

OXALIC ACID

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : OXALIC ACID

Other means of identification : Not applicable

Recommended use : Cleaning product

Restrictions on use : Reserved for industrial and professional use.

Product dilution information : Product is sold ready to use.

Company : Ecolab Inc.

1 Ecolab Place

St. Paul, Minnesota USA 55102

1-800-352-5326

Emergency health

information

: 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)

Issuing date : 05/07/2019

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 4
Acute toxicity (Dermal) : Category 4
Skin corrosion : Category 1A
Serious eye damage : Category 1

GHS label elements

Hazard pictograms





Signal Word : Danger

Hazard Statements : Harmful if swallowed or in contact with skin.

Causes severe skin burns and eye damage.

Precautionary Statements : Prevention:

Do not breathe dusts or mists. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective

gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Wash

contaminated clothing before reuse.

Storage:

Store locked up.

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Disposal:

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

Other hazards : None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture Mixture

Chemical name CAS-No. Concentration (%)

60 - 100 ethanedioic acid, dihydrate 6153-56-6

SECTION 4. FIRST AID MEASURES

: Rinse immediately with plenty of water, also under the eyelids, for at In case of eye contact

least 15 minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Get medical attention immediately.

In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes. Use

> a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately. Apply calcium

gluconate gel, if available, or milk of magnesia to affected area.

If swallowed : Rinse mouth with water. Do NOT induce vomiting. Never give

> anything by mouth to an unconscious person. Get medical attention immediately. If available, take several calcium antacid tablets (eg

Tums) or several tablespoons of milk of magnesia.

If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if

symptoms occur.

Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal

protective equipment.

Notes to physician : Treat symptomatically.

Most important symptoms and effects, both acute and

delayed

: See Section 11 for more detailed information on health effects and

symptoms.

SECTION 5. FIRE-FIGHTING MEASURES

: Use extinguishing measures that are appropriate to local Suitable extinguishing media

circumstances and the surrounding environment.

Unsuitable extinguishing

media

: None known.

Specific hazards during fire

fighting

: Not flammable or combustible.

Hazardous combustion

products

: Decomposition products may include the following materials:

Carbon oxides

for fire-fighters

Special protective equipment : Use personal protective equipment.

Specific extinguishing : Fire residues and contaminated fire extinguishing water must be

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methods disposed of in accordance with local regulations. In the event of fire

and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Do not allow contact with soil, surface or ground water.

Methods and materials for containment and cleaning up

: Sweep up and shovel into suitable containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Do not ingest. Do not get in eyes, on skin, or on clothing. Do not

breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate

ventilation. Wash hands thoroughly after handling.

Conditions for safe storage : Keep out of reach of children. Store in suitable labeled containers.

Storage temperature : 0 °C to 50 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

| Components | CAS-No. | Form of exposure | Permissible concentration | Basis |
|-----------------------------|-----------|------------------|---------------------------|-----------|
| ethanedioic acid, dihydrate | 6153-56-6 | TWA | 1 mg/m3 | NIOSH REL |
| | | STEL | 2 mg/m3 | NIOSH REL |
| | | TWA | 1 mg/m3 | OSHA Z1 |
| | | TWA | 1 mg/m3 | ACGIH |
| | | STEL | 2 mg/m3 | ACGIH |

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations

below occupational exposure standards.

Personal protective equipment

Eye protection : Wear eye protection/ face protection.

Hand protection : Wear the following personal protective equipment:

Standard glove type.

Gloves should be discarded and replaced if there is any indication of

degradation or chemical breakthrough.

Skin protection : Personal protective equipment comprising: suitable protective gloves,

safety goggles and protective clothing

Respiratory protection : When workers are facing concentrations above the exposure limit they

must use appropriate certified respirators.

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Hygiene measures : Handle in accordance with good industrial hygiene and safety

> practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes

and body in case of contact or splash hazard.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Color opaque, white

Odor slight

рΗ 1.1 - 2.1, (1 %)

Flash point : Not applicable, Does not sustain combustion.

