

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 : PHOBI F&F+
UFI : XMKT-3N6Y-000G-CUR8

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

Recommended use(s): Insecticide - biocidal use
Use(s) advised against: Do not use for purposes other than those stated in "Recommended use(s)"

Use descriptor system (REACH) :

Not available.

1.3. Details of the supplier of the safety data sheet

Registered company name : LODI SAS .
Address : PA des Quatre Routes .35390.Grand-Fougeray.FRANCE.
Telephone : 02.99.08.48.59. Fax : .
fds@lodi.fr
Marketing Company : LODI UK - Pensnett Trading Estate 3rd Avenue - West Midlands - DY6 7FD - Kingswinford - UNITED KINGDOM.

1.4. Emergency telephone number : .

Association/Organisation : National Poisons Information Service : 0344 892 0111.

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.

Aerosol, Category 1 (Aerosol 1, H222 - H229).
Repeated exposure may cause skin dryness or cracking (EUH066).
Eye irritation, Category 2 (Eye Irrit. 2, H319).
Specific target organ toxicity (single exposure), Category 3 (STOT SE 3, H336).
Specific target organ toxicity (repeated exposure), Category 2 (STOT RE 2, H373).
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).
The propellant gas is not taken into account when determining the health and environmental classification of the mixture.

2.2. Label elements

Biocidal mixture (see section 15).
Mixture for aerosol application.

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

Hazard pictograms :



GHS09

GHS08

GHS02

GHS07

Signal Word :

DANGER

Product identifiers :

EC 927-241-2

EC 200-661-7

EC 254-484-5

HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

PROPAN-2-OL

CYPHENOTHRINE TECH

Hazard statements :

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

H319

Causes serious eye irritation.

H336

May cause drowsiness or dizziness.

H373

May cause damage to organs through prolonged or repeated exposure (if inhaled).

H410

Very toxic to aquatic life with long lasting effects.

EUH066

Repeated exposure may cause skin dryness or cracking.

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Precautionary statements - General :

P102 Keep out of reach of children.

Precautionary statements - Prevention :

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P260 Do not breathe spray.

P273 Avoid release to the environment.

Precautionary statements - Response :

P391 Collect spillage.

Precautionary statements - Storage :

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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) $\geq 0.1\%$ 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 $\geq 0.1\%$ 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: 601_004_00_A CAS: 106-97-8 EC: 203-448-7 REACH: 01-2119474691-32 BUTANE (CONTAINING < 0,1 % BUTANDIENE)	GHS02 Dgr Flam. Gas 1A, H220 Press. Gas, H280	[1] [7]	30 <= x % < 40
INDEX: 601_003_005O CAS: 74-98-6 EC: 200-827-9 REACH: 01-2119486944-21 PROPANE	GHS02 Dgr Flam. Gas 1A, H220 Press. Gas, H280	[1] [7]	20 <= x % < 30
INDEX: 75_28_5_A CAS: 75-28-5 EC: 200-857-2 REACH: 01-2119485395-27-XXXX ISOBUTANE	GHS02 Dgr Flam. Gas 1A, H220 Press. Gas, H280	C [1] [7]	10 <= x % < 20
INDEX: 34590_94_8 CAS: 34590-94-8 EC: 252-104-2 DIPROPYLENE GLYCOL MONOMETHYL ETHER		[1]	2.5 <= x % < 10
INDEX: 927_241_2A EC: 927-241-2 REACH: 01-2119471843-32 HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	GHS07, GHS08, GHS02 Dgr Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 3, H412 EUH:066		2.5 <= x % < 10
INDEX: 67_63_0D CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25 PROPAN-2-OL	GHS07, GHS02 Dgr Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]	2.5 <= x % < 10
INDEX: R39515_40_7 CAS: 39515-40-7 EC: 254-484-5 CYPHENOTHRINE TECH	GHS07, GHS09, GHS08 Dgr Acute Tox. 4, H302 Acute Tox. 4, H332 STOT RE 1, H372 Aquatic Acute 1, H400 M Acute = 1000 Aquatic Chronic 1, H410 M Chronic = 1000		0 <= x % < 2.5

