

Glycolic Acid

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 /
March 26, 2012 / Rules and Regulation

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1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Glycolic Acid
Synonyms: No data available
INCI Name: Glycolic Acid, Water
CAS Number: 79-14-1, 7732-18-5
Formula: C₂H₄O₃
Product Form: Liquid
Product Use: Cosmetic use

Distributor: MakingCosmetics Inc.
Address: 10800 231st Way NE
Redmond, WA 98053 (USA)
Phone / Fax: 425-292-9502 / 425-292-9601
Web: www.makingcosmetics.com

Emergency Telephone Number: 1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

Classification: Skin corrosion - Category 1B
Acute toxicity, inhalation - Category 4
Signal Word: DANGER!
Hazard Pictograms:



Hazard Statements: H314: Causes severe skin burns and eye damage.
H332: Harmful if swallowed.
Precautionary Statements: (Prevention) P260: Do not breathe dust or mists.
P264: Wash hands and other exposed skin areas thoroughly after handling.
P271: Use only outdoors or in a well-ventilation area.
P280: Wear protective gloves, protective clothing, and eye protection.
(Response) P301 + P330 + P331 + P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.
P303 + P361 + P353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340 + P310: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or 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 or doctor.
P321: Specific treatment: Contact a POISON CENTER or doctor. Refer to Section 4.
P363: Wash contaminated clothing before reuse.
(Storage) P405: Store locked up.
(Disposal) P501: Dispose of contents and containers in accordance with national and local regulations.
Potential Health Hazards: Eyes: Causes serious eye damage. Risk of blindness.
Inhalation: May cause irritation of the nose, throat, and respiratory system.
Skin: Causes severe skin irritation and burns.
Ingestion: Harmful if swallowed.
NFPA Ratings (704):

Health	3	Serious
Flammability	0	Minimal
Reactivity	0	Minimal
Specific Hazard	N/A	

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %	Molecular Weight
Glycolic Acid	79-14-1	68 - 72%	Not Available
Water	7732-18-5	28 - 32%	Not Available

4 FIRST AID MEASURES

Eyes:	Immediately flush eyes with large amounts of water or saline solution for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after first 2 minutes and continue rinsing. Seek immediate medical attention, preferably from an ophthalmologist. Treat symptomatically.
Inhalation:	If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Do not use mouth-to-mouth method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt, or waistband. Seek immediate medical attention. Treat symptomatically.
Skin:	Flush skin with large amounts of water while removing contaminated clothing and continue rinsing for at least 15 minutes. Wash contaminated clothing thoroughly before reuse. Discard contaminated shoes. Seek immediate medical attention for chemical burns. Treat symptomatically.
Ingestion:	Do Not Induce Vomiting. Never give anything by mouth to an unconscious or convulsing person. Rinse mouth with water if the victim is conscious. Remove dentures if present. If vomiting occurs, the head should be kept lower than the waist so that vomit does not enter the lungs. Do not leave the victim unattended. If the victim is unconscious, place in the recovery position and get immediate medical attention. Immediately contact a poison control center or doctor. Seek medical attention if the victim feels unwell or if a large quantity of material has been ingested. Treat symptomatically.
Acute/Delayed Symptoms:	Eyes: Causes burns to the eyes and serious eye damage. Symptoms may include inflammation, swelling, pain, tearing, blurred vision, and burns. May cause permanent eye damage, visual impairment, and possible blindness. Vapor or mist can cause eye irritation. Skin: Causes severe skin irritation and burns. Symptoms may include localized redness, itching, blistering, and pain. Inhalation: Harmful if inhaled. May cause irritation of the nose, throat, and respiratory system. Symptoms may include cough, sore throat, pain, headache, shortness of breath and lung inflammation. Material is extremely destructive to the mucous membranes and upper respiratory tract. Ingestion: Harmful if swallowed. Causes burns to the lips, mouth, throat, and gastrointestinal tract. Causes headache, nausea vomiting, headache, abdominal pain, diarrhea, tiredness, incoordination, collapse, and unconsciousness. May cause perforation of the esophagus and stomach. May cause server and permanent damage to the digestive tract.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:	Product is not a fire/explosion hazard. Use appropriate media for surrounding environment and adjacent fire. No limitations of extinguishing agents are given for this material.
Special protective equipment & precautions for firefighters:	Wear self-contained breathing apparatus and full protective clothing, including eye protection and boots. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Water contaminated by this material must be contained from being discharged to any waterway, sewer or drain to prevent environmental contamination.
Flash Points:	>200°F (93.3°C)
Specific hazards arising from the chemical:	Closed containers may rupture due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention. See also Stability and reactivity section.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:	Evacuate non-essential personnel. Water appropriate protective clothing and equipment designated in Section 8. Ventilate the area. Remove all sources of ignition. No smoking. Clean up spills immediately. Spill created a slip hazard. Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	Avoid liquid release into sewers/public water/environment. Notify environmental authorities in case of leak.
Methods and material for containment and cleaning up:	Cover drains and contain spill. DO NOT FLUSH LARGE SPILLS DOWN THE DRAIN. Cover spill with a large quantity of inert absorbent. Do use combustible material such as sawdust. Collect material and place it in an approved container for proper disposal. Observe possible material restrictions (Sections 7 and 10). Clean contaminated area with soap and

water. Dispose of absorbed material in accordance with the regulations.

