Date of issue: 2018/10/30
Date of revision: 2021/11/09

Safety Data Sheet

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

Product identifier:
- Product name: Glycolic acid
- SDS No. : 3471E-2

Details of the supplier of the safety data sheet
- Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.
- Address: 3-1, Honmachibashi, Chuo-ku,Osaka ,JAPAN
- Division: Chemical Safety Management Department
- Telephone number: +81-6-6946-8061
- FAX: +81-6-6946-1607
- e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

HEALTH HAZARDS
- Acute toxicity (Oral): Category 4
- Acute toxicity (Inhalation): Category 4
- Skin corrosion/irritation: Category 1B
- Serious eye damage/eye irritation: Category 1
- Reproductive toxicity: Category 2
- Specific target organ toxicity - single exposure: Category 1(respiratory system)
- Specific target organ toxicity - repeated exposure: Category 2(liver; thymus)

ENVIRONMENT HAZARDS
- Hazardous to the aquatic environment (Acute): Category 3

Label elements

Signal word: Danger

HAZARD STATEMENT
- Harmful if swallowed
- Harmful if inhaled
- Causes severe skin burns and eye damage
- Suspected of damaging fertility or the unborn child
- Causes damage to organs(respiratory system)
- May cause damage to organs through prolonged or repeated exposure(liver; thymus)
- Harmful to aquatic life

PRECAUTIONARY STATEMENT

Prevention
- Avoid release to the environment.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Use only outdoors or in a well-ventilated area.
- Wash contaminated parts thoroughly after handling.
- Wear protective gloves, protective clothing or face protection.
- Wear eye protection/face protection.
- Do not eat, drink or smoke when using this product.

Response

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

Disposal

Dispose of contents/container in accordance with local/national regulation.

3. Composition/information on ingredients

Mixture/Substance selection:

Substance

Ingredient name:Glycolic acid
Content (%):98(min)
Chemical formula:CH2(OH)COOH
Chemicals No, Japan:2-1346
CAS No.:79-14-1
MW:76.05
ECNO:201-180-5

Note : The figures shown above are not the specifications of the product.

4. First-aid measures

Descriptions of first-aid measures

General measures

Get medical advice/attention if you feel unwell.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water or shower.
If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth. Do NOT induce vomiting.
Call a POISON CENTER/doctor/physician if you feel unwell.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

Unsuitable extinguishing media

Unsuitable extinguishing media data is not available.

Specific hazards arising from the substance or mixture

Containers may explode when heated.

Fire may produce irritating, corrosive and/or toxic gases.

Advice for firefighters

Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with full face peace operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Avoid raising dust.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Use only outdoors or in a well-ventilated area.

Wear protective gloves, protective clothing or face protection.

Wear eye protection/face protection.

When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity"

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wash contaminated clothing before reuse.

Storage

Conditions for safe storage

Keep container tightly closed.
Store in a cool, dry place. Do not store in direct sunlight.
Keep under lock and key.

Container and packaging materials for safe handling

Glass
Polyethylene

8. Exposure controls/personal protection

Control parameters

Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.
Eye wash station should be available.
Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Crystals or crystalline powder
Color: Colorless to white
Odor data is not available.
Melting point/Freezing point: 80℃
Boiling point or initial boiling point: (Glycolic acid)(decomposes) 100℃
Boiling range data is not available.
Flammability (gases, liquids and solids) data is not available.
Lower and upper explosion limit/flammability limit data is not available.
Flash point data is not available.
Auto-ignition temperature data is not available.
Decomposition temperature data is not available.
pH data is not available.
Kinematic viscosity data is not available.
Solubility:

Solubility in water: Very good

n-Octanol/water partition coefficient: log Pow=1.11
Vapor pressure: 2.67Pa
Density and/or relative density: 1.49
Relative vapor density (Air=1): 2.6
Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Stable under normal storage/handling conditions.

Possibility of hazardous reactions

Reacts with strong oxidants, cyanides and sulfides. Reacts violently with aluminium, zinc and tin. This generates fire and explosion hazard. The solution in water is a medium strong acid. (ICSC 1537)

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Strong oxidizing agents, Cyanides, Sulfides, Aluminium, Zinc, Tin

Hazardous decomposition products

Carbon oxides

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

(Glycolic acid)

rat LD50=1357mg/kg (NICNAS, 2000)

Acute toxicity (Inhalation)

[GHS Cat. Japan, base data]

(Glycolic acid)

mist: male rat LC50=2.52mg/L/4hr (NICNAS, 2000)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

(Glycolic acid)

rabbit corrosive (NICNAS, 2000)

Serious eye damage/irritation

[GHS Cat. Japan, base data]

(Glycolic acid)

rabbit irreversible damage et al (NICNAS, 2000)

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity

[GHS Cat. Japan, base data]

(Glycolic acid)

cat. 2; NICNAS, 2000

STOT

STOT-single exposure

[cat.1]

[GHS Cat. Japan, base data]

(Glycolic acid)

respiratory system (USEPA/HPV, 2001)

STOT-repeated exposure

[cat.2]

[GHS Cat. Japan, base data]
(Glycolic acid)
liver; thymus (USEPA/HPV, 2001)

Aspiration hazard data is not available.

Information on other hazards

May cause lung disorders by massive inhalation of powdered substance.
-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

12. Ecological Information

Ecotoxicity

Aquatic toxicity

Harmful to aquatic life

Hazardous to the aquatic environment (Acute)

[GHS Cat. Japan, base data]
(Glycolic acid)
Crustacea (Daphnia magna) EC50＝44mg/L/48hr (MOE Japan, 1998)

Water solubility

(Glycolic acid)
very good (ICSC, 2004)

Persistence and degradability

(Glycolic acid)
Degrade rapidly (BOD_Degradation : 86% (METI existing chemical safety inspections 1993)

Bioaccumulative potential

(Glycolic acid)
Log Kow＝-1.11 (PHYSPROP DB, 2009)

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Avoid release to the environment.
Dispose of contents/container in accordance with local/national regulation.

14. Transport Information

UN No. or ID No.: 3261
UN Proper Shipping Name :
CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Class or division (Transport hazard class) : 8
Packing group : II
ERG GUIDE No.: 154
Special provisions No.: 274

IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 3261
Proper Shipping Name :
CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Class or division : 8

Packing group : II
Special provisions No.: 274

IATA Dangerous Goods Regulations
UN No.: 3261
Proper Shipping Name :
CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Class or division : 8
Hazard labels : Corrosive
Packing group : II
Special provisions No.: A3; A803

Environmental hazards
MARPOL Annex III – Prevention of pollution by harmful substances
Marine pollutants (yes/no) : no

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Chemicals listed in TSCA Inventory
Glycolic acid

Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling
Acute Tox. 4: H302 Harmful if swallowed
Acute Tox. 4: H332 Harmful if inhaled
Skin Corr. 1B: H314 Causes severe skin burns and eye damage
Repr. 2: H361 Suspected of damaging fertility or the unborn child
STOT SE 1: H370 Causes damage to organs
STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure
Aquatic Acute 3: H402 Harmful to aquatic life

Reference Book
Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN
IMDG Code, 2018 Edition (Incorporating Amendment 39-18)
IATA Dangerous Goods Regulations (62nd Edition) 2021
2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2021 TLVs and BEIs. (ACGIH)
Supplier's data/information

General Disclaimer
This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.
The GHS classification data given here is based on current Japan official data (NITE published in 2020).