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INDEX: 613_259_00_5 CAS: 72963-72-5 EC: 428-790-6 IMIPROTHRIN (ISO)	GHS07, GHS09, GHS08 Wng Acute Tox. 4, H302 Acute Tox. 4, H332 Carc. 2, H351 STOT SE 2, H371 Aquatic Acute 1, H400 M Acute = 10 Aquatic Chronic 1, H410 M Chronic = 10	[2]	0 <= x % < 2.5
INDEX: 89997637_CO2 CAS: 89997-63-7 EC: 289-699-3 CHRYSANTHEMUM CINERARIAEFOLIUM, EXTRACT FROM OPEN AND MATURE FLOWERS OF TANACETUM CINERARIIFOLIUM OBTAINED WITH SUPERCRITICAL CO2	GHS07, GHS09 Wng Acute Tox. 4, H302 Skin Sens. 1B, H317 Acute Tox. 4, H332 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: 34590_94_8 CAS: 34590-94-8 EC: 252-104-2 DIPROPYLENE GLYCOL MONOMETHYL ETHER		inhalation: ATE = 3.40447 mg/l (vapours) dermal: ATE = 9510 mg/kg BW
INDEX: 67_63_0D CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25 PROPAN-2-OL		dermal: ATE = 13900 mg/kg BW oral: ATE = 5840 mg/kg BW
INDEX: R39515_40_7 CAS: 39515-40-7 EC: 254-484-5 CYPHENOTHRINE TECH		oral: ATE = 318 mg/kg BW
INDEX: 613_259_00_5 CAS: 72963-72-5 EC: 428-790-6 IMIPROTHRIN (ISO)		inhalation: ATE = 1.4 mg/l 4h (dust/mist) oral: ATE = 550 mg/kg BW
INDEX: 89997637_CO2 CAS: 89997-63-7 EC: 289-699-3 CHRYSANTHEMUM CINERARIAEFOLIUM, EXTRACT FROM OPEN AND MATURE FLOWERS OF TANACETUM CINERARIIFOLIUM OBTAINED WITH SUPERCRITICAL CO2		inhalation: ATE = 2.3 mg/l 4h (dust/mist) oral: ATE = 1030 mg/kg BW

Nanoform

Not available.

Information on ingredients :

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

- [1] Substance for which maximum workplace exposure limits are available.
- [2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.
- [7] Propellant gas

> 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 :

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

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

In the event of splashes or contact with eyes :

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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 case of skin exposure, clean skin with water then with soap. Seek medical attention if irritation or discomfort develops

In the event of swallowing :

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

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

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

Never give anything by mouth . Do not induce vomiting.

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

Vapor inhalation may cause drowsiness and dizziness

Cause serious eye irritation

Repeated exposure may cause skin dryness or cracking.

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

Specific and immediate treatment :

Treat symptomatically.

Information for the doctor :

Treat symptomatically.

> SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

> Suitable methods of extinction

In the event of a fire, use :

- sprayed water or water mist

- foam

- carbon dioxide (CO₂)

- powder

Prevent the effluent of fire-fighting measures from entering drains or waterways.

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 (CO₂)

5.3. Advice for firefighters

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

> SECTION 6 : ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

Avoid inhaling the vapors.

Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

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.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures

Use drums to dispose of collected waste in compliance with current regulations (see section 13).

> 6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.
Collecte mechanically the product.

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.

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.
Remove contaminated clothing and protective equipment before entering eating areas.

Fire prevention :

Handle in well-ventilated areas.
Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.
Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.
Do not spray on a naked flame or any incandescent material.
Do not pierce or burn, even after use.
Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.
Keep packages tightly closed and away from sources of heat, sparks and naked flames.
Do not use tools which may produce sparks. Do not smoke.
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.
Do not breathe in aerosols.
Avoid inhaling vapors. Carry out any industrial operation which may give rise to this in a sealed apparatus.
Provide vapor extraction at the emission source and also general ventilation of the premises.
Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.
In all cases, recover emissions at source.
Avoid skin and eye contact with this mixture.
Avoid exposure - obtain special instructions before use.
Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.
Never open the packages under pressure.

> 7.2. Conditions for safe storage, including any incompatibilities

Follow proper grounding procedures to avoid static electricity. Use grounded electrical/mechanical equipment.

> Storage

Keep out of reach of children.
Keep the container tightly closed in a dry, well-ventilated place.
Keep away from all sources of ignition - do not smoke.
Keep well away from all sources of ignition, heat and direct sunlight.
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.
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.
Separate out aerosols in stock is recommended. The "aerosols" zone must be delimited by either metal mesh with 5 cm mesh forming a cage, or with walls, to avoid aerosols projection which could ignite the remaining stock.

