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

INSTINCT™

Version	Revision Date:	SDS Number:	Date of last issue: 27.06.2024
1.1	12.01.2026	800080005800	Date of first issue: 27.06.2024

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 : INSTINCT™

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

Use of the Substance/Mixture : Fertilizer additive

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)

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Long-term (chronic) aquatic hazard, Category 2	H411: 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 :

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H411	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 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

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.

Hazardous components which must be listed on the label:

Nitrapyrin
Decyl alcohol, ethoxylated, phosphated, potassium salt
2,3,4,5,6-Pentachloropyridine
3-Chloro-6-(trichloromethyl)pyridine
1,2-benzisothiazol-3(2H)-one

Additional Labelling

EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
EUH204	Contains isocyanates. May produce an allergic reaction.

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)
Nitrapyrin	1929-82-4 217-682-2 006-057-00-8 01-2120763198-45-XXXX	Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 2; H411	26.01
Hydrocarbons, C10-C13, aromatics, <1% naphthalene	Not Assigned 922-153-0 01-2119451097-39-XXXX	Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 3 - < 10
Polybutene	9003-29-6 500-004-7	Asp. Tox. 1; H304	>= 1 - < 3
Decyl alcohol, ethoxylated, phosphated, potassium salt	68070-99-5	Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 1 - < 3
4,6-dichloro-2-trichloromethyl pyridine	1129-19-7	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 1 - < 3
Polyoxyethylene octyl ether phosphate potassium salt	73018-34-5	Skin Irrit. 2; H315 Eye Dam. 1; H318	>= 1 - < 3
2,3,4,5,6-Pentachloropyridine	2176-62-7 218-535-5	Acute Tox. 4; H302 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 ——————— M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 0.3 - < 1
3-Chloro-6-(trichloromethyl)pyridine	1197-03-1	Acute Tox. 4; H302 Acute Tox. 3; H331 Eye Irrit. 2; H319	>= 0.1 - < 0.25

		Skin Sens. 1; H317 Aquatic Chronic 2; H411	
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox. 4; H302 Acute Tox. 2; H330 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 _____ M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1 _____ specific concentration limit Skin Sens. 1A; H317 >= 0.036 % _____ Acute toxicity estimate Acute oral toxicity: 450 mg/kg Acute inhalation toxicity (dust/mist): 0.21 mg/l	>= 0.0025 - < 0.025
Substances with a workplace exposure limit :			
Sodium chloride	7647-14-5 231-598-3		>= 3 - < 10

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 effects occur, consult a physician.
In case of skin contact	:	Wash off with plenty of water.
In case of eye contact	:	Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.
If swallowed	:	No emergency medical treatment necessary.

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	:	No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	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. Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion products	:	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Nitrogen oxides (NOx) Carbon oxides Hydrogen chloride gas

5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus. 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	:	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	:	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). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). 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

Advice on safe handling : To avoid spills during handling keep bottle on a metal tray.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
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.
Avoid inhalation of vapour or mist.
Do not swallow.
Do not get in eyes.
Keep container tightly closed.
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. 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 : Strong oxidizing agents

Packaging material : Unsuitable material: Do not store in or use containers except the original product package.

7.3 Specific end use(s)

Specific use(s) : No data available

Nitrogen stabilizer

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Nitrapyrin	1929-82-4	OELV - 8 hrs (TWA)	10 mg/m3	IE OEL

		OELV - 15 min (STEL)	20 mg/m3	IE OEL
Sodium chloride	7647-14-5	TWA	10 mg/m3	Corteva OEL
Propylene glycol	57-55-6	OELV - 8 hrs (TWA) (particles)	10 mg/m3	IE OEL
		OELV - 8 hrs (TWA) (total (vapour and particles))	150 ppm 470 mg/m3	IE OEL
2,3,4,5,6-Pentachloropyridine	2176-62-7	TWA	5 mg/m3	Corteva OEL
1,2-benzisothiazol-3(2H)-one	2634-33-5	TWA (inhalable dust)	0.06 mg/m3	Corteva OEL
		STEL (inhalable dust)	0.1 mg/m3	Corteva OEL

