on the following organs:
Liver.
Kidney.

Benzyl acetate:

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Remarks : For similar material(s):
Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

cyclohexanone:

Remarks : In animals, effects have been reported on the following organs:
Central nervous system.
Kidney.
Liver.
Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed.

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Remarks : Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

Ethylhexanol:

Remarks : In animals, effects have been reported on the following organs:
Blood.

Kidney.
Liver.
Spleen.

Aspiration toxicity

Components:

Fenpicoxamid:
Based on physical properties, not likely to be an aspiration hazard.

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:
May be harmful if swallowed and enters airways.

cyclohexanone:
Based on physical properties, not likely to be an aspiration hazard.

Polyether modified trisiloxane:
Based on physical properties, not likely to be an aspiration hazard.

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:
Based on available information, aspiration hazard could not be determined.

Alcohols, C11-14-iso-, C13-rich, ethoxylated:
Based on physical properties, not likely to be an aspiration hazard.

Ethylhexanol:
May be harmful if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0.078 mg/l

Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203
Remarks: Information source: Internal study report

Toxicity to daphnia and other aquatic invertebrates : Remarks: Material is very toxic to aquatic organisms (LC50/EC50/IC50 below 1 mg/L in the most sensitive species).

EC50 (Daphnia magna (Water flea)): 0.048 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202
Remarks: Information source: Internal study report

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 30 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Information source: Internal study report

Toxicity to terrestrial organisms : Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

oral LD50: > 2000 mg/kg bodyweight.
Species: Colinus virginianus (Bobwhite quail)

contact LD50: 53.4 µg/bee
Exposure time: 48 h
Species: Apis mellifera (bees)

oral LD50: > 205.6 µg/bee
Exposure time: 48 h
Species: Apis mellifera (bees)

Components:

Fenpicoxamid:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.0022 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203 or Equivalent

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.0058 mg/l
Exposure time: 48 h
Test Type: semi-static test
Method: OECD Test Guideline 202 or Equivalent

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 0.522 mg/l
End point: Growth rate inhibition
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201 or Equivalent

M-Factor (Acute aquatic toxicity)	:	100
Toxicity to fish (Chronic toxicity)	:	NOEC: 0.00037 mg/l Exposure time: 32 d Species: Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.00053 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
M-Factor (Chronic aquatic toxicity)	:	100
Toxicity to soil dwelling organisms	:	LC50: >1000 mg/kg dry weight (d.w.) Exposure time: 7 d End point: mortality Species: Eisenia fetida (earthworms) Method: Other guidelines
Toxicity to terrestrial organisms	:	oral LD50: > 2000 mg/kg bodyweight. Species: Colinus virginianus (Bobwhite quail) oral LD50: > 303 micrograms/bee Exposure time: 48 h Species: Apis mellifera (bees) contact LD50: > 202.4 micrograms/bee Exposure time: 48 h Species: Apis mellifera (bees)

Benzyl acetate:

Toxicity to fish	:	Remarks: Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species). LC50 (Oryzias latipes (Orange-red killifish)): 4 mg/l Exposure time: 96 h Test Type: flow-through test Method: Other guidelines
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 17 mg/l Exposure time: 48 h Test Type: semi-static test Method: OECD Test Guideline 202 NOEC (Daphnia magna (Water flea)): 10 mg/l Exposure time: 48 h Test Type: semi-static test Method: OECD Test Guideline 202

Toxicity to microorganisms	:	NOEC (Other): 52 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test EC50 (Other): 110 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test
Toxicity to fish (Chronic toxicity)	:	NOEC: 0.92 mg/l Exposure time: 28 d Species: Oryzias latipes (Orange-red killifish)

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 14.8 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 7.7 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 16.06 mg/l Exposure time: 72 h

Ecotoxicology Assessment

Acute aquatic toxicity	:	Toxic to aquatic life.

cyclohexanone:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): 630 mg/l Exposure time: 48 h Test Type: static test LC50 (Pimephales promelas (fathead minnow)): 527 - 732 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 820 mg/l Exposure time: 24 h
Toxicity to algae/aquatic plants	:	LOEC (Scenedesmus quadricauda (Green algae)): 370 mg/l Exposure time: 192 h Method: Method Not Specified.
Toxicity to microorganisms	:	EC50 (activated sludge): > 1,000 mg/l Method: OECD 209 Test

Polyether modified trisiloxane:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 2.1 mg/l

Exposure time: 96 h

LC50 (Lepomis macrochirus (Bluegill sunfish)): 15 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.1 mg/l
Exposure time: 48 h

EC50 (Daphnia magna (Water flea)): 177 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Algae (Scenedesmus subspicatus)): 152.2 mg/l
Exposure time: 72 h

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Toxicity to fish : Remarks: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

Remarks: Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species).

