

According to the UN GHS revision 8

Creation Date: May 29, 2024

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## 1. IDENTIFICATION

### 1.1 GHS Product identifier

Product name: Oxalic acid dihydrate

Catalog Number: T5064

CAS Number: 6153-56-6

### 1.2 Other means of identification

Other names: -

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

Identified uses:

### 1.4 Supplier's details

Company: Targetmol Chemicals Inc.

Uses advised against: 36 Washington Street, Wellesley Hills, Massachusetts 02481 USA

Tel/Fax: (781) 999-4286

### 1.5 Emergency phone number

Emergency phone number: 781-999-4286

Service hours: Monday to Friday, 9am-5pm (Standard timezone: UTC/GMT -5hours).

## 2. HAZARD IDENTIFICATION

### 2.1 Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Acute toxicity - Category 4, Dermal

### 2.2 GHS label elements, including precautionary statements

Pictogram(s):



Signal word: Warning

Hazard statement(s):  
H302 Harmful if swallowed  
H312 Harmful in contact with skin

Precautionary statement(s):

Prevention:

P264 Wash ... thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

Response:

P301+P317 IF SWALLOWED: Get medical help.  
P330 Rinse mouth.  
P302+P352 IF ON SKIN: Wash with plenty of water/...  
P317 Get medical help.  
P321 Specific treatment (see ... on this label).  
P362+P364 Take off contaminated clothing and wash it before reuse.

Storage:

none

**Disposal:**

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.

### 2.3 Other hazards which do not result in classification

no data available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| Chemical name         | Common names and synonyms | CAS number | EC number |
|-----------------------|---------------------------|------------|-----------|
| Oxalic acid dihydrate | -                         | 6153-56-6  | 612-167-2 |

## 4. FIRST-AID MEASURES

### 4.1 Description of necessary first-aid measures

**General advice**

no data available

**If inhaled**

Fresh air, rest. Half-upright position. Refer immediately for medical attention.

**Following skin contact**

Remove contaminated clothes. Rinse skin with plenty of water or shower for at least 15 minutes. Refer for medical attention.

**Following eye contact**

Rinse with plenty of water (remove contact lenses if easily possible). Refer immediately 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

## 5. FIRE-FIGHTING MEASURES

### 5.1 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.

### 5.3 Special protective actions for fire-fighters

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

## 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, protective gloves and safety goggles. Sweep spilled substance into covered plastic containers. If appropriate, moisten first to prevent dusting. Wash away remainder with plenty of water.

### 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.

## 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

Separated from strong oxidants and food and feedstuffs.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational Exposure limit values

TLV: 1 mg/m<sup>3</sup>, as TWA; 2 mg/m<sup>3</sup> as STEL. EU-OEL: 1 mg/m<sup>3</sup> as TWA

#### 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 or eye protection in combination with breathing protection.

#### Skin protection

Protective gloves. Protective clothing.

#### Respiratory protection

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

#### Thermal hazards

no data available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                                         |                                            |
|---------------------------------------------------------|--------------------------------------------|
| Physical state                                          | Solid. Crystalline.                        |
| Color                                                   | White.                                     |
| Odour                                                   | no data available                          |
| Melting point/ freezing point                           | Remarks:At atmospheric pressure.           |
| Boilingpoint or initial boiling point and boiling range | 108-109°C                                  |
| Flammability                                            | no data available                          |
| Lower and upper explosion limit/flammability limit      | no data available                          |
| Flash point                                             | 157°C                                      |
| Auto-ignition temperature                               | > 400 °C. Remarks:At atmospheric pressure. |
| Decomposition temperature                               | no data available                          |

|                                       |                                              |
|---------------------------------------|----------------------------------------------|
| pH                                    | no data available                            |
| Kinematic viscosity                   | no data available                            |
| Solubility                            | H2O: 143 mg/mL,<br>Ethanol: 400 mg/mL,       |
| N-octanol-water partition coefficient | log Pow = -1.7. Temperature:23 °C.           |
| Vapour pressure                       | 0 mm Hg. Temperature:25 °C.                  |
| Density and/ or relative density      | 0.813 g/cm <sup>3</sup> . Temperature:20 °C. |
| Relative vapour density               | 4.4 (vs air)                                 |
| Particle characteristics              | no data available                            |

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

No data.Decomposes on contact with hot surfaces or flames. This produces formic acid and carbon monoxide. The solution in water is a medium strong acid. Reacts violently with strong oxidants. This generates fire and explosion hazard. Reacts with some silver compounds. This produces explosive silver oxalate. Attacks some forms of plastic.

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

no data available

### 10.6 Hazardous decomposition products

no data available

## 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Oral: LD50 - rat (male) - 9.5 mL/kg bw. Remarks:475 mg/kg bw.

Inhalation: no data available

Dermal: LD50 - rabbit - 20 000 mg/kg bw.

#### 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 corrosive to the eyes, skin and respiratory tract. Corrosive on ingestion. The substance may cause effects on the calcium balance after ingestion. Exposure at high levels could cause death.

### STOT-repeated exposure

Repeated or prolonged contact with skin may cause dermatitis. Exposure may result in kidney stones, slow-healing ulcers and black finger nails.

### Aspiration hazard

Evaporation at 20°C is negligible; a harmful concentration of airborne particles can, however, be reached quickly when dispersed.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

Toxicity to fish: LC0 - *Leuciscus idus melanotus* - 250 mg/L - 48 h.

Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia magna* - 162.2 mg/L - 48 h.

Toxicity to algae: EC50 - *Pseudokirchneriella subcapitata* (previous names: *Raphidocelis subcapitata*, *Selenastrum capricornutum*) - > 19.83 - < 21.35 mg/L - 72 h.

Toxicity to microorganisms: Toxicity Threshold - *Pseudomonas putida* - 1 550 mg/L - 16 h.

### 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

## 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.

## 14. TRANSPORT INFORMATION

### 14.1 UN Number

no data available

### 14.2 UN Proper Shipping Name

no data available

### 14.3 Transport hazard class(es)

no data available

### 14.4 Packing group, if applicable

no data available

### 14.5 Environmental hazards

no data available

#### 14.6 Special precautions for user

no data available

#### 14.7 Transport in bulk according to IMO instruments

no data available

### 15. REGULATORY INFORMATION

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

|                                                                          |             |
|--------------------------------------------------------------------------|-------------|
| European Inventory of Existing Commercial Chemical Substances (EINECS)   | Not Listed. |
| EC Inventory                                                             | Not 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)                                     | Not Listed. |

### 16. OTHER INFORMATION

#### Information on revision

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#### 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

The apparent melting point caused by loss of crystal water is given. The substance can be dehydrated by careful drying at 100 °C, but considerable loss occurs through sublimation. See ICSC 0529.

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.

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