

Safety Data Sheet (Glycolic Acid 70%)

Section 1. Product Identification

Product Name Glycolic Acid 70%
CAS Number 79-14-1

Section 2. Hazards Identification

Classification of the substance or mixture

Acute toxicity (Inhalation): Category 4

Skin corrosion: Category 1

Serious eye damage: Category 1

GHS Label Elements

Pictograms:



Signal word: DANGER

Hazard and precautionary statements

Hazard Statements

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

Precautionary Statements

Prevention

P261 Avoid breathing mist or vapors.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P330 + P331 + P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor.

P303 + P361 + P353 + P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with wa-ter/shower. Immediately call a POISON CENTER/doctor.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 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.

P363 Wash contaminated clothing before reuse.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/ container to an approved waste disposal plant.

Other Hazards: Corrosive to the respiratory tract.

Section 3. Composition / Information on Ingredients

Common Name Glycolic Acid 70%
Synonym(s) Hydroxyethanoic Acid
CAS Number 79-14-1

COMPONENT	CAS NUMBER	CONCENTRATION
Glycolic Acid	79-14-1	50 - 70%
Formic acid	64-18-6	0.1 - 1%
Methoxyacetic acid	625-45-6	0.1 - 1%

Section 4. First Aid Measures

Eye Contact: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician.

Inhalation Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin Contact: Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse.

Clean shoes thoroughly before reuse.

Ingestion: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

MOST IMPORTANT SYMPTOMS/EFFECTS ACUTE AND DELAYED

Potential Acute Health Effects

Eye Contact: Causes serious eye damage.

Inhalation: May give off gas, vapor, or dust that is very irritating or corrosive to the respiratory system.

Skin Contact: Causes severe burns.

Ingestion: May cause burns to mouth, throat, and stomach.

Over-Exposure Signs/Symptoms

Eye Contact: Adverse symptoms may include the following: pain, watering, redness

Inhalation: No known significant effects or critical hazards.

Skin Contact: Adverse symptoms may include the following: pain or irritation, redness, blistering may occur

Ingestion: Adverse symptoms may include the following: stomach pains

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY

Notes to Physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific Treatments: No specific treatment.

Protection of First-Aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Section 5. Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable Extinguishing Media: None known.

Specific Hazards Arising from the Chemical: No specific fire or explosion hazard.

Hazardous Thermal Decomposition Products: Decomposition products may include the

following materials: carbon dioxide, carbon monoxide

Special Protective Actions for Fire-Fighters: No special measures are required.

Special Protective Equipment for Fire-Fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures for Non-Emergency Personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For Emergency Responders: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

Environmental Precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and Materials for Containment and Cleaning-Up

Small Spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and Storage

Precautions for Safe Handling

Protective Measures: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on General Occupational Hygiene: Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information

on hygiene measures

Conditions for Safe Storage, Including Any Incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure Controls / Personal Protection

Control Parameters

Occupational Exposure Limits: None.

Appropriate Engineering Controls: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental Exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual Protection Measures

Hygiene Measures: Wash hands, forearms, and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin Protection

Hand Protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin Protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must

be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and Chemical Properties

Appearance

Physical State: Liquid.

Color: White to straw.

Odor: Burnt sugar.

Odor Threshold: Not available.

Molecular Weight: Not applicable.

Molecular Formula: Not applicable.

pH: 1.7 (10% w/w)

Melting Point: 10°C (50°F)

Boiling Point: 113°C (235.4°F)

Flash Point: Not available.

Burning Time: Not applicable.

Burning Rate: Not applicable.

Evaporation Rate: Not available.

Flammability (Solid, Gas): Not available.

Lower and Upper Explosive (Flammable) Limits: Not available.

Vapor Pressure: 1.5 kPa (11 mm Hg, room temperature)

Vapor Density: Not available.

Relative Density: 1.27

Volatility: 30% (v/v)

Solubility in Water: Soluble

Partition Coefficient: n-Octanol/Water: Not available.

Auto-ignition Temperature: Not available.

Decomposition Temperature: Not available.

SADT: Not available.

Viscosity: Not available.

Section 10. Stability and Reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical Stability: The product is stable.

Possibility of Hazardous Reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid: Incompatibles.

Incompatible Materials: Strong oxidizing agents. Metals. Cyanides and sulfides.

