Ibriditrin

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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 France 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 : Ibriditrin

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

Use of the Substance/Mixture : Insecticide

1.3 Details of the supplier of the safety data sheet

COMPANY IDENTIFICATION
Manufacturer/importer
DuPont Solutions (France) S.A.S.
1 bis avenue du 8 mai 1945 Bâtiment Equinoxe II
78280 Guyancourt
FRANCE

Customer Information Number : +33 1 30 23 13 13
E-mail address : SDS@corteva.com

1.4 Emergency telephone number

SGS +32 3 575 55 55 OR

+33 975 182 341

ORFILA: + 33 (0)1 45 42 59 59

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H332: Harmful if inhaled.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
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 : Warning

Hazard statements :
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H410 Very toxic to aquatic life with long lasting effects.

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

Precautionary statements :

Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water.
P312 Call a POISON CENTER/ doctor if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.

Disposal:

P501 Dispose of contents/container to an approved waste disposal plant in accordance with local, regional and national legislations.

Hazardous components which must be listed on the label:

tefluthrin (ISO)
Diphenylmethane Diisocyanate, isomers and homologues
4,4'-methylenediphenyl diisocyanate
o-(p-isocyanatobenzyl)phenyl isocyanate
1,2-benzisothiazol-3(2H)-one

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)
Hydrocarbons, C10, aromatics, <1% naphthalene	1189173-42-9 01-2119463583-34-0008, 01-2119463583-34-0009, 01-2119463583-34-0010	STOT SE 3; H336 (Central nervous system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411	>= 50 - < 60
tefluthrin (ISO)	79538-32-2 607-723-00-6	Acute Tox. 2; H300 Acute Tox. 1; H330 Acute Tox. 2; H310 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 _____ M-Factor (Acute aquatic toxicity): 10.00010.000 M-Factor (Chronic aquatic toxicity): 10.00010.000	>= 20 - < 25
Diphenylmethane Diisocyanate, isomers and homologues	9016-87-9	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 (Respiratory Tract) _____ specific concentration limit Eye Irrit. 2B; H320 >= 5 %	>= 3 - < 5

		STOT SE 3; H335 >= 5 % Skin Irrit. 2; H315 >= 5 % Resp. Sens. 1; H334 >= 0,1 % Skin Sens. 1; H317 >= 1 % STOT RE 2; H373 >= 10 % Skin Irrit. 3; H316 1 - < 5 %	
4,4'-methylenediphenyl diisocyanate	101-68-8 202-966-0 615-005-00-9 01-2119457014-47	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 (Respiratory Tract) _____ specific concentration limit Eye Irrit. 2; H319 >= 5 % STOT SE 3; H335 >= 5 % Skin Irrit. 2; H315 >= 5 % Resp. Sens. 1; H334 >= 0,1 % Skin Sens. 1; H317 >= 1 % STOT RE 2; H373 >= 10 % Skin Irrit. 3; H316 1 - < 5 % Eye Irrit. 2B; H320 >= 5 % STOT SE 3; H335 >= 5 % Skin Irrit. 2; H315 >= 5 % Resp. Sens. 1; H334 >= 0,1 %	>= 0,3 - < 1
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1 227-534-9 615-005-00-9 01-2119480143-45	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317	>= 0,3 - < 1

		Carc. 2; H351 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 (Respiratory Tract) _____ specific concentration limit Eye Irrit. 2; H319 >= 5 % STOT SE 3; H335 >= 5 % Skin Irrit. 2; H315 >= 5 % Resp. Sens. 1; H334 >= 0,1 % Eye Irrit. 2B; H320 >= 5 % STOT SE 3; H335 >= 5 % Skin Irrit. 2; H315 >= 5 % Resp. Sens. 1; H334 >= 0,1 % Skin Sens. 1; H317 >= 1 % STOT RE 2; H373 >= 10 % Skin Irrit. 3; H316 1 - < 5 % Acute Tox. 4; H332 >= 25 %	
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 3; H412 _____ M-Factor (Acute aquatic toxicity): 1 _____ specific concentration limit Skin Sens. 1; H317 >= 0,05 %	>= 0,025 - < 0,05

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
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.
In case of skin contact	:	Remove contaminated clothing. Immediately wash skin with soap and plenty of water.
In case of eye contact	:	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.
If swallowed	:	Rinse mouth. Call a physician or poison control centre immediately.