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Sodium chloride	Consumers	Ingestion	Long-term systemic effects	126.65 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	443.28 mg/m3
	Consumers	Skin contact	Long-term systemic effects	126.65 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	126.65 mg/kg bw/day
	Consumers	Inhalation	Acute systemic effects	443.28 mg/m3
	Consumers	Skin contact	Acute systemic effects	126.65 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	2068.62 mg/m3
	Workers	Skin contact	Long-term systemic effects	295.52 mg/kg bw/day
	Workers	Inhalation	Acute systemic effects	2068.62 mg/m3
	Workers	Skin contact	Acute systemic effects	295.52 mg/kg bw/day
Propylene glycol	Workers	Skin contact	Acute systemic effects	
	Remarks:No data available			
	Workers	Inhalation	Acute systemic effects	
	Remarks:No data available			
	Workers	Skin contact	Acute local effects	
	Remarks:No data available			
	Workers	Inhalation	Acute local effects	
	Remarks:No data available			
	Workers	Skin contact	Long-term systemic effects	

	Remarks:No data available			
	Workers	Inhalation	Long-term systemic effects	168 mg/m3
	Workers	Skin contact	Long-term local effects	
	Remarks:No data available			
	Workers	Inhalation	Long-term local effects	10 mg/m3
	Consumers	Skin contact	Acute systemic effects	
	Remarks:No data available			
	Consumers	Inhalation	Acute systemic effects	
	Remarks:No data available			
	Consumers	Skin contact	Acute local effects	
	Remarks:No data available			
	Consumers	Inhalation	Acute local effects	
	Remarks:No data available			
	Consumers	Skin contact	Long-term systemic effects	
	Remarks:No data available			
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
	Consumers	Skin contact	Long-term local effects	
	Remarks:No data available			
	Consumers	Inhalation	Long-term local effects	10 mg/m3

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

Substance name	Environmental Compartment	Value
Sodium chloride	Fresh water	5 mg/l
	Intermittent use/release	19 mg/l
	Sewage treatment plant	500 mg/l
	Soil	4.86 mg/kg
Propylene glycol	Fresh water	260 mg/l
	Marine water	26 mg/l
	Intermittent use/release	183 mg/l
	Sewage treatment plant	20000 mg/l
	Fresh water sediment	572 mg/kg dry weight (d.w.)
	Marine sediment	57.2 mg/kg dry weight (d.w.)
	Soil	50 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

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 gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. 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 3 or higher (breakthrough time greater than 60 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 : Wear clean, body-covering clothing.

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, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process.
For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Form	:	Liquid.
Colour	:	off-white
Odour	:	Gasoline-like
Odour Threshold	:	No data available
Melting point/ range	:	Not applicable
Freezing point		No data available
Boiling point/boiling range	:	No data available
Flammability	:	Not applicable to liquids
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	> 100 °C Method: closed cup
Auto-ignition temperature	:	No data available
pH	:	8.54 (21.7 °C)
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Solubility(ies)		
Water solubility	:	No data available
Vapour pressure	:	No data available
Density	:	1.196 g/cm3 (20 °C)
Relative vapour density	:	No data available

9.2 Other information

Explosives	:	No
Oxidizing properties	:	No significant increase (>5C) in temperature.
Evaporation rate	:	No data available

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.

10.4 Conditions to avoid

Conditions to avoid	:	None known.