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

ACUTE TOXICITY

Product/Ingredient Name: Glycolic acid

Result: LC50 Inhalation Dusts and mists

Species: Rat

Dose: 3600 mg/m³

Exposure: 4 hours

Product/Ingredient Name: Glycolic acid

Result: LD50 Oral

Species: Rat

Dose: 1938 mg/kg

Exposure: -

IRRITATION/CORROSION

Product/Ingredient Name: Glycolic acid

Result: Eyes - Severe irritant

Species: Rabbit

Score: -

Exposure: 2 mg

Observation: -

Product/Ingredient Name: Glycolic acid

Result: Skin - Severe irritant

Species: Rabbit

Score: -

Exposure: 0.5 mL

Observation: -

Sensitization

Skin: There is no data available.

Respiratory: There is no data available.

Mutagenicity: There is no data available.

Carcinogenicity: There is no data available.

Reproductive Toxicity: There is no data available.

Teratogenicity: There is no data available.

Specific Target Organ Toxicity (Single Exposure): There is no data available.

Specific Target Organ Toxicity (Repeated Exposure): There is no data available.

Aspiration Hazard: There is no data available.

Information on the likely Routes of Exposure: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects

Eye Contact: Causes serious eye damage.

Inhalation: May give off gas, vapor, or dust that is very irritating or corrosive to the respiratory system.

Skin Contact: Causes severe burns.

Ingestion: May cause burns to mouth, throat and stomach.

Symptoms related to the Physical, Chemical, and Toxicological Characteristics

Eye Contact: Adverse symptoms may include the following: pain, watering, redness

Inhalation: No known significant effects or critical hazards.

Skin Contact: Adverse symptoms may include the following: pain or irritation, redness, blistering may occur

Ingestion: Adverse symptoms may include the following: stomach pains

DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE

Short Term Exposure

Potential Immediate Effects: No known significant effects or critical hazards.

Potential Delayed Effects: No known significant effects or critical hazards.

Long Term Exposure

Potential Immediate Effects: No known significant effects or critical hazards.

Potential Delayed Effects: No known significant effects or critical hazards.

Potential Chronic Health Effects

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental Effects: No known significant effects or critical hazards.

Fertility Effects: No known significant effects or critical hazards.

Numerical Measures of Toxicity

Acute Toxicity Estimates

Route: Inhalation (dusts and mists)

ATE Value: 5.143 mg/L

Section 12. Ecological Information

Toxicity: There is no data available.

Persistence and Degradability: There is no data available.

Bioaccumulative Potential

Product/Ingredient Name: Glycolic acid

LogP_{ow}: < 0.3

BCF: -

Potential: Low

Mobility in Soil

Soil/Water Partition Coefficient (K_{oc}): There is no data available.

Other Adverse Effects: No known significant effects or critical hazards.

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

DOT Classification

UN Number: UN3265

UN Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Glycolic acid)

Transport Hazard Class(es): 8

Packing Group: II

Environmental Hazards: No.

Additional Information: -

IMDG

UN Number: UN3265

UN Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Glycolic acid)

Transport Hazard Class(es): 8

Packing Group: II

Environmental Hazards: No.

Additional Information: -

IATA

UN Number: UN3265

UN Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Glycolic acid)

Transport Hazard Class(es): 8

Packing Group: II

Environmental Hazards: No.

Additional Information: -

AERG: 153

Special Precautions for User: Transport within user's premises: always transport in closed

containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not available.

Section 15. Regulatory Information

U.S. Federal Regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304

Composition/Information on Ingredients: No products were found.

SARA 304 RQ: Not applicable.

SARA 311/312

Classification: Immediate (acute) health hazard

Composition/Information on Ingredients

Name: Glycolic acid

%: 60 - 100

Fire Hazard: No.

Sudden Release of Pressure: No.

Reactive: No.

Immediate (Acute) Health Hazard: Yes.

Delayed (Chronic) Health Hazard: No.

State Regulations

Massachusetts: None of the components are listed.

New York: None of the components are listed.

New Jersey: None of the components are listed.

Pennsylvania: None of the components are listed.

California Prop. 65: No products were found.

INTERNATIONAL REGULATIONS

International Lists

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted.

Disclaimer: As the users' condition of work is not known, the information contained in this Material Safety Data Sheet is accurate to the best of our knowledge and is based on the national community regulations. The product must not be employed for uses other than those specified without having previously obtained written handling instructions. Users are responsible for taking all necessary to comply with the requirements of the law and local regulations. The information contained in this sheet should be regarded as the description of the safety requirements relating to our products and not as a guarantee of its properties.

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Korea inventory: All components are listed or exempted.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule I Chemicals: Not listed

Chemical Weapons Convention List Schedule II Chemicals: Not listed

Chemical Weapons Convention List Schedule III Chemicals: Not listed

Hazardous Material Information System (U.S.A.)

Health: 3

Flammability: 0

Physical Hazards: 0

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

Health: 3

Flammability: 0

Instability: 0