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	:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Water spray Alcohol-resistant foam
Unsuitable extinguishing media	:	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Exposure to combustion products may be a hazard to health.

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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

Environmental precautions : 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.

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).
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 : Do not breathe vapours/dust.
Handle in accordance with good industrial hygiene and safety practice.

Smoking, eating and drinking should be prohibited in the application area.
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. Keep in properly labelled containers. Store in accordance with the particular national regulations.

Advice on common storage : Strong oxidizing agents

Packaging material : Unsuitable material: None known.

7.3 Specific end use(s)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
4,4'-methylenediphenyl diisocyanate	101-68-8	Time Weighted Average	0,01 ppm 0,1 mg/m3	FR VLE
	Further information: Possibly carcinogenic to humans, Risk for sensitisation of the airways, Indicative exposure limits			
		Short Term Exposure Limit	0,02 ppm 0,2 mg/m3	FR VLE
	Further information: Possibly carcinogenic to humans, Risk for sensitisation of the airways, Indicative exposure limits			

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

Substance name	End Use	Exposure routes	Potential health effects	Value
4,4'-methylenediphenyl diisocyanate	Workers	Skin contact	Acute systemic effects	
Remarks:	No hazard identified			
	Workers	Inhalation	Acute systemic effects	
Remarks:	No hazard identified			
	Workers	Skin contact	Acute local effects	
Remarks:	No data available			
	Workers	Inhalation	Acute local effects	0,1 mg/m3
	Workers	Skin contact	Long-term systemic effects	
Remarks:	No hazard identified			
	Workers	Inhalation	Long-term systemic effects	
Remarks:	No hazard identified			

	Workers	Skin contact	Long-term local effects	
Remarks:	No data available			
	Workers	Inhalation	Long-term local effects	0,05 mg/m3
	Consumers	Skin contact	Acute systemic effects	
Remarks:	No hazard identified			
	Consumers	Inhalation	Acute systemic effects	
Remarks:	No hazard identified			
	Consumers	Ingestion	Acute systemic effects	
Remarks:	No hazard identified			
	Consumers	Skin contact	Acute local effects	
Remarks:	No hazard identified			
	Consumers	Inhalation	Acute local effects	0,05 mg/m3
	Consumers	Inhalation	Long-term systemic effects	
Remarks:	No hazard identified			
	Consumers	Inhalation	Long-term local effects	0,025 mg/m3
o-(p-isocyanatobenzyl)phenyl isocyanate	Workers	Inhalation	Long-term systemic effects	0,05 mg/m3
	Workers	Inhalation	Acute systemic effects	0,1 mg/m3
	Workers	Inhalation	Long-term local effects	0,05 mg/m3
	Workers	Inhalation	Acute local effects	0,1 mg/m3
	Workers	Skin contact	Acute systemic effects	50 mg/kg bw/day
	Workers	Skin contact	Acute local effects	28,7 mg/cm2
	Consumers	Inhalation	Long-term systemic effects	0,025 mg/m3
	Consumers	Inhalation	Acute systemic effects	0,05 mg/m3
	Consumers	Inhalation	Long-term local effects	0,025 mg/m3
	Consumers	Inhalation	Acute local effects	0,05 mg/m3
	Consumers	Skin contact	Acute systemic effects	25 mg/kg bw/day
	Consumers	Skin contact	Acute local effects	17,2 mg/cm2
	Consumers	Ingestion	Acute systemic effects	20 mg/kg bw/day

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

Substance name	Environmental Compartment	Value
4,4'-methylenediphenyl diisocyanate	Fresh water	1 mg/l
	Marine water	0,1 mg/l
	Soil	1 mg/kg dry weight (d.w.)
	Sewage treatment plant	1 mg/l