10.5 Incompatible materials

Materials to avoid	:	Strong acids Strong bases

10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials.
Decomposition products can include and are not limited to:
Carbon oxides
Nitrogen oxides (NOx)
Hydrogen chloride gas

SECTION 11: Toxicological information

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

Acute toxicity

Components:

Nitrapyrin:

Acute oral toxicity	:	LD50 (Rat, male): 1,072 mg/kg LD50 (Rat, female): 1,231 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 3.51 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Symptoms: No deaths occurred at this concentration., The LC50 value is greater than the Maximum Attainable Concentration.
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit, male and female): 2,830 mg/kg

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Remarks: For similar material(s):

Acute inhalation toxicity : LC50 (Rat): > 4.778 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: For similar material(s):

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: For similar material(s):

Polybutene:

Acute oral toxicity : LD50 (Rat): > 10,000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): 4.82 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 10,250 mg/kg

4,6-dichloro-2-trichloromethyl pyridine:

Acute oral toxicity : LD50 (Rat): 1,000 - 2,000 mg/kg
Method: Estimated.

2,3,4,5,6-Pentachloropyridine:

Acute oral toxicity : LD50 (Rat, male): 435 mg/kg

3-Chloro-6-(trichloromethyl)pyridine:

Acute oral toxicity : LD50 (Rat, male): 1,072 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 3.51 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit, male and female): 2,830 mg/kg

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : Acute toxicity estimate: 450 mg/kg
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

LD50 (Rat, male): 454 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : Acute toxicity estimate: 0.21 mg/l
Test atmosphere: dust/mist
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

LC50 (Rat, male and female): 0.25 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: Breathing difficulties

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

Sodium chloride:

Acute oral toxicity : LD50 (Rat): > 3,550 mg/kg
Remarks: Excessive exposure may cause:
Nausea and/or vomiting.

Acute inhalation toxicity : LC50 (Rat): > 42 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): 10,000 mg/kg

Skin corrosion/irritation

Components:

Nitrapyrin:

Species : Rabbit
Result : No skin irritation

Polybutene:

Result : No skin irritation

Decyl alcohol, ethoxylated, phosphated, potassium salt:

Result : Skin irritation

4,6-dichloro-2-trichloromethyl pyridine:

Result : Skin irritation

Polyoxyethylene octyl ether phosphate potassium salt:

Result : Skin irritation

2,3,4,5,6-Pentachloropyridine:

Species : Rabbit
Result : No skin irritation

1,2-benzisothiazol-3(2H)-one:

Species : Rabbit
Method : OECD Test Guideline 404
Result : Skin irritation

Sodium chloride:

Species : Rabbit
Result : No skin irritation

Serious eye damage/eye irritation

Components:

Nitrapyrin:

Species : Rabbit
Result : Eye irritation

Polybutene:

Result : No eye irritation

Decyl alcohol, ethoxylated, phosphated, potassium salt:

Result : Corrosive

4,6-dichloro-2-trichloromethyl pyridine:

Result : Eye irritation

Polyoxyethylene octyl ether phosphate potassium salt:

Result : Corrosive

2,3,4,5,6-Pentachloropyridine:

Species : Rabbit
Result : No eye irritation

3-Chloro-6-(trichloromethyl)pyridine:

Result : Eye irritation

1,2-benzisothiazol-3(2H)-one:

Species : Rabbit
Result : Corrosive

Sodium chloride:

Species : Rabbit
Result : No eye irritation

Respiratory or skin sensitisation

Components:

Nitrapyrin:

Species : Guinea pig
Result : May cause sensitisation by skin contact.

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

Species : Guinea pig
Result : Does not cause skin sensitisation.
Remarks : For similar material(s):

4,6-dichloro-2-trichloromethyl pyridine:

Result : Does not cause skin sensitisation.

2,3,4,5,6-Pentachloropyridine:

Result : May cause sensitisation by skin contact.

3-Chloro-6-(trichloromethyl)pyridine:

Species : Guinea pig
Result : May cause sensitisation by skin contact.

1,2-benzisothiazol-3(2H)-one:

Test Type : Local lymph node assay (LLNA)
Species : Mouse
Method : OECD Test Guideline 406
Result : The product is a skin sensitiser, sub-category 1A.