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 than the original packaging.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits :

- European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
34590-94-8	308	50	-	-	Peau

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
106-97-8	1000 ppm				
74-98-6	1000 ppm				
75-28-5	1000 ppm				
34590-94-8	100 ppm	150 ppm		Skin	
67-63-0	200 ppm	400 ppm		A4; BEI	

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
106-97-8		1000 ppm 2400 mg/m3		4(II)
74-98-6		1000 ppm 1800 mg/m3		4(II)
75-28-5		1000 ppm 2400 mg/m3		4(II)
34590-94-8		50 ppm 310 mg/m3		1(I)
67-63-0		200 ppm 500 mg/m3		2(II)

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m3 :	VLE-ppm :	VLE-mg/m3 :	Notes :	TMP No :
106-97-8	800	1900	-	-	-	-
34590-94-8	50	308	-	-	*	84
67-63-0	-	-	400	980	-	84

- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
106-97-8	600 ppm 1450 mg/m3	750 ppm 1810 mg/m3		Carc	
34590-94-8	50 ppm 308 mg/m3			Sk	
67-63-0	400 ppm 999 mg/m3	500 ppm 1250 mg/m3			

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

HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
77 mg/kg body weight/day

Inhalation.
Long term systemic effects.
871 mg of substance/m3

Consumers.

Ingestion.
Long term systemic effects.
46 mg/kg body weight/day

Dermal contact.
Long term systemic effects.
46 mg/kg body weight/day

Inhalation.
Long term systemic effects.
185 mg of substance/m3

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DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)

Final use:	Workers.
Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	283 mg/kg body weight/day

Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	308 mg of substance/m3

Final use:	Consumers.
Exposure method:	Ingestion.
Potential health effects:	Long term systemic effects.
DNEL :	36 mg/kg body weight/day

Exposure method:	Dermal contact.
Potential health effects:	Long term systemic effects.
DNEL :	121 mg/kg body weight/day

Exposure method:	Inhalation.
Potential health effects:	Long term systemic effects.
DNEL :	37.2 mg of substance/m3

> Predicted no effect concentration (PNEC):

DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)

Environmental compartment:	Soil.
PNEC :	2.74 mg/kg

Environmental compartment:	Fresh water.
PNEC :	19 mg/l

Environmental compartment:	Sea water.
PNEC :	1.9 mg/l

Environmental compartment:	Intermittent waste water.
PNEC :	190 mg/l

Environmental compartment:	Fresh water sediment.
PNEC :	70.2 mg/kg

Environmental compartment:	Marine sediment.
PNEC :	7.02 mg/kg

Environmental compartment:	Waste water treatment plant.
PNEC :	4168 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.

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- 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)
- Butyl Rubber (Isobutylene-isoprene copolymer)
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

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 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

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

- Respiratory protection

Avoid inhaling vapors.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask :

Wear a disposable half-mask aerosol filter in accordance with standard EN149/A1.

Category :

- FFP1
- FFP3

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

- A1 (Brown)
- A3 (Brown)

Particle filter according to standard EN143 :

- P1 (White)
- P3 (White)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state : Fluid liquid.
Spray.

Colour

Colour: Colourless to slightly yellow.

Odour

Odour threshold : Not stated.
Odour : Characteristic.

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.
Extremely flammable aerosol

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) : Not stated.
Explosive properties, upper explosivity limit (%) : Not stated.
Pressurised container: may burst if heated.

Flash point

Flash point interval : Not relevant.

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< 0°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 : Insoluble.
Fat solubility : Not stated.

Partition coefficient n-octanol/water (log value)

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

Vapour pressure

Vapour pressure (50°C) : Not relevant.

Density and/or relative density

Density : 0.86 (PA)

Relative vapour density

Vapour density : Not stated.

Particle characteristics

The mixture does not contain nanoforms.

9.2. Other information

VOC (g/l) : 524
% VOC : 87%

> **9.2.1. Information with regard to physical hazard classes**

% of flammable components: 99

Aerosols

Chemical combustion heat : >= 30 kJ/g.

9.2.2. Other safety characteristics

No data available.

> **SECTION 10 : STABILITY AND REACTIVITY**

10.1. Reactivity

Pressurized container: may burst if heated.
Extremely flammable aerosol.

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**

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- heating
- heat
- flames and hot surfaces
- temperatures above 50°C.

