



Preparing for the New Era of Laboratories

MATERIAL SAFETY DATA SHEET (MSDS)

According to regulation (EU) no.1907/2006

OXALIC ACID DIHYDRATE 99,5% AR

PRODUCT CODE : O-5129

CAS No : 6153-56-6

FORMULA : $\text{C}_2\text{H}_2\text{O}_4 \cdot 2 \text{H}_2\text{O}$

UN No : 3261

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

OXALIC ACID DIHYDRATE 99,5% AR



MSDS Number : 0251

Date : Aug 28th, 2024

Version : 1.0

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

- 1.1 Product Name** : OXALIC ACID DIHYDRATE 99,5% AR
Synonyms : Ethanedioic Acid, dihydrate
CAS No. : 6153-56-6
HS Code : 2917 11 00
Chemical Formula : $C_2H_2O_4 \cdot 2 H_2O$
Molecular Weight : 126.07 g/mol
Product Code : O-5129
Brand : Labotiq
1.2 Manufacturer : Labotiq
Address : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111
Website : www.labotiq.net
Email : labotiq.id@gmail.com
For information : Phone : (+62-251) 839110, 8311662, Fax : (+62-251) 83135710
Emergency number : +6281316894650
1.3 Application : Laboratory chemicals, Manufacture of substances, General Chemical reagent

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 4), H302
 Acute toxicity, Dermal (Category 4), H312
 Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H302 + H312

H318

Harmful if swallowed or in contact with skin
 Causes serious eye damage.

Precautionary statement(s)

P264

P270

P280

P301 + P312

P302 + P352 + P312

P305 + P351 + P338

Wash skin thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

OXALIC ACID DIHYDRATE 99,5% AR



MSDS Number : 0251

Date : Aug 28th, 2024

Version : 1.0

Supplemental Hazard Statements

none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : Ethanedioic Acid, dihydrate
 Formula : $C_2H_2O_4 \cdot 2 H_2O$
 Molecular weight : 126.07 g/mol
 CAS-No. : 6153-56-6
 EC-No. : 205-634-3
 Index-No. : 607-006-00-8

3.2 Mixture

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

Component	Classification	Concentration
Oxalic acid dihydrate CAS-No. 6153-56-6 EC-No. 205-634-3 Index-No. 607-006-00-8	Acute Tox. 4; Eye Dam. 1; H302, H312, H318	<=100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 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

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

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MSDS Number : 0251

Date : Aug 28th, 2024

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Carbon oxides, Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. hygroscopic

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
OXALIC ACID DIHYDRATE 99,5% AR

MSDS Number : 0251

Date : Aug 28th, 2024

Version : 1.0

Storage class

Storage class (TRGS 510): 11: Combustible Solids

7.3 Specific end use(s)

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

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****8.2 Exposure controls****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday

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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740, Size M)

Body Protection

protective clothing

Respiratory protection

required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2 The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented

Control of environmental exposure

Do not let product enter drains.

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

OXALIC ACID DIHYDRATE 99,5% AR



MSDS Number : 0251

Date : Aug 28th, 2024

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Form: solid
	Colour: white
Odour	odorless
Odour Threshold	No data available
pH	ca.1,5 at 10 g/l
Melting point/freezingpoint	Melting point/range: 104 - 106 °C - lit.
Initial boiling point and boiling range	149 - 160 °C at 1.013 hPa - (decomposition)
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	0,000312 hPa at 25 °C
Vapour density	No data available
Relative density	1,65 g/cm ³ at 20 °C
Water solubility	100 g/l at 25 °C
Partition coefficient: noctanol/water	log Pow: -1,7 at 23 °C - Bioaccumulation is not expected.
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Risk of explosion with: chlorates, sodium hypochlorite, Strong oxidizing agents, silver salts of oxyhalogenic acids

Exothermic reaction with: bases, Ammonia, Mercury

10.4 Conditions to avoid

Avoid moisture.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
OXALIC ACID DIHYDRATE 99,5% AR

MSDS Number : 0251

Date : Aug 28th, 2024

Version : 1.0

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity**

LD50 Oral - Rat - 375 mg/kg

Remarks: (IUCLID)

The value is given in analogy to the following substances: Oxalic acid Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Symptoms: Possible damages:, mucosal irritations

Acute toxicity estimate Dermal - 1.100,1 mg/kg (Expert judgment)

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation (OECD Test Guideline 404)

Remarks: The value is given in analogy to the following substances: Oxalic acid

Serious eye damage/eye irritation

Eyes - Rabbit Result: Irreversible effects on the eye (OECD Test Guideline 405)

Remarks: The value is given in analogy to the following substances: Oxalic acid

Respiratory or skin sensitisation

Local lymph node assay (LLNA) - Mouse

Result: negative (OECD Test Guideline 429)

Remarks: The value is given in analogy to the following substances: Oxalic acid

Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: The value is given in analogy to the following substances: Oxalic acid

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster lung cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

Result: negative

Remarks: The value is given in analogy to the following substances: Oxalic acid

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

MATERIAL SAFETY DATA SHEET (SDS/MSDS)
OXALIC ACID DIHYDRATE 99,5% AR

MSDS Number : 0251

Date : Aug 28th, 2024

Version : 1.0

Additional Information

Inhalation may provoke the following symptoms:, Cough, Shortness of breath Kidney injury may occur., Cardiovascular effects. Systemic effects: After absorption: agitation, spasms Nausea Vomiting Circulatory collapse collapse disturbed electrolyte balance. Secondary products cause: Damage to: Kidney Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information**12.1 Toxicity***Toxicity to fish*

LC50 - Leuciscus idus (Golden orfe) - 160 mg/l - 48 h(Oxalic acid dihydrate)

Toxicity to daphnia and other aquatic invertebrates

Daphnia magna (Water flea) - 162,2 mg/l - 48 h (OECD Test Guideline 202)

Remarks: The value is given in analogy to the following substances: Oxalic acid

12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 20 d

Result: 89 % - Readily biodegradable.

Remarks: (ECHA)

The value is given in analogy to the following substances: Oxalic acid

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

12.6 Other adverse effects

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Dissolve or mix the material with a combustible solvent and burn in a chem scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information**14.1 UN number**

ADR/RID: 3261

IMDG: 3261

IATA: 3261

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MSDS Number : 0251

Date : Aug 28th, 2024

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14.2 UN proper shipping name

ADR/RID: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S

IMDG: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S

IATA: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S

14.3 Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packaging group I

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information

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

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

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H302

Harmful if swallowed.

H302 + H312

Harmful if swallowed or in contact with skin

H312

Harmful in contact with skin.

H318

Causes serious eye damage.

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 0

Further 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. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.

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