Kun & Co.

SAFETY DATA SHEET

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.

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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.

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 (%)
ethanedioic acid, dihydrate	6153-56-6	60 - 100

SECTION 4. FIRST AID MEASURES

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

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

Special protective equipment for fire-fighters : Use personal protective equipment.

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

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.

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
pH	:	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
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	0.88 - 0.92
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
Molecular weight	:	No data available
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.

Incompatible materials	:	Bases Metals
Hazardous decomposition products	:	Decomposition products may include the following materials: Carbon oxides

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	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
Acute inhalation toxicity	:	No data available
Acute dermal toxicity	:	Acute toxicity estimate : 1,516 mg/kg
Skin corrosion/irritation	:	No data available
Serious eye damage/eye irritation	:	No data available
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

Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : No data available

Toxicity to daphnia and other aquatic invertebrates : No data available

Toxicity to algae : No data available

Components

Toxicity to daphnia and other 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 re-use 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

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

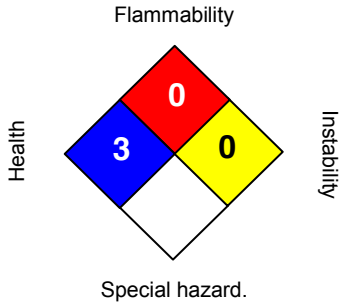
Philippines Inventory of Chemicals and Chemical Substances (PICCS) :
On the inventory, or in compliance with the inventory

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:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

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.