LODIGROUP
HYGIÈNE & BIOSÉCURITÉ

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : AURODIL
UFI : 4X97-R2GK-K00Q-6HFP

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

Professional use
Insecticide - biocidal use

Use descriptor system (REACH) :

Not available.

1.3. Details of the supplier of the safety data sheet

Registered company name : LODI S.A.S.
Address : PA des Quatre Routes.35390.Grand-Fougeray.FRANCE.
Telephone : 02.99.08.48.59. Fax : 02 99 08 38 68.
fds@lodi.fr
https://www.lodi-group.fr/

1.4. Emergency telephone number : +33 (0)1 45 42 59 59.

Association/Organisation : INRS / ORFILA http://www.centres-antipoison.net..

Other emergency numbers

European poison Control Center: 112

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Acute oral toxicity, Category 4 (Acute Tox. 4, H302).
Repeated exposure may cause skin dryness or cracking (EUH066).
Eye irritation, Category 2 (Eye Irrit. 2, H319).
Skin sensitisation, Category 1 (Skin Sens. 1, H317).
Aspiration hazard, Category 1 (Asp. Tox. 1, H304).
Hazardous to the aquatic environment - Acute hazard, Category 1 (Aquatic Acute 1, H400).
Hazardous to the aquatic environment - Chronic hazard, Category 1 (Aquatic Chronic 1, H410).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

Biocidal mixture (see section 15).

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :


GHS09


GHS08


GHS07

Signal Word :
DANGER
Product identifiers :

EC 258-067-9	PERMETHRIN (ISO)
EC 920-901-0	HYDROCARBURES, C11-C13, ISOALCANES, <2% AROMATIQUES
EC 245-387-9	PRALLETHRIN (ISO)

Hazard statements :

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Precautionary statements - Prevention :

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.

Precautionary statements - Response :	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P331	Do NOT induce vomiting.
Precautionary statements - Disposal :	
P501	Dispose of contents/container according to the regulation.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

The mixture does not contain substances> = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	Classification (EC) 1272/2008	Note	%
INDEX: 613_058_00_2 CAS: 52645-53-1 EC: 258-067-9 PERMETHRIN (ISO)	GHS07, GHS09 Wng Acute Tox. 4, H302 Skin Sens. 1, H317 Acute Tox. 4, H332 Aquatic Acute 1, H400 M Acute = 1000 Aquatic Chronic 1, H410 M Chronic = 1000		25 <= x % < 50
INDEX: 920_901_0 CAS: _ EC: 920-901-0 REACH: 01-2119456810-40 HYDROCARBURES, C11-C13, ISOALCANES, <2% AROMATIQUES	GHS08 Dgr Asp. Tox. 1, H304 EUH:066		10 <= x % < 25
INDEX: 51_03_6_A CAS: 51-03-6 EC: 200-076-6 REACH: 01-2119537431-46 PIPÉRONYL BUTOXYDE	GHS07, GHS09 Wng Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1 EUH:066		10 <= x % < 25
INDEX: 1335202817A CAS: 1335202-81-7 EC: 932-231-6 REACH: 01-2119560592-37 BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., CALCIUM SALTS	GHS05 Dgr Skin Irrit. 2, H315 Eye Dam. 1, H318		0 <= x % < 2.5
INDEX: 607_431_00_9 CAS: 23031-36-9 EC: 245-387-9 PRALLETHRIN (ISO)	GHS06, GHS09 Dgr Acute Tox. 4, H302 Acute Tox. 3, H331 Aquatic Acute 1, H400 M Acute = 100 Aquatic Chronic 1, H410 M Chronic = 100		0 <= x % < 2.5

Specific concentration limits:

Identification	Specific concentration limits	ATE
INDEX: 613_058_00_2 CAS: 52645-53-1 EC: 258-067-9 PERMETHRIN (ISO)		inhalation: ATE = 4.638 mg/l 4h (dust/mist) oral: ATE = 554 mg/kg BW
INDEX: 51_03_6_A CAS: 51-03-6 EC: 200-076-6 REACH: 01-2119537431-46 PIPÉRONYL BUTOXYDE		oral: ATE = 4570 mg/kg BW

INDEX: 607_431_00_9 CAS: 23031-36-9 EC: 245-387-9 PRALLETHRIN (ISO)		inhalation: ATE = 0.658 mg/l 4h (dust/mist) oral: ATE = 417 mg/kg BW

Nanoform

Not available.