> **10.5. Incompatible materials**

Keep away from :

- strong acids
- strong bases

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.

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

Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness.

Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

May cause severe damage to organs in the event of repeated or prolonged exposure.

11.1.1. Substances

> Acute toxicity :

CHRYSANTHEMUM CINERARIAEFOLIUM, EXTRACT FROM OPEN AND MATURE FLOWERS OF TANACETUM CINERARIIFOLIUM
OBTAINED WITH SUPERCRITICAL CO2 (CAS: 89997-63-7)

Oral route : LD50 = 1030 mg/kg bodyweight/day
Species : Rat

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

Inhalation route (Dusts/mist) : LC50 = 2.3 mg/l
Species : Rat
Duration of exposure : 4 h

IMIPROTHRIN (ISO) (CAS: 72963-72-5)

Oral route : LD50 = 550 mg/kg bodyweight/day

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

Inhalation route (Dusts/mist) : LC50 = 1.4 mg/l
Duration of exposure : 4 h

CYPHENOTHRINE TECH (CAS: 39515-40-7)

Oral route : LD50 = 318 mg/kg bodyweight/day
Species : Rat

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

Inhalation route (Dusts/mist) : LC50 > 1.39 mg/l

PROPAN-2-OL (CAS: 67-63-0)

Oral route : LD50 = 5840 mg/kg bodyweight/day
Species : Rat

Dermal route : LD50 = 13900 mg/kg bodyweight/day
Species : Rat

Inhalation route (Vapours) : LC50 > 25 mg/l
Species : Rat

HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

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 : Rat
OECD Guideline 402 (Acute Dermal Toxicity)

Inhalation route (Vapours) : LC50 > 5000 mg/m3
Species : Rat

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OECD Guideline 403 (Acute Inhalation Toxicity)

DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)
Oral route : LD50 > 5000 mg/kg bodyweight/day
Species : Rat

Dermal route : LD50 = 9510 mg/kg bodyweight/day
Species : Rabbit

Inhalation route (Vapours) : LC50 = 3.40447 mg/l
Species : Rat

Skin corrosion/skin irritation :

DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)
Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Germ cell mutagenicity :

HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
No mutagenic effect.

OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
OECD Guideline 471 (Bacterial Reverse Mutation Assay)

Carcinogenicity :

HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
Carcinogenicity Test : Negative.
No carcinogenic effect.

Reproductive toxicant :

HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS
No toxic effect for reproduction

11.1.2. Mixture

No toxicological data available for the mixture.

11.2. Information on other hazards

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

CAS 128-37-0 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.
CAS 67-63-0 : 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

CHRYSANTHEMUM CINERARIAEFOLIUM, EXTRACT FROM OPEN AND MATURE FLOWERS OF TANACETUM CINERARIIFOLIUM
OBTAINED WITH SUPERCRITICAL CO2 (CAS: 89997-63-7)

Fish toxicity : LC50 = 0.0052 mg/l
Factor M = 100
Species : Oncorhynchus mykiss
Duration of exposure : 96 h

Crustacean toxicity : EC50 = 0.012 mg/l
Species : Daphnia magna
Duration of exposure : 48 h

Aquatic plant toxicity : ECr50 = 0.0014 mg/l
Duration of exposure : 96 h

IMIPROTHRIN (ISO) (CAS: 72963-72-5)

Fish toxicity : LC50 = 0.038 mg/l
Factor M = 10
Species : Oncorhynchus mykiss

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	Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 0.051 mg/l Factor M = 10 Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 > 7.8 mg/l Species : Scenedesmus capricornutum Duration of exposure : 72 h
CYPHENOTHRINE TECH (CAS: 39515-40-7)	
Fish toxicity :	LC50 = 0.00034 mg/l Factor M = 1000 Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 0.00043 mg/l Factor M = 1000 Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 > 0.014 mg/l Duration of exposure : 72 h
PROPAN-2-OL (CAS: 67-63-0)	
Fish toxicity :	LC50 > 9640 mg/l Species : Pimephales promelas Duration of exposure : 96 h
Crustacean toxicity :	EC50 > 10000 mg/l Species : Daphnia magna Duration of exposure : 24 h
HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS	
Fish toxicity :	LC50 < 30 mg/l Species : Oncorhynchus mykiss Duration of exposure : 96 h
Crustacean toxicity :	EC50 < 46 mg/l Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	ECr50 > 1000 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h
	NOEC < 1 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h
DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)	
Fish toxicity :	LC50 > 10000 mg/l Species : Poecilia reticulata Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 1919 mg/l Species : Daphnia magna Duration of exposure : 48 h
	NOEC = 0.5 mg/l Species : Daphnia magna
Algae toxicity :	ECr50 > 969 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 96 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