7 HANDLING & STORAGE

Precautions for safe handling:	Do not get in eyes or on skin or clothing. No Smoking. Do not breathe vapor or mist. If normal use of material presents a respiratory hazard, use only adequate ventilation, or wear an appropriate respirator. Wash contaminated clothing and shoes thoroughly after use. Use good personal hygiene practice. See section 8 for recommendations on the use of personal protective equipment.
Conditions for safe storage, incl. any incompatibilities:	Store in a dry, well-ventilated area away. Transfer only approved containers having correct labeling. Keep container tightly closed when not in use. Protect containers from physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers of this material are hazardous when empty as they contain product residues. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Keep out of reach of children. Store away from incompatible materials (see section 10 for incompatibilities).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Component</u>	<u>Exposure Limits</u>	<u>Basis</u>	<u>Entity</u>
Glycolic Acid	None		

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection:

Eyes:	Wear safety glasses with unperforated side shields during use.
Inhalation:	No personal respiratory protective equipment normally required. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to vapor/fume at levels exceeding the exposure limits.
Body:	Wear gloves recommended by glove supplier for protection against materials in Section 3. Breakthrough time of selected gloves must be greater than the intended use period. Wear protective clothing and protective boots. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.
Other:	Use good personal hygiene practices. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly, select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, pale-yellow liquid	Vapor Pressure:	No data available
Odor:	Mild, similar to burnt sugar	Vapor Density:	No data available
Odor Threshold:	No data available	Evaporation Rate:	No data available
Color:	No data available	Flammability:	Not considered a fire hazard
Molecular Weight:	70.05 g/mol	Upper/lower Explosive Limit:	No data available
pH:	0.4 - 0.7	Flash Point:	>200°F (93.3°C)
Initial Boiling Point:	212°F (100°C)	Specific Gravity:	No data available
Melting/Freezing Point:	50°F (10°C), precipitates	Water Solubility @ 20°C:	Miscible
Relative Density:	No data available	Auto-Ignition Temperature:	No data available
Partition Coefficient: n-octanol/water:	log Pow = - 0.07	Decomposition Temperature:	No data available
Dynamic Viscosity at 16°C:	11.3 cps	Explosive Properties:	Not an explosion hazard
Oxidizing Properties:	Not applicable	Density:	1.27 - 1.30

10 STABILITY AND REACTIVITY

Reactivity:	No special reactivity has been reported during normal conditions of handling and use.
Chemical Stability:	This material is stable under recommend storage and handing conditions.
Hazardous Polymerization:	No data available.
Conditions to Avoid:	Avoid temperature extremes and contact with incompatible materials.
Incompatible Materials:	Strong oxidizing agents, metals.
Hazardous Decomposition Products:	Thermal decomposition products may include oxides of carbon.
Possible Hazardous Reactions:	Risk of violent reaction and explosive with metals. Contact may generate flammable hydrogen gas. Hazardous polymerization will not occur.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:	No data available.
Skin:	Causes severe skin irritation and burns.
Eyes:	Causes serious eye damage. Risk of blindness.
Inhalation:	(Rat, Male) LC50: 3.6 mg/l, 4 hours.
Ingestion:	(Rat) LD50: 1.950 mg/kg.
Carcinogenicity:	This product contains no substances present at levels greater than or equal to the 0.1% threshold (de minimis) that are identified as a probable, possible, potential, or confirmed carcinogens by ACGIH, IARC, NTP, or OSHA.
Teratogenicity:	No data available.
Endocrine Disrupting Properties:	This mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Germ Cell Mutagenicity:	No data available.
Embryotoxicity:	No data available.
Specific Target Organ Toxicity:	No data available.
Reproductive Toxicity:	No data available that indicates this product causes adverse developmental or fertility effects.