Odor Threshold : No data available Melting point/freezing point : No data available

Initial boiling point and

boiling range

: > 100 °C

Evaporation rate : No data available Flammability (solid, gas) : No data available Upper explosion limit : No data available Lower explosion limit : No data available : No data available Vapor pressure Relative vapor density : No data available

: 0.88 - 0.92 Relative density Water solubility : slightly soluble Solubility in other solvents : No data available Partition coefficient: n-

octanol/water

: No data available

Autoignition temperature : No data available Thermal decomposition : No data available Viscosity, kinematic : No data available Explosive properties : No data available Oxidizing properties : No data available : No data available Molecular weight VOC : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: No dangerous reaction known under conditions of normal use.

Conditions to avoid : None known.

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Incompatible materials : Bases

Metals

Hazardous decomposition

products

: Decomposition products may include the following materials:

Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

exposure

Information on likely routes of : Inhalation, Eye contact, Skin contact, Ingestion

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Harmful in contact with skin. Causes severe skin burns.

Ingestion : Harmful if swallowed. Causes digestive tract burns.

Inhalation : May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Pain, Corrosion

Ingestion Corrosion, Abdominal pain

Inhalation Respiratory irritation, Cough

Toxicity

Product

Acute oral toxicity : Acute toxicity estimate : 378.79 mg/kg

: No data available Acute inhalation toxicity

Acute dermal toxicity : Acute toxicity estimate : 1,516 mg/kg

Skin corrosion/irritation : No data available Serious eye damage/eye : No data available

irritation

Respiratory or skin

sensitization

: No data available

Carcinogenicity : No data available Reproductive effects : No data available Germ cell mutagenicity : No data available Teratogenicity : No data available STOT-single exposure : No data available STOT-repeated exposure : No data available Aspiration toxicity : No data available

SECTION 12. ECOLOGICAL INFORMATION

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Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : No data available

Toxicity to daphnia and other : No data available

aquatic invertebrates

Toxicity to algae : No data available

Components

Toxicity to daphnia and other : ethanedioic acid, dihydrate aquatic invertebrates : ethanedioic acid, dihydrate 48 h EC50 Daphnia: 137 mg/l

Persistence and degradability

Readily biodegradable.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Where possible recycling is preferred to disposal or incineration. If

recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations : Dispose of as unused product. Empty containers should be taken to

an approved waste handling site for recycling or disposal. Do not reuse empty containers. Dispose of in accordance with local, state, and

federal regulations.

RCRA - Resource Conservation and Recovery

Authorization Act Hazardous

waste

: D002 (Corrosive)

SECTION 14. TRANSPORT INFORMATION

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

Not dangerous goods

Sea transport (IMDG/IMO)

Not dangerous goods

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SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section 302

EHS TPQ.

SARA 313 : This material does not contain any chemical components with known

CAS numbers that exceed the threshold (De Minimis) reporting levels

established by SARA Title III, Section 313.

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California Cleaning Product Right to Know Act of 2017 (SB 258)

This regulation applies to this product.

| Chemical Name | CAS-No. | Function | List(s) |
|-----------------------------|-----------|----------------|----------------|
| ethanedioic acid, dihydrate | 6153-56-6 | Cleaning Agent | Not Applicable |
| | | | |

^{*}refer to ecolab.com/sds for electronic links to designated lists

The ingredients of this product are reported in the following inventories:

Switzerland. New notified substances and declared preparations :

On the inventory, or in compliance with the inventory

United States TSCA Inventory:

On the inventory, or in compliance with the inventory

Canadian Domestic Substances List (DSL):

All components of this product are on the Canadian DSL

Australia Inventory of Chemical Substances (AICS) :

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemical Substances:

On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory :

On the inventory, or in compliance with the inventory

Korea. Korean Existing Chemicals Inventory (KECI):

On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS):

On the inventory, or in compliance with the inventory

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China. Inventory of Existing Chemical Substances in China (IECSC):

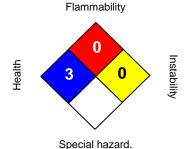
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI):

On the inventory, or in compliance with the inventory

SECTION 16. OTHER INFORMATION

NFPA:



HMIS III:



0 = not significant, 1 =Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

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Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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