	Intermittent use/release	10 mg/l
o-(p-isocyanatobenzyl)phenyl isocyanate	Fresh water	1 mg/l
	Marine water	0,1 mg/l
	Intermittent use/release	10 mg/l
	Sewage treatment plant	1 mg/l
	Soil	1 mg/kg

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 protection	:	Chemical goggles should be consistent with EN 166 or equivalent.
Hand protection		
Remarks	:	Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.
Skin and body protection	:	Long sleeved shirt and long pants
Respiratory protection	:	Half mask with a particle filter P2 (EN 143) Half mask with a particle filter P3 (EN 143).

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Colour	:	off-white
Odour	:	characteristic
Odour Threshold	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	No data available
pH	:	9 - 11 Concentration: 100 g/L
Viscosity		
Viscosity, dynamic	:	380 - 400 mPa,s (25 °C)
Viscosity, kinematic	:	No data available

Solubility(ies)
Water solubility : No data available

Vapour pressure : No data available

Relative density : 1,06

Bulk density : No data available

9.2 Other information

Explosives : No data available

Self-ignition : 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.
None known.

10.4 Conditions to avoid

Conditions to avoid : None known.

10.5 Incompatible materials

Materials to avoid : None.

10.6 Hazardous decomposition products

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): > 2.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 2,85 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

Components:

Hydrocarbons, C10, aromatics, <1% naphthalene:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg
Remarks: For similar material(s):

Acute inhalation toxicity : LC50 (Rat): > 4,688 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: For similar material(s):
Maximum attainable concentration.

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: For similar material(s):

tefluthrin (ISO):

Acute oral toxicity : Remarks: High toxicity if swallowed.
Swallowing a small amount may cause serious injury; swallowing larger amounts may be fatal.

LD50 (Rat, male): 21,8 mg/kg

LD50 (Rat, female): 34,6 mg/kg

Acute inhalation toxicity : Remarks: Brief exposure (minutes) to easily attainable concentrations may cause serious adverse effects, even death.

LC50 (Rat, male): 0,0491 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

LC50 (Rat, female): 0,0371 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : Remarks: Prolonged or widespread skin contact may result in absorption of amounts which could cause death.

LD50 (Rat, male): 316 mg/kg

LD50 (Rat, female): 177 mg/kg

Diphenylmethane Diisocyanate, isomers and homologues:

Acute oral toxicity : LD50 (Rat): > 10.000 mg/kg
Remarks: Typical for this family of materials.

Acute inhalation toxicity	:	LC50 (Rat): 0,49 mg/l Exposure time: 4 h Test atmosphere: dust/mist LC50 (Rat): 2,24 mg/l Exposure time: 1 h Test atmosphere: Aerosol Remarks: For similar material(s): 4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8). LC50 (Rat): 0,387 mg/l Exposure time: 4 h Test atmosphere: Aerosol Remarks: For similar material(s): 2,4'-Diphenylmethane diisocyanate (CAS 5873-54-1).
Acute dermal toxicity	:	LD50 (Rabbit): > 9.400 mg/kg Remarks: Typical for this family of materials.

4,4'-methylenediphenyl diisocyanate:

Acute oral toxicity	:	LD50 (Rat): > 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): 2,24 mg/l Exposure time: 1 h Test atmosphere: dust/mist Assessment: The component/mixture is moderately toxic after short term inhalation.
Acute dermal toxicity	:	LD50 (Rabbit): > 9.400 mg/kg

o-(p-isocyanatobenzyl)phenyl isocyanate:

Acute oral toxicity	:	LD50 (Rat): > 2.000 mg/kg Assessment: The substance or mixture has no acute oral toxicity Remarks: For similar material(s):
Acute inhalation toxicity	:	LC50 (Rat): 0,387 mg/l Exposure time: 4 h Test atmosphere: dust/mist LC50 (Rat): 2,24 mg/l Exposure time: 1 h Test atmosphere: Aerosol Remarks: For similar material(s): 4,4'-Methylenediphenyl diisocyanate (CAS 101-68-8).
Acute dermal toxicity	:	LD50 (Rabbit): > 9.400 mg/kg Remarks: For similar material(s):