LC50 (Fish): > 1 - 10 mg/l
Exposure time: 96 h
Test Type: Static

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.9 mg/l
Exposure time: 48 h
Test Type: Static

Toxicity to algae/aquatic plants : EC50 (Algae): 29 mg/l
Exposure time: 96 h
Test Type: Static

Toxicity to microorganisms : EC50 (Bacteria): 550 mg/l
Exposure time: 3 h

Toxicity to fish (Chronic toxicity) : 0.23 mg/l
Exposure time: 72 d
Species: Fish
Test Type: flow-through

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : 1.18 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: flow-through test

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): > 1 - 10 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia (water flea)): > 1 - 10 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Algae): > 1 - 10 mg/l Exposure time: 72 h

Ethylhexanol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 32 - 37 mg/l Exposure time: 96 h LC50 (Fathead minnow (Pimephales promelas)): 28.2 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 35.2 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 EC50 (Daphnia magna (Water flea)): 39 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 or Equivalent
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 11.5 mg/l End point: Growth rate inhibition Exposure time: 72 h Method: OECD Test Guideline 201 or Equivalent
Toxicity to microorganisms	:	EC50 (Bacteria): 256 - 320 mg/l Exposure time: 16 h

12.2 Persistence and degradability

Components:

Fenpicoxamid:

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 12.5 % Exposure time: 28 d Method: OECD Test Guideline 301B or Equivalent Remarks: 10-day Window: Fail
Stability in water	:	Test Type: Hydrolysis Degradation half life (DT50): 7.1 d pH: 4 Hydrolysis: at 25 °C Test Type: Hydrolysis

Degradation half life (DT50): 0.92 d
pH: 7
Hydrolysis: at 25 °C

Test Type: Hydrolysis
Degradation half life (DT50): 0.024 d
pH: 9
Hydrolysis: at 25 °C

Benzyl acetate:

Biodegradability : Result: Readily biodegradable.
Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation: 100 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: 10-day Window: Pass

Biodegradation: 92 - 96 %
Exposure time: 28 d
Method: OECD Test Guideline 301C or Equivalent
Remarks: 10-day Window: Not applicable

ThOD : 2.24 kg/kg

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Biodegradability : Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Result: Readily biodegradable.
Biodegradation: > 80 %
Exposure time: 28 d
Method: OECD Test Guideline 301F or Equivalent
Remarks: 10-day Window: Pass

Chemical Oxygen Demand (COD) : 2.890 mg/g

cyclohexanone:

Biodegradability : Result: Readily biodegradable.
Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation: 87 %
Exposure time: 14 d
Method: OECD Test Guideline 301C or Equivalent
Remarks: 10-day Window: Not applicable

Biodegradation: 90 - 100 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Remarks: 10-day Window: Pass

Polyether modified trisiloxane:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Biodegradability : Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: 10-day Window: Pass

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301E or Equivalent
Remarks: 10-day Window: Pass

Result: Readily biodegradable.
Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: 10-day Window: Pass

Ethylhexanol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: > 95 %
Exposure time: 5 d
Method: OECD Test Guideline 302B or Equivalent
Remarks: 10-day Window: Not applicable

Biodegradation: 68 %
Exposure time: 17 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: 10-day Window: Pass

Photodegradation : Test Type: Half-life (indirect photolysis)
Sensitiser: OH radicals
Rate constant: 1.32E-11 cm3/s
Method: Estimated.

12.3 Bioaccumulative potential

Components:

Fenpicoxamid:

Partition coefficient: n-octanol/water : log Pow: 4.4 (20 °C)
pH: 7
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Benzyl acetate:

Partition coefficient: n-octanol/water : log Pow: 1.96
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Partition coefficient: n-octanol/water : log Pow: < 3.44 (20 °C)
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

cyclohexanone:

Partition coefficient: n-octanol/water : log Pow: 0.81
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Polyether modified trisiloxane:

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Bioaccumulation : Bioconcentration factor (BCF): 2 - 1,000

Partition coefficient: n-octanol/water : log Pow: 2.89
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Partition coefficient: n-octanol/water : Remarks: No relevant data found.

Ethylhexanol:

Partition coefficient: n-octanol/water : log Pow: 3.1
Method: Measured
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

12.4 Mobility in soil

Components:

Fenpicoxamid:

Distribution among environmental compartments : Koc: > 5000
Remarks: Expected to be relatively immobile in soil (Koc > 5000).

Benzyl acetate:

Distribution among environmental compartments :

Koc: 277
Method: Estimated.
Remarks: Potential for mobility in soil is medium (Koc between 150 and 500).

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Distribution among environmental compartments : Koc: 527.3
Remarks: Potential for mobility in soil is low (Koc between 500 and 2000).

cyclohexanone:

Distribution among environmental compartments : Koc: 15
Method: Estimated.
Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Distribution among environmental compartments : Remarks: No relevant data found.

Ethylhexanol:

Distribution among environmental compartments : Koc: 800
Method: Estimated.
Remarks: Potential for mobility in soil is low (Koc between 500 and 2000).

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

Fenpicoxamid:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Benzyl acetate:

Assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

cyclohexanone:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Polyether modified trisiloxane:

Assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:

Assessment : This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

Alcohols, C11-14-iso-, C13-rich, ethoxylated:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Ethylhexanol:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Components:

Fenpicoxamid:
Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Benzyl acetate:
Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide:
Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

cyclohexanone:
Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Polyether modified trisiloxane:
Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Benzenesulfonic Acid, 4-C10-14-Alkyl Derivs., Calcium Salts:
Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Alcohols, C11-14-iso-, C13-rich, ethoxylated:
Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

Ethylhexanol:
Ozone-Depletion Potential : Remarks: This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste gener-

ator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.
If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

SECTION 14: Transport information

14.1 UN number or ID number

ADR	:	UN 3082
RID	:	UN 3082
IMDG	:	UN 3082
IATA	:	UN 3082

14.2 UN proper shipping name

ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fenpicoxamid)
RID	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fenpicoxamid)
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fenpicoxamid)
IATA	:	Environmentally hazardous substance, liquid, n.o.s. (Fenpicoxamid)

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADR	:	9	
RID	:	9	
IMDG	:	9	
IATA	:	9	

14.4 Packing group

ADR

Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9
Tunnel restriction code	:	(-)

RID

Packing group	:	III

Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9

IMDG

Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Remarks	:	Stowage category A

IATA (Cargo)

Packing instruction (cargo aircraft)	:	964
Packing instruction (LQ)	:	Y964
Packing group	:	III
Labels	:	Miscellaneous

IATA (Passenger)

Packing instruction (passenger aircraft)	:	964
Packing instruction (LQ)	:	Y964
Packing group	:	III
Labels	:	Miscellaneous

14.5 Environmental hazards

ADR
Environmentally hazardous : yes

RID
Environmentally hazardous : yes

IMDG
Marine pollutant : yes(Fenpicoxamid)

14.6 Special precautions for user

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA Special provision A197, and ADR/RID special provision 375.

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	E1	ENVIRONMENTAL HAZARDS

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.
The mixture is evaluated within the frame of the provisions of Regulation (EC) No. 1107/2009.
Refer to the label for exposure assessment information.

SECTION 16: Other information

Information Source and References
This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Full text of H-Statements

H226	:	Flammable liquid and vapour.
H302	:	Harmful if swallowed.
H311	:	Toxic in contact with skin.
H315	:	Causes skin irritation.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H332	:	Harmful if inhaled.
H335	:	May cause respiratory irritation.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Skin Irrit.	:	Skin irritation
STOT SE	:	Specific target organ toxicity - single exposure
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first

		list of indicative occupational exposure limit values
2017/164/EU	:	Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values
Corteva OEL	:	Corteva Occupational Exposure Limit
IE OEL	:	List of Chemical Agents and Carcinogens with Occupational Exposure Limit Values - Code of Practice, Schedule 1 and 2
2000/39/EC / TWA	:	Limit Value - eight hours
2000/39/EC / STEL	:	Short term exposure limit
2017/164/EU / TWA	:	Limit Value - eight hours
Corteva OEL / TWA	:	8-hr TWA
IE OEL / OELV - 8 hrs (TWA)	:	Occupational exposure limit value (8-hour reference period)
IE OEL / OELV - 15 min (STEL)	:	Occupational exposure limit value (15-minute reference period)

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; ECx - Concentration associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - not otherwise specified; NOEC - Non-Observed Effective Concentration; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; (Q)SAR - (Quantitative) Structure Activity Relationship; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SDS - Safety Data Sheet; UN - United Nations.
EC-Number - European Community number REACH - Regulation (EC) No 1907/2006 of the European Parliament and of Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals.

Further information

Classification of the mixture:		**Classification procedure:**
Eye Irrit. 2	H319	Based on product data or assessment
STOT SE 3	H335	Calculation method
Aquatic Acute 1	H400	Based on product data or assessment
Aquatic Chronic 1	H410	Calculation method

Product code: GF-3308

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