



MATERIAL SAFETY DATA SHEET (MSDS)

Agrochemicals

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1. PRODUCT IDENTIFICATION

Product Name : **PROCON 25 EC**
Active ingredient : Lambda cyhalothrin 25 g/l
Chemical name : (RS)-alpha-cyano-3-phenoxybenzyl 3-[2-chloro-3,3,3-trifluoropropenyl]-2,2,-dimethylcyclopropanecarboxylate.
Chemical class : a pyrethroid insecticide
Empirical formula : C₂₃H₁₉CF₃NO₃
CAS No. : 91465-08-6
Emergency Number : (021) 837-00120

2. COMPOSITION/INFORMATION ON INGREDIENTS

EC-No. : 415-130-7 Lambda-cyhalothrin
EC-No. : 265-199-0 Solvent naphtha (petroleum), light aromatic

Hazardous ingredients	CAS-No.	Hazard symbols	Risk Phrases	Concentration
Lambda-cyhalothrin (Classification according to Directive 67/548/EEC)	91465-08-6	T+,N	R21-R25-R26-R50/53	25 g/l
Solvent naphtha (petroleum), light aromatic	64742-95-6	Xn,N	R10-R37-R51/53-R65-R66-R67	> 500 g/l
Alkylphenol Ethoxylate	68412-54-4	Xn	R22-R36/38-R53	< 100 g/l
Calcium alkyl benzene sulphonate	26264-06-2	Xi	R38-R41	< 100 g/l

For the full text of the risk phrases mentioned in this Section, see Section 16.

3. HAZARDS IDENTIFICATION

- Toxic by inhalation.
- Harmful if swallowed.
- May cause damage if aspirated into the lungs.
- Irritating to respiratory system and skin. May cause tingling/ numbness in exposed areas (paresthesia). Risk of serious damage to eyes.
- Flammable.
- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. FIRST AID MEASURES

If swallowed seek medical advice immediately and show this container or label.

- **Eye contact:** Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.
- **Skin contact:** Take off immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water. Such action is essential to minimise contact with skin. Contaminated clothing should be laundered before re-issue.
- **Inhalation:** Remove patient from exposure, keep warm and at rest. Obtain medical attention as a precaution.
- **Ingestion:** If swallowed seek medical advice immediately and show the container, label or this Data Sheet, if possible. Do not induce vomiting.

Medical advice

If the amount of chemical is judged to be less than a lethal dose, observe the patient and treat symptomatically. If gastric lavage is considered necessary, prevent aspiration of gastric material. Consider administration of activated charcoal and a laxative.



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5. FIRE FIGHTING MEASURES

Flammable: Keep fire exposed containers cool by spraying with water.

Extinguishing media: For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires, use foam or water-fog; avoid use of water jet. Contain run-off water with, for example, temporary earth barriers.

Protective Equipment: A self-contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure suitable personal protection during removal of spillages. This means wearing a face mask that gives protection against organic vapours, eye protection, chemically resistant gloves, boots and coveralls. See Also Section 8

Clean up methods: Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Wash the spillage area with water. Washings must be prevented from entering surface water drains.

Spillages or uncontrolled discharges into water courses must be alerted to the appropriate regulatory body.

7. HANDLING AND STORAGE

HANDLING

Read the label before use.

Safe handling advice: Avoid contact with skin and eyes. Do not breathe spray. Avoid inhalation of high concentrations of vapours. When using do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

STORAGE

Safe storage advice : Keep in original containers, tightly closed, out of reach of children. Keep away from food, drink and animal feeding stuffs. Protect from extremes of temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection

When using this product refer to the label for details.

Where suitable engineering controls are not fitted or are inadequate, wear suitable protective equipment. When selecting personal protective equipment, users should consult their supplier to confirm that the equipment is suitable.

Respiratory protect: Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. Respiratory protective equipment should conform to the appropriate EN standard.

Eye protection: Wear suitable eye/face protection conforming to EN 166

Hand protection: Wear suitable gloves conforming to EN 374 Suitable materials: nitrile rubber

Body protection: Wear suitable protective clothing.

Occupational exposure limits

Hazardous ingredient: Lambda-cyhalothrin, 8 hr TWA: 0.04 mg/m³. Sk : Can be absorbed through skin

Hazardous ingredient: Mixed hydrocarbon solvents OEL 8 hr TWA : 100 mg/m³. RCP (Reciprocal calculation procedure.)

Not applicable to field use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid
Colour : almost colourless to pale yellow
Odour : aromatic
Flash point : not less than 38°C
Explosive properties : Non-explosive.
Density : 0.91 g/ml at 20°C
Solubility : miscible in/with water
Oxidizing properties : Non-oxidising



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10. STABILITY AND REACTIVITY

Hazardous decomposition products: Combustion or thermal decomposition will evolve toxic and irritant vapours.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (LETHAL DOSES)

LD₅₀ Oral rat (both genders): approx 668 mg/kg

The solvent(s) in this product may cause bronchopneumonia or pulmonary edema if aspirated into the respiratory system during ingestion or from vomiting.