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

Acute oral toxicity	:	LD50 (Rat): 675,3 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 0,25 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 5.000 mg/kg

Skin corrosion/irritation

Components:

Diphenylmethane Diisocyanate, isomers and homologues:

Result	:	Skin irritation

4,4'-methylenediphenyl diisocyanate:

Result	:	Skin irritation

o-(p-isocyanatobenzyl)phenyl isocyanate:

Result	:	Skin irritation

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

Species	:	Rabbit
Result	:	Skin irritation

Serious eye damage/eye irritation

Components:

Diphenylmethane Diisocyanate, isomers and homologues:

Result	:	Mild eye irritation

4,4'-methylenediphenyl diisocyanate:

Result	:	Mild eye irritation

o-(p-isocyanatobenzyl)phenyl isocyanate:

Result	:	Mild eye irritation

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

Species	:	Rabbit
Result	:	Corrosive

Respiratory or skin sensitisation

Product:

Assessment : Does not cause respiratory sensitisation.

Components:

Hydrocarbons, C10, aromatics, <1% naphthalene:

Remarks : For similar material(s):
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks : For respiratory sensitization:
No relevant data found.

Diphenylmethane Diisocyanate, isomers and homologues:

Assessment : May cause sensitisation by skin contact.
Remarks : Skin contact may cause an allergic skin reaction.
Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

Assessment : May cause sensitisation by inhalation.
Remarks : May cause allergic respiratory reaction.
MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

4,4'-methylenediphenyl diisocyanate:

Assessment : May cause sensitisation by skin contact.
Remarks : Skin contact may cause an allergic skin reaction.
Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

Assessment : May cause sensitisation by inhalation.
Remarks : May cause allergic respiratory reaction.
MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Assessment : May cause sensitisation by skin contact.
Remarks : For similar material(s):
Skin contact may cause an allergic skin reaction.
Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

Assessment : May cause sensitisation by inhalation.

Remarks	:	May cause allergic respiratory reaction. MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

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

Species	:	Mouse
Assessment	:	The product is a skin sensitiser, sub-category 1B.

Germ cell mutagenicity

Components:

Hydrocarbons, C10, aromatics, <1% naphthalene:

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

Diphenylmethane Diisocyanate, isomers and homologues:

Germ cell mutagenicity- Assessment	:	Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

4,4'-methylenediphenyl diisocyanate:

Germ cell mutagenicity- Assessment	:	Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Germ cell mutagenicity- Assessment	:	For similar material(s):, Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

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

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

Carcinogenicity

Product:

Carcinogenicity - Assessment	:	Animal testing did not show any carcinogenic effects.

Components:

Diphenylmethane Diisocyanate, isomers and homologues:

Carcinogenicity - Assessment	:	Limited evidence of carcinogenicity in animal studies Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

4,4'-methylenediphenyl diisocyanate:

Carcinogenicity - Assessment	:	Limited evidence of carcinogenicity in animal studies Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Carcinogenicity - Assessment	:	Limited evidence of carcinogenicity in animal studies Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

Reproductive toxicity

Components:

Hydrocarbons, C10, aromatics, <1% naphthalene:

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.

Diphenylmethane Diisocyanate, isomers and homologues:

Reproductive toxicity - Assessment	:	In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

4,4'-methylenediphenyl diisocyanate:

Reproductive toxicity - Assessment	:	Has been toxic to the fetus in laboratory animals at doses toxic to the mother., Did not cause birth defects in laboratory animals.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Reproductive toxicity - Assessment	:	For similar material(s):, Has been toxic to the fetus in laboratory animals at doses toxic to the mother., Did not cause birth defects in laboratory animals.

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	:	The substance or mixture is not classified as specific target organ toxicant, single exposure.