Information on ingredients :

(Full text of H-phrases: see section 16)

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. description of first aid measures

In the event of exposure by inhalation :

Remove casualty to fresh air and keep warm and at rest. Seek mediacl attention if difficulties appear and persist.

in case of inhalation, obtain a medical examination immediatly and show the label

In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

Protect uninjured eye.

In the event of splashes or contact with skin :

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of an allergic reaction, seek medical attention.

In the event of swallowing :

Do not give the patient anything orally.

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water, administer activated medical charcoal and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention immediately, showing the label.

In case of acute distress, contact 15 (or 112).

4.2. Most important symptoms and effects, both acute and delayed

Eyes contact may be irritant

May cause sensitization by skin contact.

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Specific and immediate treatment :

Treat symptomatically.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist
- foam
- multipurpose ABC powder
- BC powder
- carbon dioxide (CO_2)

Unsuitable methods of extinction

In the event of a fire, do not use :

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO_2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

Cool containers exposed to heat with water and remove from fire area if it can be done without risk.Cool containers exposed to flames with water long time after the fire is out.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

Remove persons to safety.

Wear personal protection equipment.

For non first aid worker

Avoid any contact with the skin and eyes.

Evacuate the area

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Do not discharge into the aquatic environment.

6.3. Methods and material for containment and cleaning up

If the ground is contaminated, once the product has been recovered by sponging with an inert and non-combustible absorbent material, wash the contaminated area in plenty of water.

Clean preferably with a detergent, do not use solvents.

Rapidly collect the product. To do so, wear a mask and protective clothing

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Individuals with a history of skin sensitisation should not, under any circumstance, handle this mixture.

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Avoid contact with skin and eyes, inhalation of vapours and mists. Don’t use empty container before they have been cleaned. Before making transfer operations, assure that there aren’t any incompatible material residuals in the containers. Do not eat, drink and smoke when using this product.

Don’t use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Fire prevention :

Handle in well-ventilated areas.

Never inhale this mixture.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Contamined clothing should be changed before entering eating areas.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep the container tightly closed in a dry, well-ventilated place.

Keep away from food and drink, including those for animals.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Keep out of reach of children.

Keep away from sources of ignition - No Smoking.

Packaging

Always keep in packaging made of an identical material to the original.
Recommended types of packaging :
Original packaging.
Suitable packaging materials :
Original packaging.
Unsuitable packaging materials :
Different that the original packaging.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No data available.

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

PIPÉRONYL BUTOXYDE (CAS: 51-03-6)

Final use:	**Workers.**
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	0.443 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	1.6 mg of substance/m3

Final use:	**Consumers.**
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	0.221 mg/kg body weight/day
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	0.221 mg/kg body weight/day
Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	0.388 mg of substance/m3

Predicted no effect concentration (PNEC):

PIPÉRONYL BUTOXYDE (CAS: 51-03-6)

Environmental compartment:	Soil.
PNEC :	0.111 mg/kg
Environmental compartment:	Fresh water.
PNEC :	0.00148 mg/l
Environmental compartment:	Sea water.
PNEC :	0.000148 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	0.043 mg/kg
Environmental compartment:	Marine sediment.
PNEC :	0.0043 mg/kg
Environmental compartment:	Waste water treatment plant.
PNEC :	2.89 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- PVA (Polyvinyl alcohol)
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

|> - Body protection

Avoid skin contact.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 4, 5, 6) in accordance with EN13034/A1 to prevent skincontact.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

Exposure controls linked to environmental protection

Avoid release to the environment.

Do not discharge into drains or watercourses.

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state :	Fluid liquid.

Colour

Brown - yellow

transparent

Odour

Odour threshold :	Not stated.

Slight.

Melting point

Melting point/melting range :	Not relevant.

Freezing point

Freezing point / Freezing range :	Not stated.

Boiling point or initial boiling point and boiling range

Boiling point/boiling range :	Not relevant.

Flammability

Flammability (solid, gas) :	Not stated.

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) :	Not stated.
Explosive properties, upper explosivity limit (%) :	Not stated.

Flash point

Flash Point :	74.00 °C.

Auto-ignition temperature

Self-ignition temperature :	Not relevant.

Decomposition temperature

Decomposition point/decomposition range :	Not relevant.

pH

pH (aqueous solution) :	Not stated.
pH :	Not relevant.

Kinematic viscosity

Viscosity :	Not stated.
Viscosity :	14 mm2/s < v <= 20,5 mm2/s (40°C)

Solubility

Water solubility :	Dilutable.
Fat solubility :	Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water :	Not stated.