LD₅₀ Dermal rat (both genders): > 1840 mg/kg

LC₅₀ Inhalation male rats: 1.384 mg/l 4 hours

LC₅₀ Inhalation female rats: 1 mg/l 4 hours

ACUTE TOXICITY (IRRITATION, SENSITISATION ETC.)

Eye Irritation: The concentrate is at least a severe eye irritant.

Skin Irritation: Severe irritant to rabbit skin.

Skin Sensitisation: Unlikely to cause skin sensitisation.

Other Effects: In humans may cause tingling or numbness in exposed areas (paraesthesia). The effect may result from splash, aerosol or transfer to the face from contaminated gloves and hands. This effect is transient, lasting up to 24 hours.

Respiratory Irritation: By consideration of the components of this mixture it is likely to be irritant.

CHRONIC TOXICOLOGICAL EFFECTS / LONG TERM EXPOSURE

Long Term Exposure: No long term risks to man are associated with this material when handled and used as directed on the label.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND DISTRIBUTION

Inform. applies to: Lambda-cyhalothrin

The substance is essentially insoluble in water.

The substance has low mobility in soil.

BIOACCUMULATIVE POTENTIAL

Inform. applies to: Lambda-cyhalothrin

The substance has high potential for bioaccumulation. It is rapidly metabolised and excreted.

PERSISTENCE AND DEGRADATION

Inform. applies to: Lambda-cyhalothrin

There is evidence of rapid hydrolysis in soil.

There is evidence of photodegradation in soil.

There is evidence of photodegradation in water.

There is evidence of rapid biodegradation in soil and water.

ECOTOXICITY

Very toxic to aquatic organisms.

Toxicity to fish LC₅₀ 96 hours Rainbow trout: 16.6 µg/l

Toxicity to daphnia: EC₅₀ 48 hours Daphnia magna: 1.8 µg/l

Toxicity to algae: EbC₅₀ 96 hours green algae: 27 mg/l. ErC50 96 hours green alga : 31 mg/l



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13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Surplus material must be disposed of as detailed in the 'Guidelines for the avoidance, limitation and disposal of pesticide waste on the farm' GCPF, 1987. Empty containers should be washed and discarded. Empty containers should not be used for other purposes. Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Road transport ADR/RID

UN No: UN1993

Class-primary: 3 Flammable Liquid

UN Pack. Group: III

Proper shipping name : FLAMMABLE LIQUID, N.O.S. (CONTAINS SUBSTITUTED BENZENOID HYDROCARBONS AND LAMBDA-CYHALOTHRIN 2.5%)

Maritime transport IMDG

UN No. : UN1993

Class-primary: 3 Flammable Liquid

UN Pack. Group: III

Proper shipping name: FLAMMABLE LIQUID, N.O.S. (CONTAINS SUBSTITUTED BENZENOID HYDROCARBONS AND LAMBDA-CYHALOTHRIN 5%)

Marine pollutant: Yes

Air transport ICAO/IATA

UN/ID No.: UN1993

Class-primary: 3 Flammable Liquid

UN Pack. Group: III

Proper shipping name: FLAMMABLE LIQUID, N.O.S. (CONTAINS SUBSTITUTED BENZENOID HYDROCARBONS AND LAMBDA-CYHALOTHRIN 5%)

15. REGULATORY INFORMATION

Classification	: FLAMMABLE, TOXIC AND DANGEROUS FOR THE ENVIRONMENT
Hazard symbols	: T N
Risk Phrases	: (R10) Flammable. (R22) Harmful if swallowed. (R23) Toxic by inhalation. (R37/38) Irritating to respiratory system and skin. (R41) Risk of serious damage to eyes. (R50/53) Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. (R65) Harmful: May cause lung damage if swallowed.
Safety Phrases	: (S2) Keep out of the reach of children. (S13) Keep away from food, drink and animal feeding stuffs. (S20/21) When using, do not eat, drink or smoke. (S26) In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. (S35) This material and its container must be disposed of in a safe way. (S39) Wear eye/face protection. (S45) In case of accident or if you feel unwell, seek medical a contamination.
Special label	: To avoid risks to man and the environment, comply with the instructions for use.

This preparation is covered by the EEC Dangerous Preparations Directive. It has therefore been labelled in accordance with these regulations. Users should ensure that they comply with any relevant local, state or national legislation.



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16. OTHER INFORMATION

Use: : To control insects in agricultural and horticultural crops.

Text of R phrases mentioned in Section 2

(R10) Flammable.

(R21) Harmful in contact with skin.

(R22) Harmful if swallowed.

(R25) Toxic if swallowed.

(R26) Very toxic by inhalation.

(R36/38) Irritating to eyes and skin.

(R37) Irritating to respiratory system.

(R38) Irritating to skin.

(R41) Risk of serious damage to eyes.

(R50/53) Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(R51/53) Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(R53) May cause long-term adverse effects in the aquatic environment.

(R65) Harmful: May cause lung damage if swallowed.

(R66) Repeated exposure may cause skin dryness or cracking

(R67) Vapours may cause drowsiness and dizziness

Read the label before you buy: use pesticides safely.

This data sheet was prepared in accordance with Directive 91/155/EEC (93/112/EC, 2001/58/EC)

The information on this sheet is not a specification, it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed.