

# SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.2  
Creation Date: July 15, 2019  
Revision Date: August 08, 2025

## SECTION 1: Identification

### 1.1 GHS Product identifier

Product name Deltamethrin

### 1.2 Other means of identification

Product number LCPD100276-ME  
Other names -

### 1.3 Recommended use of the chemical and restrictions on use

Identified uses For laboratory and Industrial use only.  
Uses advised against no data available

### 1.4 Supplier's details

Company CATO Research Chemicals Inc.  
Address 3/F,Building B,No.179 BASIGO, Guangpu Rd East,Huangpu Dist,Guangzhou  
Telephone +86-20-81960175

### 1.5 Emergency phone number

Emergency phone number +86-20-81960175  
Service hours 'Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Acute toxicity - Category 3, Oral  
Acute toxicity - Category 3, Inhalation  
Hazardous to the aquatic environment, short-term (Acute) - Category Acute 1  
Hazardous to the aquatic environment, long-term (Chronic) - Category Chronic 1

### 2.2 GHS label elements, including precautionary statements

Pictogram(s)



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)

Prevention

P264 Wash ... thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P301+P316 IF SWALLOWED: Get emergency medical help immediately.  
P321 Specific treatment (see ... on this label).  
P330 Rinse mouth.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P316 Get emergency medical help immediately.  
P391 Collect spillage.  
P405 Store locked up.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Response

Storage

Disposal

## 2.3 Other hazards which do not result in classification

no data available

# SECTION 3: Composition/information on ingredients

## 3.1 Substances

| Chemical name | Common names and synonyms                                                                                                   | CAS number | EC number | Concentration |
|---------------|-----------------------------------------------------------------------------------------------------------------------------|------------|-----------|---------------|
| Deltamethrin  | $\alpha$ -cyano-3-phenoxybenzyl [1R-[1 $\alpha$ (S*),3 $\alpha$ ]]-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate | 52918-63-5 | 258-256-6 | 100%          |

# SECTION 4: First-aid measures

## 4.1 Description of necessary first-aid measures

### If inhaled

Fresh air, rest. Seek medical attention if you feel unwell.

### Following skin contact

Rinse and then wash skin with water and soap. Seek medical attention if you feel unwell.

### Following eye contact

First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then refer for medical attention.

### Following ingestion

Rinse mouth. Do NOT induce vomiting. Refer immediately for medical attention.

## 4.2 Most important symptoms/effects, acute and delayed

no data available

## 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

# SECTION 5: Fire-fighting measures

## 5.1 Suitable extinguishing media

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

## 5.2 Specific hazards arising from the chemical

Combustible. Gives off irritating or toxic fumes (or gases) in a fire. Liquid formulations containing organic solvents may be flammable. Risk of fire and explosion if formulations contain flammable/explosive solvents.

## 5.3 Special protective actions for fire-fighters

Use water spray, foam, powder, carbon dioxide. In case of fire: keep drums, etc., cool by spraying with water.

# SECTION 6: Accidental release measures

## 6.1 Personal precautions, protective equipment and emergency procedures

Personal protection: particulate filter respirator adapted to the airborne concentration of the substance. Do NOT let this chemical enter the environment. Do NOT wash away into sewer. Sweep spilled substance into covered containers. If appropriate, moisten first to prevent dusting. Carefully collect remainder. Then store and dispose of according to local regulations. See Notes.

## 6.2 Environmental precautions

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

## 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# SECTION 7: Handling and storage

## 7.1 Precautions for safe handling

NO open flames. Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

## 7.2 Conditions for safe storage, including any incompatibilities

Store only in original container. Separated from food and feedstuffs. Provision to contain effluent from fire extinguishing. Store in an area without drain or sewer access.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

|                            |                                                                                                                             |                   |                          |                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|-------------------|--------------------------|-------------------|
| Component                  | $\alpha$ -cyano-3-phenoxybenzyl [1R-[1 $\alpha$ (S*),3 $\alpha$ ]]-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate |                   |                          |                   |
| CAS No.                    | 52918-63-5                                                                                                                  |                   |                          |                   |
|                            | Limit value - Eight hours                                                                                                   |                   | Limit value - Short term |                   |
|                            | ppm                                                                                                                         | mg/m <sup>3</sup> | ppm                      | mg/m <sup>3</sup> |
| People's Republic of China |                                                                                                                             | 0,03              |                          |                   |
|                            | Remarks                                                                                                                     |                   |                          |                   |

#### Biological limit values

no data available

### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection

Wear face shield.

#### Skin protection

Protective gloves. Protective clothing.

#### Respiratory protection

Use ventilation (not if powder), local exhaust or breathing protection.

#### Thermal hazards

no data available

## SECTION 9: Physical and chemical properties and safety characteristics

|                                                          |                                       |
|----------------------------------------------------------|---------------------------------------|
| Physical state                                           | white to off-white crystals or powder |
| Colour                                                   | no data available                     |
| Odour                                                    | no data available                     |
| Melting point/freezing point                             | 98°C                                  |
| Boiling point or initial boiling point and boiling range | 300°C                                 |
| Flammability                                             | no data available                     |
| Lower and upper explosion limit/flammability limit       | no data available                     |
| Flash point                                              | 100°C                                 |
| Auto-ignition temperature                                | no data available                     |
| Decomposition temperature                                | no data available                     |
| pH                                                       | no data available                     |
| Kinematic viscosity                                      | no data available                     |
| Solubility                                               | no data available                     |
| Partition coefficient n-octanol/water                    | 5.43                                  |
| Vapour pressure                                          | <10 Pa(20°C)                          |
| Density and/or relative density                          | 1.595g/cm <sup>3</sup>                |
| Relative vapour density                                  | no data available                     |
| Particle characteristics                                 | no data available                     |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

Decomposes above 300°C . This produces toxic fumes including hydrogen cyanide and hydrogen bromide.

#### 10.4 Conditions to avoid

no data available

#### 10.5 Incompatible materials

no data available

#### 10.6 Hazardous decomposition products

no data available

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### SECTION 11: Toxicological information

#### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

#### Skin corrosion/irritation

no data available

#### Serious eye damage/irritation

no data available

#### Respiratory or skin sensitization

no data available

#### Germ cell mutagenicity

no data available

#### Carcinogenicity

no data available

#### Reproductive toxicity

no data available

#### STOT-single exposure

The substance is irritating to the eyes, skin and respiratory tract. The substance may cause effects on the nervous system. The effects may be delayed. Exposure through the skin could cause local effects, including sensations such as tingling, itching or burning.

#### STOT-repeated exposure

no data available

#### Aspiration hazard

No indication can be given about the rate at which a harmful concentration of this substance in the air is reached.

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### SECTION 12: Ecological information

#### 12.1 Toxicity

- Toxicity to fish: no data available
- Toxicity to daphnia and other aquatic invertebrates: no data available
- Toxicity to algae: no data available
- Toxicity to microorganisms: no data available

#### 12.2 Persistence and degradability

no data available

#### 12.3 Bioaccumulative potential

no data available

#### 12.4 Mobility in soil

no data available

#### 12.5 Other adverse effects

no data available

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### SECTION 13: Disposal considerations

#### 13.1 Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## SECTION 14: Transport information

### 14.1 UN Number

ADR/RID: UN2811 (For reference only, please check.) IMDG: UN2811 (For reference only, please check.) IATA: UN2811 (For reference only, please check.)

### 14.2 UN Proper Shipping Name

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (For reference only, please check.) IMDG: TOXIC SOLID, ORGANIC, N.O.S. (For reference only, please check.) IATA: TOXIC SOLID, ORGANIC, N.O.S. (For reference only, please check.)

### 14.3 Transport hazard class(es)

ADR/RID: 6.1 (For reference only, please check.) IMDG: 6.1 (For reference only, please check.) IATA: 6.1 (For reference only, please check.)

### 14.4 Packing group, if applicable

ADR/RID: I (For reference only, please check.) IMDG: I (For reference only, please check.) IATA: I (For reference only, please check.)

### 14.5 Environmental hazards

ADR/RID: Yes IMDG: Yes IATA: Yes

### 14.6 Special precautions for user

no data available

### 14.7 Transport in bulk according to IMO instruments

no data available

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

| Chemical name                                                                                                               | Common names and synonyms                                                                                                   | CAS number | EC number   |
|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------|-------------|
| $\alpha$ -cyano-3-phenoxybenzyl [1R-[1 $\alpha$ (S*),3 $\alpha$ ]]-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate | $\alpha$ -cyano-3-phenoxybenzyl [1R-[1 $\alpha$ (S*),3 $\alpha$ ]]-3-(2,2-dibromovinyl)-2,2-dimethylcyclopropanecarboxylate | 52918-63-5 | 258-256-6   |
| European Inventory of Existing Commercial Chemical Substances (EINECS)                                                      |                                                                                                                             |            | Listed.     |
| EC Inventory                                                                                                                |                                                                                                                             |            | Listed.     |
| United States Toxic Substances Control Act (TSCA) Inventory                                                                 |                                                                                                                             |            | Not Listed. |
| China Catalog of Hazardous chemicals 2015                                                                                   |                                                                                                                             |            | Not Listed. |
| New Zealand Inventory of Chemicals (NZIoC)                                                                                  |                                                                                                                             |            | Listed.     |
| Philippines Inventory of Chemicals and Chemical Substances (PICCS)                                                          |                                                                                                                             |            | Listed.     |
| Vietnam National Chemical Inventory                                                                                         |                                                                                                                             |            | Listed.     |
| Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)                                                    |                                                                                                                             |            | Listed.     |
| Korea Existing Chemicals List (KECL)                                                                                        |                                                                                                                             |            | Listed.     |

## SECTION 16: Other information

#### Information on revision

Creation Date July 15, 2019  
Revision Date August 08, 2025

#### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%



- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

#### Other Information

If the substance is formulated with solvents also consult the ICSCs of these materials. Carrier solvents used in commercial formulations may change physical and toxicological properties.

**Any questions regarding this SDS, Please send your inquiry to [info@cato-chem.com](mailto:info@cato-chem.com)**

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*Disclaimer: 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. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.*