Vapour pressure

Vapour pressure (50°C) :	Below 110 kPa (1.10 bar).

Density and/or relative density

Density :	0.986

Relative vapour density

Vapour density :	Not stated.

9.2. Other information

No data available.

9.2.1. Information with regard to physical hazard classes

No data available.

9.2.2. Other safety characteristics

No data available.

SECTION 10 : STABILITY AND REACTIVITY

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11 : TOXICOLOGICAL INFORMATION

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

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Harmful if swallowed.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days.

Splashes in the eyes may cause irritation and reversible damage

May cause an allergic reaction by skin contact.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

11.1.1. Substances

Acute toxicity :

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., CALCIUM SALTS (CAS: 1335202-81-7)

Dermal route : LD50 > 2000 mg/kg bodyweight/day
Species : Rat

PRALLETHRIN (ISO) (CAS: 23031-36-9)

Oral route : LD50 = 417 mg/kg bodyweight/day
Species : Rat

Dermal route : LD50 > 5000 mg/kg bodyweight/day
Species : Rat

Inhalation route (Dusts/mist) : LC50 = 0.658 mg/l
Species : Rat
Duration of exposure : 4 h

PIPÉRONYL BUTOXYDE (CAS: 51-03-6)

Oral route : LD50 = 4570 mg/kg bodyweight/day
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 > 2000 mg/kg bodyweight/day
Species : Rabbit
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Dusts/mist) : LC50 > 5.9 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)

HYDROCARBURES, C11-C13, ISOALCANES, <2% AROMATIQUES (CAS: _)

Oral route : LD50 > 5000 mg/kg bodyweight/day
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 > 5000 mg/kg bodyweight/day
Species : Rabbit
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Vapours) : LC50 5000

PERMETHRIN (ISO) (CAS: 52645-53-1)

Oral route : LD50 = 554 mg/kg bodyweight/day
Species : Rat
OECD Guideline 423 (Acute Oral toxicityAcute Toxic Class Method)

Dermal route : LD50 > 2000 mg/kg bodyweight/day
Species : Rat
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Dusts/mist) : LC50 = 4.638 mg/l
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)
Duration of exposure : 4 h

Respiratory or skin sensitisation :

PERMETHRIN (ISO) (CAS: 52645-53-1)

Guinea Pig Maximisation Test (GMPT) : Sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

Germ cell mutagenicity :

PRALLETHRIN (ISO) (CAS: 23031-36-9)

Mutagenesis (in vitro) : Negative.

11.1.2. Mixture

Aspiration hazard :

May be fatal if swallowed and enters airways.

Aspiration toxicity includes severe acute effects such as chemical pneumonia, varying degrees of pulmonary injury or death following aspiration.

11.2. Information on other hazards

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 51-03-6 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 52645-53-1 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

SECTION 12 : ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

PRALLETHRIN (ISO) (CAS: 23031-36-9)

Fish toxicity :	LC50 = 0.012 mg/l Factor M = 10 Species : Oncorhynchus mykiss Duration of exposure : 96 h
	0.0001 < NOEC <= 0.001 mg/l Factor M = 100
Crustacean toxicity :	EC50 = 0.0062 mg/l Factor M = 100 Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 = 4.5 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., CALCIUM SALTS (CAS: 1335202-81-7)

Fish toxicity :	LC50 = 1 mg/l Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 2.9 mg/l Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 = 29 mg/l Duration of exposure : 96 h

PIPÉRONYL BUTOXYDE (CAS: 51-03-6)

Fish toxicity :	LC50 = 3.94 mg/l Species : Cyprinodon variegatus Duration of exposure : 96 h
	NOEC = 0.18 mg/l Species : Pimephales promelas
Crustacean toxicity :	EC50 = 0.51 mg/l Factor M = 1 Species : Daphnia magna Duration of exposure : 48 h
	NOEC = 0.03 mg/l Factor M = 1 Species : Daphnia magna Duration of exposure : 21 days
Algae toxicity :	ECr50 = 3.89 mg/l Species : Selenastrum capricornutum

Duration of exposure : 72 h

NOEC = 0.824 mg/l
Species : Selenastrum capricornutum

HYDROCARBURES, C11-C13, ISOALCANES, <2% AROMATIQUES (CAS: _)

Fish toxicity :
LC50 > 1000 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 96 h
OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC = 0.32 mg/l
Species : Oncorhynchus mykiss
Duration of exposure : 28 days