Components:

Hydrocarbons, C10, aromatics, <1% naphthalene:

Exposure routes	:	Inhalation
Assessment	:	May cause drowsiness or dizziness.

Diphenylmethane Diisocyanate, isomers and homologues:

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

4,4'-methylenediphenyl diisocyanate:

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

o-(p-isocyanatobenzyl)phenyl isocyanate:

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

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

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

STOT - repeated exposure

Components:

Diphenylmethane Diisocyanate, isomers and homologues:

Exposure routes	:	Inhalation
Target Organs	:	Respiratory Tract

Assessment	:	May cause damage to organs through prolonged or repeated exposure.

4,4'-methylenediphenyl diisocyanate:

Exposure routes	:	Inhalation
Target Organs	:	Respiratory Tract
Assessment	:	May cause damage to organs through prolonged or repeated exposure.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Exposure routes	:	Inhalation
Target Organs	:	Respiratory Tract
Assessment	:	May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

Hydrocarbons, C10, aromatics, <1% naphthalene:

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

Diphenylmethane Diisocyanate, isomers and homologues:

Remarks	:	Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

4,4'-methylenediphenyl diisocyanate:

Remarks	:	Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Remarks	:	Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

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

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

Aspiration toxicity

Product:

No aspiration toxicity classification

Components:

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

Diphenylmethane Diisocyanate, isomers and homologues:
Based on physical properties, not likely to be an aspiration hazard.

4,4'-methylenediphenyl diisocyanate:
Based on physical properties, not likely to be an aspiration hazard.

o-(p-isocyanatobenzyl)phenyl isocyanate:
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:

Hydrocarbons, C10, aromatics, <1% naphthalene:

Toxicity to fish	:	Remarks: For similar material(s): 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: For similar material(s): Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species). LC50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l Exposure time: 96 h Remarks: For similar material(s):
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 3 - 10 mg/l Exposure time: 48 h Remarks: For similar material(s):

Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 11 mg/l Exposure time: 72 h Remarks: For similar material(s):

Ecotoxicology Assessment

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

tefluthrin (ISO):

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0,00006 mg/l Exposure time: 96 h Test Type: flow-through LC50 (Lepomis macrochirus (Bluegill sunfish)): 0,00013 mg/l Exposure time: 96 h Test Type: flow-through
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Mysidopsis bahia (opossum shrimp)): 0,000053 mg/l End point: mortality Exposure time: 96 h Test Type: flow-through test
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): > 1,05 mg/l Exposure time: 96 h Test Type: Static
M-Factor (Acute aquatic toxicity)	:	10.000 10.000
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,0000096 mg/l Exposure time: 28 d Species: Pimephales promelas (fathead minnow) Test Type: flow-through
M-Factor (Chronic aquatic toxicity)	:	10.000 10.000

Diphenylmethane Diisocyanate, isomers and homologues:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 1.000 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 or Equivalent Remarks: Based on information for a similar material:
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1.000 mg/l Exposure time: 24 h Test Type: static test Method: OECD Test Guideline 202 or Equivalent Remarks: For similar material(s):

Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): 1.640 mg/l End point: Growth rate inhibition Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 or Equivalent Remarks: For similar material(s):
Toxicity to microorganisms	:	EC50 (activated sludge): > 100 mg/l End point: Respiration rates. Exposure time: 3 h Test Type: static test Remarks: Based on information for a similar material:
Toxicity to soil dwelling organisms	:	Test Type: Based on information for a similar material: EC50: > 1.000 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms) Method: Other guidelines
Plant toxicity	:	EC50: 1.000 mg/l End point: Growth inhibition Test period: 14 d Species: Avena sativa (oats) Method: Other guidelines EC50: 1.000 mg/l End point: Growth inhibition Test period: 14 d Species: Lactuca sativa (lettuce) Method: Other guidelines

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.