Germ cell mutagenicity

Components:

Nitrapyrin:

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

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

Germ cell mutagenicity- Assessment : For similar material(s):, In vitro genetic toxicity studies were negative., Animal genetic toxicity studies were negative.

Polybutene:

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

2,3,4,5,6-Pentachloropyridine:

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

3-Chloro-6-(trichloromethyl)pyridine:

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

1,2-benzisothiazol-3(2H)-one:

Germ cell mutagenicity- Assessment : Not mutagenic when tested in bacterial or mammalian systems.

Sodium chloride:

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

Carcinogenicity

Components:

Nitrapyrin:

Carcinogenicity - Assessment : Kidney effects and/or tumors have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans.

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

Carcinogenicity - Assessment : Contains naphthalene which has caused cancer in some laboratory animals., However, the relevance of this to humans is unknown.

Polybutene:

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

3-Chloro-6-(trichloromethyl)pyridine:

Carcinogenicity - Assessment : Kidney effects and/or tumors have been observed in male rats. These effects are believed to be species specific and unlikely to occur in humans.

Reproductive toxicity

Components:

Nitrapyrin:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction.
Has been toxic to the fetus in laboratory animals at doses toxic to the mother., Exposures having no effect on the mother should have no effect on the fetus., Did not cause birth defects in laboratory animals.

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

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

Polybutene:

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

2,3,4,5,6-Pentachloropyridine:

Reproductive toxicity - Assessment : Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

3-Chloro-6-(trichloromethyl)pyridine:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction.
Has been toxic to the fetus in laboratory animals at doses toxic to the mother., Exposures having no effect on the mother should have no effect on the fetus.

1,2-benzisothiazol-3(2H)-one:

Reproductive toxicity - Assessment : In animal studies, did not interfere with reproduction., In animal studies, did not interfere with fertility.
Did not cause birth defects in laboratory animals.

STOT - single exposure

Product:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

Components:

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

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

Polybutene:

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

Decyl alcohol, ethoxylated, phosphated, potassium salt:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

4,6-dichloro-2-trichloromethyl pyridine:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

Polyoxyethylene octyl ether phosphate potassium salt:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

2,3,4,5,6-Pentachloropyridine:

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

3-Chloro-6-(trichloromethyl)pyridine:

Assessment : Available data are inadequate to determine single exposure specific target organ toxicity.

1,2-benzisothiazol-3(2H)-one:

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

Sodium chloride:

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

STOT - repeated exposure

Product:

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

Repeated dose toxicity

Components:

Nitrapyrin:

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

Blood.
Female reproductive organs.
Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

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

Polybutene:

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

Decyl alcohol, ethoxylated, phosphated, potassium salt:

Remarks : No relevant data found.

4,6-dichloro-2-trichloromethyl pyridine:

Remarks : No relevant data found.

Polyoxyethylene octyl ether phosphate potassium salt:

Remarks : No relevant data found.

2,3,4,5,6-Pentachloropyridine:

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

3-Chloro-6-(trichloromethyl)pyridine:

Remarks : In animals, effects have been reported on the following organs:
Kidney.
Liver.
Blood.
Female reproductive organs.
Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use.

1,2-benzisothiazol-3(2H)-one:

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

Sodium chloride:

Remarks : Medical experience with sodium chloride has shown a strong association between elevated blood pressure and prolonged dietary overuse. Related effects could occur in the kidneys.

Aspiration toxicity

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

Components:

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

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:
May be fatal if swallowed and enters airways.

Polybutene:
May be fatal if swallowed and enters airways.

Decyl alcohol, ethoxylated, phosphated, potassium salt:
Based on available information, aspiration hazard could not be determined.

4,6-dichloro-2-trichloromethyl pyridine:
Based on available information, aspiration hazard could not be determined.

Polyoxyethylene octyl ether phosphate potassium salt:
Based on available information, aspiration hazard could not be determined.

2,3,4,5,6-Pentachloropyridine:
Based on physical properties, not likely to be an aspiration hazard.

