

## Safety Data Sheet

according to Regulation (EC) No 1907/2006 (REACH)  
Classifications according to Regulation (EC) No 1272/2008.  
Printdate 23 Apr 2024

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product name:

Deltamethrin

### 1.1. Catalog No.:

688755

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical  
uses: R&D

### 1.3. Uses advised against:

HPC Standards GmbH  
Am Wieseneck 7

04451 Cunnersdorf  
Deutschland

Tel. +49 34291 3372-36  
Fax. +49 34291 3372-39  
contact@hpc-standards.com

### 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36  
This number is only available during office hours.

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Oral (Category 3), H301  
Acute aquatic toxicity (Category 1), H400  
Chronic aquatic toxicity (Category 1), H410  
For the full text of the H-Statements mentioned in this Section, see Section 16.  
Classification according to EU Directives 67/548/EEC or 1999/45/EC  
T Toxic R23/25  
N Dangerous for the  
environment  
R50/53

### 2.2. Label elements

#### 2.2.1. Pictogram



## 2.2.2.

Signal word Danger Hazard statement(s)

H301 Toxic if swallowed.

H331 Toxic if inhaled.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

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

P273 Avoid release to the environment.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P311 Call a POISON CENTER or doctor/ physician.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard

Statements

none

2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical characterization : Natural product

Formula : C<sub>22</sub>H<sub>19</sub>Br<sub>2</sub>NO<sub>3</sub>

Molecular Weight : 505,2 g/mol

CAS-No. : 52918-63-5

EC-No. : 258-256-6

Index-No. : 607-319-00-X

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

(S)-?-Cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate

CAS-No.

EC-No.

Index-No.

52918-63-5

258-256-6

607-319-00-X

Acute Tox. 3; Aquatic Acute 1;

Aquatic Chronic 1; H301,

H331, H410

<= 100 %

Hazardous ingredients according to Directive 1999/45/EC

Component Classification Concentration

(S)-?-Cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate

CAS-No.

EC-No.

Index-No.

52918-63-5

258-256-6

607-319-00-X

T, N, R23/25 - R50/53 <= 100 %

### 3.1.1. Formula

C<sub>22</sub>H<sub>19</sub>Br<sub>2</sub>NO<sub>3</sub>

### 3.1.2. Molecular Weight (g/mol)

505.20

### 3.1.3. CAS-No.

52918-63-5

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, nitrogen oxides (NOx), Hydrogen bromide gas

### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### 5.4 Further information

no data available

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.  
For personal protection see section 8.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

## **7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

**7.3 Specific end use(s)**

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

Components with workplace control parameters

**8.2 Exposure controls**

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance Form: solid
  - b) Odour no data available
  - c) Odour Threshold no data available
  - d) pH no data available
  - e) Melting point/freezing point
- Melting point/range: 98

## 10. STABILITY AND REACTIVITY

- 10.1 Reactivity  
no data available
  - 10.2 Chemical stability  
Stable under recommended storage conditions.
  - 10.3 Possibility of hazardous reactions  
no data available
  - 10.4 Conditions to avoid  
no data available
  - 10.5 Incompatible materials  
Strong oxidizing agents
  - 10.6 Hazardous decomposition products  
Other decomposition products - no data available
- In the event of fire: see section 5

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects
- Acute toxicity  
LD50 Oral - rat - 9,36 mg/kg
- Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Convulsions or effect on seizure threshold. Kidney, Ureter, Bladder:Urine volume increased.
- LC50 Inhalation - rat - 2 h - 785 mg/m3
- Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Convulsions or effect on seizure threshold. Gastrointestinal:Changes in structure or function of salivary glands.
- LD50 Dermal - rabbit - 2.000 mg/kg
- Skin corrosion/irritation  
no data available
- Serious eye damage/eye irritation  
no data available
- Respiratory or skin sensitisation  
no data available
- Germ cell mutagenicity  
no data available
- Carcinogenicity  
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.
- IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans ((S)-?-Cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate)
- Reproductive toxicity  
no data available
- Specific target organ toxicity - single exposure  
no data available
- Specific target organ toxicity - repeated exposure  
no data available
- Aspiration hazard  
no data available
- Additional Information  
RTECS: GZ1233000
- Cough, Shortness of breath, Headache, Nausea, Vomiting, To the best of our knowledge, the chemical,

physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity  
Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 0,25 ug/l - 96,0 h  
mortality NOEC - Cyprinus carpio (Carp) - 0,002 mg/l - 24,0 h  
Toxicity to daphnia and other aquatic invertebrates  
EC50 - Daphnia magna (Water flea) - 0,00012 mg/l - 48 h  
12.2 Persistence and degradability  
12.3 Bioaccumulative potential  
Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 4 d  
- 0,0599 ug/l  
Bioconcentration factor (BCF): 817  
12.4 Mobility in soil  
no data available  
12.5 Results of PBT and vPvB assessment  
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted  
12.6 Other adverse effects  
Very toxic to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods  
Product  
Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.  
Contaminated packaging  
Dispose of as unused product.

## 14. TRANSPORT INFORMATION

14.1 UN number  
ADR/RID: 2811 IMDG: 2811 IATA: 2811  
14.2 UN proper shipping name  
ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. ((S)-?-Cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate)  
IMDG: TOXIC SOLID, ORGANIC, N.O.S. ((S)-?-Cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate)  
IATA: Toxic solid, organic, n.o.s. ((S)-?-Cyano-3-phenoxybenzyl (1R,3R)-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate)  
14.3 Transport hazard class(es)  
ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1  
14.4 Packaging group  
ADR/RID: II IMDG: II IATA: II  
14.5 Environmental hazards  
ADR/RID: yes IMDG Marine pollutant: yes IATA: no  
14.6 Special precautions for user

no data available

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

## 16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!