Crustacean toxicity :
EC50 > 1000 mg/l
Species : Daphnia magna
Duration of exposure : 48 h
OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC = 1 mg/l
Species : Daphnia magna
Duration of exposure : 21 days

Algae toxicity :
ECr50 > 1000 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

NOEC = 1000 mg/l
Species : Pseudokirchnerella subcapitata
Duration of exposure : 72 h
OECD Guideline 201 (Alga, Growth Inhibition Test)

PERMETHRIN (ISO) (CAS: 52645-53-1)

Fish toxicity :
LC50 = 0.009 mg/l
Factor M = 100
Species : Oncorhynchus mykiss
Duration of exposure : 96 h

Crustacean toxicity :
EC50 = 0.00064 mg/l
Factor M = 1000
Species : Daphnia magna
Duration of exposure : 48 h

Algae toxicity :
Species : Pseudokirchnerella subcapitata

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

PRALLETHRIN (ISO) (CAS: 23031-36-9)

Biodegradability :
Non-rapidly degradable.

BENZENESULFONIC ACID, C10-13-ALKYL DERIVS., CALCIUM SALTS (CAS: 1335202-81-7)

Biodegradability :
no degradability data is available, the substance is considered as not degrading quickly.

PIPÉRONYL BUTOXYDE (CAS: 51-03-6)

Biodegradability :
no degradability data is available, the substance is considered as not degrading quickly.

HYDROCARBURES, C11-C13, ISOALCANES, <2% AROMATIQUES (CAS: _)

Biodegradability :
Non-rapidly degradable.

PERMETHRIN (ISO) (CAS: 52645-53-1)

Biodegradability : Non-rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

PRALLETHRIN (ISO) (CAS: 23031-36-9)
Octanol/water partition coefficient : log Koe = 4.49

PIPÉRONYL BUTOXYDE (CAS: 51-03-6)
Octanol/water partition coefficient : log Koe = 4.8

PERMETHRIN (ISO) (CAS: 52645-53-1)
Octanol/water partition coefficient : log Koe = 6.5

Bioaccumulation : BCF >= 500.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Recycle or dispose of waste in compliance with current legislation, via a certified collector or company.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2020 [40-20] - ICAO/IATA 2023 [64]).

14.1. UN number or ID number

3082

14.2. UN proper shipping name

UN3082=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(permethrin (iso), prallethrin (iso))

14.3. Transport hazard class(es)

- Classification :

9

14.4. Packing group

III

14.5. Environmental hazards

- Environmentally hazardous material :

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M6	III	9	90	5 L	274 335 375 601	E1	3	-

Not subject to this regulation if Q <= 5 l / 5 kg (ADR 3.3.1 - DS 375)

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	9	-	III	5 L	F-A. S-F	274 335 969	E1	Category A	-

Not subject to this regulation if Q <= 5 l / 5 kg (IMDG 3.3.1 - 2.10.2.7)

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	964	450 L	964	450 L	A97 A158 A197 A215	E1
	9	-	III	Y964	30 kg G	-	-	A97 A158 A197 A215	E1

Not subject to this regulation if Q <= 5 l / 5 kg (IATA 4.4.4 - DS A197)

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

Marine pollutant (IMDG 3.1.2.9):(permethrin (iso))

14.7. Maritime transport in bulk according to IMO instruments

No data available.

SECTION 15: Regulatory information

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

Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

Container information:

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH): https://echa.europa.eu/substances-restricted-under-reach.

Particular provisions :

No data available.

Labelling for biocidal products (Regulation (UE) n° 528/2012) :

Name	CAS	%	Product-type
PIPÉRONYL BUTOXYDE	51-03-6	150.00 g/l	18
PRALLETHRIN (ISO)	23031-36-9	10.0 g/l	18
PERMETHRIN (ISO)	52645-53-1	250.0 g/l	18

Product-type 18 : Insecticides, acaricides and products to control other arthropods.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
NOEC : The concentration with no observed effect.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
ATE : Acute Toxicity Estimate
BW : Body Weight
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
UFI : Unique formulation identifier.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
ADR : European agreement concerning the international carriage of dangerous goods by Road.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
ICAO : International Civil Aviation Organisation
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefahrdungsklasse (Water Hazard Class).
GHS07 : Exclamation mark
GHS08 : Health hazard
GHS09 : Environment
PBT: Persistent, bioaccumulable and toxic.
vPvB : Very persistent, very bioaccumulable.
SVHC : Substances of very high concern.
|> Modification compared to the previous version