1,2-benzisothiazol-3(2H)-one:
Based on physical properties, not likely to be an aspiration hazard.

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

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

Components:

Nitrapyrin:

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 3.4 - 7.9 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 or Equivalent LC50 (Rainbow trout (Oncorhynchus mykiss)): 4 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 2.2 mg/l Exposure time: 48 h Test Type: flow-through test
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 1.7 mg/l End point: Growth rate inhibition Exposure time: 72 h
Toxicity to fish (Chronic toxicity)	:	NOEC: 2.87 mg/l Exposure time: 34 d Species: Fathead minnow (Pimephales promelas)
Toxicity to soil dwelling organisms	:	LC50: 209 mg/kg Exposure time: 15 d End point: survival Species: Eisenia fetida (earthworms)
Toxicity to terrestrial organisms	:	Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg). Material is slightly toxic to birds on a dietary basis (LC50 between 1001 and 5000 ppm). oral LD50: 2708 mg/kg bodyweight. Species: Anas platyrhynchos (Mallard duck) dietary LC50: 1466 mg/kg diet. Species: Anas platyrhynchos (Mallard duck) dietary LC50: 820 mg/kg diet. Species: Coturnix japonica (Japanese quail) oral LD50: > 100 µg/bee Exposure time: 48 h Species: Apis mellifera (bees)

contact LD50: > 100 µg/bee
Exposure time: 48 h
Species: Apis mellifera (bees)

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 3.6 mg/l Exposure time: 96 h Remarks: For similar material(s):
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 1.1 mg/l Exposure time: 48 h Remarks: For similar material(s):
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 7.9 mg/l Exposure time: 72 h Remarks: For similar material(s):

Polybutene:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l Exposure time: 96 h Test Type: static test LC50 (Oncorhynchus mykiss (rainbow trout)): > 10,000 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1,000 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202 or Equivalent

2,3,4,5,6-Pentachloropyridine:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 0.47 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): > 4 mg/l End point: Growth rate inhibition Exposure time: 96 h Test Type: static test
M-Factor (Acute aquatic toxicity)	:	1
M-Factor (Chronic aquatic toxicity)	:	1

3-Chloro-6-(trichloromethyl)pyridine:

Toxicity to fish	:	LC50 (Bluegill sunfish (Lepomis macrochirus)): 3.4 - 7.9 mg/l

Exposure time: 96 h
Test Type: Static
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 2.2 mg/l
Exposure time: 48 h
Test Type: flow-through test

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 1.7 mg/l
End point: Growth rate inhibition
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC: 2.87 mg/l
Exposure time: 34 d
Species: Fathead minnow (Pimephales promelas)

Toxicity to soil dwelling organisms : LC50: 209 mg/kg
Exposure time: 15 d
End point: survival
Species: Eisenia fetida (earthworms)

Toxicity to terrestrial organisms : oral LD50: 2,708 mg/kg
Species: Anas platyrhynchos (Mallard duck)
Remarks: Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

dietary LC50: 1466 mg/kg diet.
Species: Anas platyrhynchos (Mallard duck)
Remarks: Material is slightly toxic to birds on a dietary basis (LC50 between 1001 and 5000 ppm).

dietary LC50: 820 ppm
Species: Coturnix japonica (Japanese quail)

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.74 mg/l
Exposure time: 96 h
Test Type: Static
Method: OECD Test Guideline 203 or Equivalent

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.7 mg/l
Exposure time: 48 h
Test Type: flow-through test
Method: OECD Test Guideline 202 or Equivalent

EC50 (Mysid shrimp (Mysidopsis bahia)): 0.99 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.61 mg/l
Exposure time: 72 h

Test Type: static test
Method: OECD Test Guideline 201 or Equivalent

ErC50 (Pseudokirchneriella subcapitata (green algae)): 0.108 mg/l
Exposure time: 24 h
Test Type: Static
Method: OECD Test Guideline 201 or Equivalent