4,4'-methylenediphenyl diisocyanate:

Toxicity to fish	:	Remarks: The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species. Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species). LC50 (Danio rerio (zebra fish)): > 1.000 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 or Equivalent Remarks: Based on information for a similar material:
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1.000 mg/l Exposure time: 24 h Test Type: static test Method: OECD Test Guideline 202 or Equivalent Remarks: For similar material(s):

Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): 1.640 mg/l End point: Growth rate inhibition Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 or Equivalent Remarks: For similar material(s):
Toxicity to microorganisms	:	EC50 (activated sludge): > 100 mg/l End point: Respiration rates. Exposure time: 3 h Test Type: static test Remarks: Based on information for a similar material:
Toxicity to soil dwelling organisms	:	Test Type: Based on information for a similar material: EC50: > 1.000 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms) Method: Other guidelines
Plant toxicity	:	EC50: 1.000 mg/l End point: Growth inhibition Test period: 14 d Species: Avena sativa (oats) Method: Other guidelines EC50: 1.000 mg/l End point: Growth inhibition Test period: 14 d Species: Lactuca sativa (lettuce) Method: Other guidelines

Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 1.000 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 or Equivalent Remarks: For similar material(s):
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 1.000 mg/l Exposure time: 24 h Test Type: static test Method: OECD Test Guideline 202 or Equivalent Remarks: For similar material(s):
Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): 1.640 mg/l End point: Growth rate inhibition Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 or Equivalent

Remarks: For similar material(s):

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
End point: Respiration rates.
Exposure time: 3 h
Test Type: static test
Remarks: Based on information for a similar material:

Toxicity to soil dwelling organisms : Test Type: Based on information for a similar material:
EC50: > 1.000 mg/kg
Exposure time: 14 d
Species: Eisenia fetida (earthworms)
Method: Other guidelines

Plant toxicity : EC50: 1.000 mg/l
End point: Growth inhibition
Test period: 14 d
Species: Avena sativa (oats)
Method: Other guidelines

EC50: 1.000 mg/l
End point: Growth inhibition
Test period: 14 d
Species: Lactuca sativa (lettuce)
Method: Other guidelines

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

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

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,9 mg/l
Exposure time: 96 h
Test Type: flow-through test
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

LC50 (Mysid shrimp (Mysidopsis bahia)): 1,9 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 0,8 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201 or Equivalent

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,21 mg/l
End point: Growth rate
Exposure time: 72 h

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

ErC50 (diatom Skeletonema costatum): 0,36 mg/l
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201 or Equivalent

NOEC (diatom Skeletonema costatum): 0,15 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Method: OECD Test Guideline 201 or Equivalent

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

12.2 Persistence and degradability

Components:

Hydrocarbons, C10, aromatics, <1% naphthalene:

Biodegradability : Remarks: Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).

tefluthrin (ISO):

Biodegradability : Remarks: Not readily biodegraded.

Diphenylmethane Diisocyanate, isomers and homologues:

Biodegradability : Result: Not biodegradable
Remarks: In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable.
In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 302C or Equivalent
Remarks: 10-day Window: Not applicable

4,4'-methylenediphenyl diisocyanate:

Biodegradability : Result: Not biodegradable
Remarks: In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas

which appear to be stable.
In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 302C or Equivalent
Remarks: 10-day Window: Not applicable

o-(p-isocyanatobenzyl)phenyl isocyanate:

Biodegradability : Result: Not biodegradable
Remarks: In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable.
In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

Biodegradation: 0 %
Exposure time: 28 d
Method: OECD Test Guideline 302C or Equivalent
Remarks: 10-day Window: Not applicable

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

Biodegradability : Result: Readily biodegradable.
Biodegradation: 24 %
Exposure time: 28 d
Method: OECD Test Guideline 301B or Equivalent
Remarks: Abiotic degradation: The material is rapidly degradable by abiotic means.

