

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 08.11.2022

Revision: 20.08.2021

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** oxalic acid
- **Article number:** 94
- **CAS Number:**
6153-56-6
- **EC number:**
205-634-3
- **Index number:**
607-006-00-8
- **Registration number** 01-2119534576-33
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Basic material with not specifically defined use.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Möller Chemie GmbH & Co. KG
Bürgerkamp 1
D-48565 Steinfurt
Tel.: 02551/9340-0
Fax: 02551/9340-60
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** Danger
- **Hazard statements**
H302+H312 Harmful if swallowed or in contact with skin.
H318 Causes serious eye damage.
- **Precautionary statements**
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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- P310 *Immediately call a POISON CENTER/doctor.*
 P321 *Specific treatment (see on this label).*
 P330 *Rinse mouth.*
 P362+P364 *Take off contaminated clothing and wash it before reuse.*
 P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterisation: Substances**
- **CAS No. Description**
6153-56-6 oxalic acid
- **Identification number(s)**
- **EC number:** 205-634-3
- **Index number:** 607-006-00-8

4 First aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
- **After skin contact:** *Immediately wash with water and soap and rinse thoroughly.*
- **After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.*
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed**
Gastric or intestinal disorders
Nausea
- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** *CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.*
- **For safety reasons unsuitable extinguishing agents:** *Water with full jet*
- **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide
carbon dioxide
Combustion or thermal decomposition of the product produces formic acid and carbon dioxide.
- **Advice for firefighters**
- **Protective equipment:** *Wear full protective suit with self-contained breathing apparatus.*
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Avoid contact with eyes and skin

Do not breathe dust.

Keep away from ignition sources.

- **Environmental precautions:**

Do not allow to enter sewers/ surface or ground water.

Damp down dust with water spray.

- **Methods and material for containment and cleaning up:**

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

- **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

Prevent formation of dust.

Ensure good ventilation/exhaustion at the workplace.

- **Information about fire - and explosion protection:** Dust can combine with air to form an explosive mixture.

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

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Keep container tightly closed Keep us in a cool, well-ventilated place.

- **Information about storage in one common storage facility:**

Keep away from alkalis.

Store away from oxidizing agents.

- **Further information about storage conditions:**

None.

Store in dry conditions.

- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:** Not required.

- **DNELs**

dermal

DNEL (worker) 2.29 mg/kg bw/day (long term, systemic effects)

DNEL (population) 1.14 mg/kg bw/day (long term, systemic effects)

DNEL (worker) 0.69 mg/cm² (acute, local effects)

DNEL (Population) 0.35 mg/cm² (Acute, local effects)

inhalative

DNEL (worker) 4.03 mg/m³ (long-term, systemic effect)

DNEL (population) 1.14 mg/m³ (long-term, systemic effect)

- **PNECs**

0.1622 mg/l (freshwater)

1.622 mg/l (intermittent release)

0.01622 mg/l (sea water)

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· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:** In dust formation respiratory protection required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Nitrile rubber, NBR

Chloroprene rubber, CR

natural latex

PVC gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Crystalline

Colour: White

· **Odour:** Odourless

· **pH-value (50 g/l) at 20 °C:** 0.7

· **Change in condition**

Melting point/freezing point: 1001.5 °C

Initial boiling point and boiling range: 150 °C

· **Flash point:** Not applicable; Product is not flammable or explosive.

· **Flammability (solid, gas):** Product is not flammable.

· **Decomposition temperature:** 101.5 °C

· **Explosive properties:** Dust explosions are generally possible with organic solids.

· **Density at 20 °C:** 1.65 g/cm³

· **Bulk density at 20 °C:** 900 kg/m³

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- | | |
|---|--|
| · Solubility in / Miscibility with water at 20 °C: | 102 g/l |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
To avoid thermal decomposition do not overheat.
Thermal decomposition producing formic acid and carbon dioxide.
- **Possibility of hazardous reactions** Risk of dust explosion if enriched with fine dust in the presence of air.
- **Conditions to avoid** To avoid thermal decomposition do not overheat.
- **Incompatible materials:**
Alkalis
Strong oxidizing agents
alkali metals
corroded steel
- **Hazardous decomposition products:**
At fire, formation of carbon monoxide (CO) and carbon dioxide (CO₂).
Formic acid is also formed during thermal decomposition.

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity**
Harmful if swallowed or in contact with skin.
- | | | |
|--|------|-----------------------|
| · LD/LC50 values relevant for classification: | | |
| Oral | LD50 | >375 mg/kg (rat) |
| Dermal | LD50 | > 2000 mg/kg (rabbit) |
- **Primary irritant effect:**
 - **Skin corrosion/irritation** May cause slight skin irritation.
 - **Serious eye damage/irritation**
Low irritation possible - not required for identification.
Causes serious eye damage.
 - **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
 - **Additional toxicological information:**
 - **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
 - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
 - **Carcinogenicity** Based on available data, the classification criteria are not met.
 - **Reproductive toxicity** Based on available data, the classification criteria are not met.
 - **STOT-single exposure** Based on available data, the classification criteria are not met.
 - **STOT-repeated exposure** Based on available data, the classification criteria are not met.
 - **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:**
LC50 / 96h 160 mg/l (fish)
EC50 / 48 h 162.2 mg/l (daphnia)
- **Persistence and degradability** Easily biodegradable

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- **Behaviour in environmental systems:**
- **Bioaccumulative potential** Keine wesentliche Bioakkumulation
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Disposal according to local regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|-----------------|
| · UN-Number | |
| · ADR, IMDG, IATA | Void |
| · UN proper shipping name | |
| · ADR, IMDG, IATA | Void |
| · Transport hazard class(es) | |
| · ADR, ADN, IMDG, IATA | |
| · Class | Void |
| · Packing group | |
| · ADR, IMDG, IATA | Void |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Not applicable. |
| · Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · UN "Model Regulation": | Void |

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** Substance is not listed.
- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**
Substance is not listed.

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- **REGULATION (EU) 2019/1148**
- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**
Substance is not listed.
- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS** Substance is not listed.
- **Regulation (EC) No 273/2004 on drug precursors** Substance is not listed.
- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**
Substance is not listed.
- **Chemical safety assessment:** A Chemical Safety Assessment has been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product safety department
- **Contact:** Mrs. Steyer

- **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

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