EC10 (Pseudokirchneriella subcapitata (green algae)): 0.0206 mg/l
End point: Growth rate
Exposure time: 24 h
Test Type: Static
Method: (calculated)

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (Bacteria (active sludge)): 28.52 mg/l
Exposure time: 3 h
Test Type: Respiration inhibition of activated sludge

Toxicity to fish (Chronic toxicity) : NOEC: 0.21 mg/l
Exposure time: 28 d
Species: Oncorhynchus mykiss (rainbow trout)
Test Type: flow-through
Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.91 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: flow-through test
Method: OECD Test Guideline 211

M-Factor (Chronic aquatic toxicity) : 1

Sodium chloride:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 5,840 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203 or Equivalent

LC50 (Pimephales promelas (fathead minnow)): 10,610 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203 or Equivalent

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1,900 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae/aquatic plants	:	EC50 (Other): 2,430 mg/l End point: Growth inhibition (cell density reduction) Exposure time: 120 h Test Type: static test Method: OECD Test Guideline 201 or Equivalent
Toxicity to microorganisms	:	IC50 (activated sludge): > 1,000 mg/l Method: OECD 209 Test

12.2 Persistence and degradability

Components:

Nitrapyrin:

Biodegradability	:	Remarks: Chemical degradation (hydrolysis) is expected in the environment within days to weeks. Degradation is expected in the soil environment within days to weeks.
ThOD	:	0.97 kg/kg
Stability in water	:	Test Type: Hydrolysis Degradation half life (half-life): 186 h (25 °C) pH: 5 Test Type: Hydrolysis Degradation half life (half-life): 173 - 233 h (25 °C) pH: 7 Test Type: Hydrolysis Degradation half life (half-life): 129 h (25 °C) pH: 9

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

Biodegradability	:	Remarks: For similar material(s): Biodegradation may occur under aerobic conditions (in the presence of oxygen). Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

Polybutene:

Biodegradability	:	Result: Readily biodegradable. Biodegradation: 93.9 % Exposure time: 28 d Method: OECD Test Guideline 310 Remarks: 10-day Window: Pass
Photodegradation	:	Test Type: Half-life (indirect photolysis) Rate constant: 2.63E-12 cm3/s

Method: Estimated.

2,3,4,5,6-Pentachloropyridine:

ThOD : 0.64 kg/kg

3-Chloro-6-(trichloromethyl)pyridine:

Biodegradability : Remarks: Chemical degradation (hydrolysis) is expected in the environment within days to weeks.
Degradation is expected in the soil environment within days to weeks.

ThOD : 0.97 mg/g

Stability in water : Degradation half life (half-life): 186 h (25 °C)
pH: 5
Method: Hydrolysis

Degradation half life (half-life): 173 - 233 h (25 °C)
pH: 7
Method: Hydrolysis

Degradation half life (half-life): 129 h (25 °C)
pH: 9
Method: Hydrolysis

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: Not biodegradable
Biodegradation: 24 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent

12.3 Bioaccumulative potential

Components:

Nitrapyrin:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Exposure time: 30 d
Bioconcentration factor (BCF): < 85
Method: Measured

Partition coefficient: n-octanol/water : log Pow: 3.324
Method: Measured
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

Partition coefficient: n-octanol/water : Remarks: No data available for this product.
For similar material(s):
Bioconcentration potential is high (BCF > 3000 or Log Pow

between 5 and 7).