12.3 Bioaccumulative potential

Components:

Hydrocarbons, C10, 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).

tefluthrin (ISO):

Bioaccumulation : Bioconcentration factor (BCF): 1.400

Partition coefficient: n-octanol/water : log Pow: 6,4 (20 °C)

Diphenylmethane Diisocyanate, isomers and homologues:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Exposure time: 28 d
Concentration: 0,0008 mg/l

Bioconcentration factor (BCF): 92
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water : Remarks: Reacts with water.
In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

4,4'-methylenediphenyl diisocyanate:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Exposure time: 28 d
Concentration: 0,0008 mg/l
Bioconcentration factor (BCF): 92
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water : Remarks: Reacts with water.
In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Bioaccumulation : Species: Cyprinus carpio (Carp)
Exposure time: 28 d
Concentration: 0,0008 mg/l
Bioconcentration factor (BCF): 92
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water : Remarks: Reacts with water.
In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

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

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 3,2
Method: Calculated.

Partition coefficient: n-octanol/water : log Pow: 1,19
Method: OECD Test Guideline 117 or Equivalent
Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

12.4 Mobility in soil

Components:

Hydrocarbons, C10, aromatics, <1% naphthalene:

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

Diphenylmethane Diisocyanate, isomers and homologues:

Distribution among environmental compartments : Remarks: In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

4,4'-methylenediphenyl diisocyanate:

Distribution among environmental compartments : Remarks: In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

o-(p-isocyanatobenzyl)phenyl isocyanate:

Distribution among environmental compartments : Remarks: In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

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.

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:

Hydrocarbons, C10, aromatics, <1% naphthalene:

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)..

Diphenylmethane Diisocyanate, isomers and homologues:

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

4,4'-methylenediphenyl diisocyanate:

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

o-(p-isocyanatobenzyl)phenyl isocyanate:

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

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

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

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:

Hydrocarbons, C10, aromatics, <1% naphthalene:

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

Diphenylmethane Diisocyanate, isomers and homologues:

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

Additional ecological information : The Environmental Toxicity data are for a compositionally similar material.
Material is not classified as dangerous to aquatic organisms (LC50/EC50/IC50/LL50/EL50 greater than 100 mg/L in most sensitive species).

4,4'-methylenediphenyl diisocyanate:

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

o-(p-isocyanatobenzyl)phenyl isocyanate:

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.

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.
(Tefluthrin, Hydrocarbons, C10, aromatics, <1% naphthalene)

RID : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tefluthrin, Hydrocarbons, C10, aromatics, <1% naphthalene)

IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Tefluthrin, Hydrocarbons, C10, aromatics, <1% naphthalene)

IATA : Environmentally hazardous substance, liquid, n.o.s.
(Tefluthrin, Hydrocarbons, C10, aromatics, <1% naphthalene)

14.3 Transport hazard class(es)

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	:	no

RID

Environmentally hazardous	:	no

IMDG

Marine pollutant	:	no

14.6 Special precautions for user

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
REACH - List of substances subject to authorisation (Annex XIV)	:	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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	H2	ACUTE TOXIC
	E1	ENVIRONMENTAL HAZARDS

Installations classified for the protection of the environment (Environment Code R511-9)	:	4510

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

H300	:	Fatal if swallowed.
H302	:	Harmful if swallowed.
H304	:	May be fatal if swallowed and enters airways.
H310	:	Fatal in contact with skin.
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.
H332	:	Harmful if inhaled.
H334	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H351	:	Suspected of causing cancer.
H373	:	May cause damage to organs through prolonged or repeated exposure 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.
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
Asp. Tox.	:	Aspiration hazard
Carc.	:	Carcinogenicity
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Resp. Sens.	:	Respiratory sensitisation
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
FR VLE	:	France. Occupational Exposure Limits (INRS)
FR VLE / VME	:	Time Weighted Average
FR VLE / VLCT (VLE)	:	Short Term Exposure Limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; 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; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Ibriditrin

Version	Revision Date:	SDS Number:	Date of last issue: 18.02.2022
1.1	23.02.2022	800080100220	Date of first issue: 18.02.2022

Classification of the mixture:		**Classification procedure:**
Acute Tox. 4	H332	Based on product data or assessment
Skin Sens. 1	H317	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

Product code: 3PP-Fancy

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.

FR / 6N