> 12.2.1. Substances

CHRYSANTHEMUM CINERARIAEFOLIUM, EXTRACT FROM OPEN AND MATURE FLOWERS OF TANACETUM CINERARIIFOLIUM OBTAINED WITH SUPERCRITICAL CO2 (CAS: 89997-63-7)

Biodegradability : Non-rapidly degradable.

IMIPROTHRIN (ISO) (CAS: 72963-72-5)

Biodegradability : Non-rapidly degradable.

CYPHENOTHRINE TECH (CAS: 39515-40-7)

Biodegradability : Non-rapidly degradable.

HYDROCARBONS, C9-C10, N-ALKANES, ISOALKANES, CYCLICS, <2% AROMATICS

Biodegradability : Rapidly degradable.

DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)

Biodegradability : Rapidly degradable.

ISOBUTANE (CAS: 75-28-5)

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

PROPANE (CAS: 74-98-6)

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

BUTANE (CONTAINING < 0,1 % BUTADIENE) (CAS: 106-97-8)

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

PROPAN-2-OL (CAS: 67-63-0)

Chemical oxygen demand : DCO = 2294000 mg/kg

Five-day biochemical oxygen demand : DBO5 = 1171000 mg/kg

Biodegradability : Rapidly degradable.

12.3. Bioaccumulative potential

> 12.3.1. Substances

CHRYSANTHEMUM CINERARIAEFOLIUM, EXTRACT FROM OPEN AND MATURE FLOWERS OF TANACETUM CINERARIIFOLIUM OBTAINED WITH SUPERCRITICAL CO2 (CAS: 89997-63-7)

Octanol/water partition coefficient : log K_{ow} > 4

IMIPROTHRIN (ISO) (CAS: 72963-72-5)

Octanol/water partition coefficient : log K_{ow} = 2.9

Bioaccumulation : BCF = 0.7638

CYPHENOTHRINE TECH (CAS: 39515-40-7)

Octanol/water partition coefficient : log K_{ow} = 5.79

PROPAN-2-OL (CAS: 67-63-0)

Octanol/water partition coefficient : log K_{ow} = 0.05

DIPROPYLENE GLYCOL MONOMETHYL ETHER (CAS: 34590-94-8)

Octanol/water partition coefficient : log K_{ow} = 0.006

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.

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

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

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 2022 [41-22] - ICAO/IATA 2023 [64]).

14.1. UN number or ID number

1950

14.2. UN proper shipping name

UN1950=AEROSOLS, flammable

14.3. Transport hazard class(es)

- Classification :



2.1

14.4. Packing group

-

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
	2	5F	-	2.1	-	1 L	190 327 344 625	E0	2	D

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	2	See SP63	-	See SP277	F-D. S-U	63 190 277 327 344 381 959	E0	- SW1 SW22	SG69

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	2.1	-	-	203	75 kg	203	150 kg	A145 A167 A802	E0
	2.1	-	-	Y203	30 kg G	-	-	A145 A167 A802	E0

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

For exempted 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):(cyphenothrine tech)

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:

Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

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>.

Explosives precursors :

The mixture does not contain any substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors.

Particular provisions :

No data available.

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

Name	CAS	%		Product-type
IMIPROTHRIN (ISO)	72963-72-5	1.10	g/kg	18
CHRYSANTHEMUM CINERARIAEFOLIUM, EXTRACT FROM OPEN AND MATURE FLOWERS OF TANACETUM CINERARIIFOLIUM OBTAINED WITH SUPERCRITICAL CO2	89997-63-7	0.10	g/kg	18
CYPHENOTHRINE TECH	39515-40-7	3.30	g/kg	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 :

H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
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.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer .
H371	May cause damage to organs .
H372	Causes damage to organs through prolonged or repeated exposure .
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
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.

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ATE : Acute Toxicity Estimate
BW : Body Weight
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
CMR: Carcinogenic, mutagenic or reprotoxic.
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 : Wassergefährdungsklasse (Water Hazard Class).
GHS02 : Flame
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