Polybutene:

Partition coefficient: n-octanol/water : log Pow: 2.89
Method: Measured
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

4,6-dichloro-2-trichloromethyl pyridine:

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

2,3,4,5,6-Pentachloropyridine:

Partition coefficient: n-octanol/water :

log Pow: 3.53
Method: Measured
Remarks: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

3-Chloro-6-(trichloromethyl)pyridine:

Bioaccumulation : Species: Bluegill sunfish (Lepomis macrochirus)
Exposure time: 30 d
Bioconcentration factor (BCF): < 85
Method: Measured

1,2-benzisothiazol-3(2H)-one:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)
Bioconcentration factor (BCF): 6.95
Method: OECD Test Guideline 305

Partition coefficient: n-octanol/water : log Pow: 0.99 (20 °C)
pH: 5
Method: OECD Test Guideline 117 or Equivalent

log Pow: 0.63 (10 °C)
pH: 7
Method: OECD Test Guideline 117 or Equivalent

log Pow: 0.70 (20 °C)
pH: 7
Method: OECD Test Guideline 117 or Equivalent

log Pow: 0.76 (30 °C)
pH: 7
Method: OECD Test Guideline 117 or Equivalent

log Pow: -0.90 (20 °C)
pH: 9
Method: OECD Test Guideline 117 or Equivalent

Sodium chloride:

Partition coefficient: n-octanol/water : Remarks: No bioconcentration is expected because of the relatively high water solubility.
Partitioning from water to n-octanol is not applicable.

12.4 Mobility in soil

Components:

Nitrapyrin:

Distribution among environmental compartments : Koc: 321
Method: Measured
Remarks: Potential for mobility in soil is medium (Koc between 150 and 500).

Stability in soil : Dissipation time: 3 - 35 d

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

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

Polybutene:

Distribution among environmental compartments : Koc: 43.79
Method: Estimated.
Remarks: For similar material(s):
Potential for mobility in soil is very high (Koc between 0 and 50).

4,6-dichloro-2-trichloromethyl pyridine:

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

1,2-benzisothiazol-3(2H)-one:

Distribution among environmental compartments : Koc: 104
Method: Estimated.
Remarks: Potential for mobility in soil is high (Koc between 50 and 150).
Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

Sodium chloride:

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

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:

Sodium chloride:

Assessment : Not persistent, bioaccumulative, and toxic (PBT).
Not very persistent and very bioaccumulative (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.

No data available

12.7 Other adverse effects

Components:

Nitrapyrin:

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

Hydrocarbons, C10-C13, aromatics, <1% naphthalene:

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

Polybutene:

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

Decyl alcohol, ethoxylated, phosphated, potassium salt:

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

4,6-dichloro-2-trichloromethyl pyridine:

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

Polyoxyethylene octyl ether phosphate potassium salt:

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

2,3,4,5,6-Pentachloropyridine:

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

1,2-benzisothiazol-3(2H)-one:

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

Sodium chloride:

Ozone-Depletion Potential : Regulation: (Update: 12/17/2010; RT)
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 generator 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.
(Nitrapyrin, Solvent naphtha)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Nitrapyrin, Solvent naphtha)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Nitrapyrin, Solvent naphtha)

IATA : Environmentally hazardous substance, liquid, n.o.s.
(Nitrapyrin, Solvent naphtha)

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(Nitrapyrin, Solvent naphtha)

14.6 Special precautions for user

Remarks : 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 (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
Regulation (EU) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	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.	E2	ENVIRONMENTAL HAZARDS
	34	Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending

streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)

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

H302	:	Harmful if swallowed.
H304	:	May be fatal if swallowed and enters airways.
H315	:	Causes skin irritation.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H330	:	Fatal if inhaled.
H331	:	Toxic if inhaled.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
H411	:	Toxic to aquatic life with long lasting effects.
H317	:	May cause an allergic skin reaction.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
Skin Sens.	:	Skin sensitisation
Corteva OEL	:	Corteva Occupational Exposure Limit
IE OEL	:	Ireland. List of Chemical Agents and Carcinogens with Occupational Exposure Limit Values - Code of Practice, Schedule 1 and 2

Corteva OEL / STEL	:	Short term exposure limit
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:**
Skin Sens. 1	H317	Calculation method
Eye Dam. 1	H318	Calculation method
Aquatic Chronic 2	H411	Calculation method

Product code: C1A-10-6 (GF-4364)

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

IE / 6N