12 ECOLOGICAL INFORMATION

Ecotoxicity:	Large spills or discharges of glycolic acid may decrease the pH of aquatic systems to a value 2, which may be fatal to aquatic life and soil microorganisms.
Aquatic Vertebrate:	(Lepomis macrochirus (Bluegill)) Acute and prolonged toxicity to fish: LC50: 24 - 48 hours: 93 mg/l. (Pimephales promelas (Fathead minnow)) LC50: 96 hours: 164 mg/l.
Aquatic Invertebrate:	No data available.
Aquatic Plants:	(Pseudokirchneriella subcapitata (Green algae)) EbC50: 72 hours: 22.5 mg/l.
Persistence and Degradability:	This product is readily biodegradable.
Bioaccumulative Potential:	The material will not bioaccumulate.
Mobility in Soil:	No data available.
PBT and vPvB Assessment:	No data available.
Other Adverse Effects:	Do not allow material to enter surface waters, wastewater, or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13 DISPOSAL CONSIDERATIONS

Waste Residues:	The generation of waste should be avoided or minimized whenever possible. This material and its container must be disposed of in a safe way via licensed pharmaceutical waste contractor and in accordance with FDA and DEA regulations. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product.
Product Containers:	Empty containers or liners may retain some product residues. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	UN Number: UN3265 Packing Group: III Hazard Class: 8 Proper Shipping Label: Corrosive Liquid, Acidic, Organic, n.o.s. NEAREG: Guide #153 Packaging authorization Non-Bulk: 49 CFR 173.202; Bulk: 173.242 Packaging exceptions: 49 CFR 173.154
IMDG (International Maritime Dangerous Goods):	UN Number: UN3265 Packing Group: III Hazard Class: 8 Proper Shipping Label: Corrosive Liquid, Acidic, Organic, n.o.s. Marine Pollutant: No EMS Number: F-A, S-B
IATA (International Air Transport Association):	UN Number: UN3265 Packing Group: III Hazard Class: 8 Proper Shipping Label: Corrosive Liquid, Acidic, Organic, n.o.s. Quanyty Limitations: 49 CFR 175.27 and 175.75 - Cargo Aircraft Only: 60 l; Passenger Aircraft: 5 l
ICAO (International Civil Aviation Organization):	UN Number: UN3265 Packing Group: III Hazard Class: 8 Proper Shipping Label: Corrosive Liquid, Acidic, Organic, n.o.s. Quanyty Limitations: 49 CFR 175.27 and 175.75 - Cargo Aircraft Only: 60 l; Passenger Aircraft: 5 l
ADR/RID (Road and Rail Transportation):	UN Number: UN3265 Packing Group: III Hazard Class: 8 Proper Shipping Label: Corrosive Liquid, Acidic, Organic, n.o.s.

15 REGULATORY INFORMATION

TSCA Inventory Status:	All substances in this product are either listed or are exempt from listing (e.g., naturally-occurring materials) on the TSCA Inventory. This product is intended for use in applications regulated by the Food and Drug Administration in the United States. This product is not subject to TSCA 12(b) Export Notification.
OSHA:	This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200.
SARA Section 311/312:	Causes severe skin burns and eye damage. Harmful if inhaled.
SARA Section 313:	None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by Section 313 of the Emergency Planning and Community Right- to-Know Act of 1986.
SARA 302/304:	None of the components of this product exceed the threshold (de minimis) reporting levels established by these sections of Title III of SARA.
SARA 302/304:	None of the components of this product exceed the threshold (de minimis) reporting levels established by these sections of Title of SARA.
CERCLA:	No components of this product exceed the threshold (de minimis) reporting levels for hazardous waste established by CERCLA.
Clean Air Act (CAA)	This product does not contain any Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b). This product does not contain Class 1 ozone depleters. This product does not contain Class ozone depleters.
Clean Water Act (CWA):	This product does not contain any Hazardous Substances listed under the CWA. This product does not contain any Priority Pollutants. This does not contain Toxic pollutants.
California Prop. 65:	This product contains no chemical(s) known to the state of California to cause birth defects or reproductive harm in concentrations that exceed the threshold (de minimis) reporting levels established under Proposition 65.
Other U.S. State Inventories:	None of the components of this product are listed in the following State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality/ Air Pollutants lists.
Canada (WHMIS):	Uncontrolled product according to WHMIS classification criteria.
Canada (NPRI):	Uncontrolled product according to WHMIS classification criteria.
Canada (DSL):	Listed.

Canada (NDSL):	Not listed.
Germany (WGK):	1 (slightly hazardous to water).
EU (EINECS):	Listed.
China (IECSC):	Listed.
Australia (AICS):	Listed.
Japan (ENCS):	Listed.
Philippines (PICCS):	Listed.
Korea (KECI):	Listed.
New Zealand (NZIoC):	Listed.

16 OTHER INFORMATION

Revision Date:	06-Dec-2024
Compliance:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Disclaimer:	This 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 other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.