

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name Glycolic Acid 50% Solution

CAS number 79-14-1

Synonyms Hydroxyacetic acid solution

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory Chemicals.

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
12501 Pauls Valley Road
Austin, Texas 78737
U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Corrosion	Category 1B
Serious Eye Damage	Category 1
Short-term Aquatic Hazard	Category 3

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

May be harmful if swallowed.
Causes severe skin burns and eye damage.

Precautionary statements

Prevention: Do not breathe vapor or mist. Wash hands and other skin areas exposed to material thoroughly after handling. Wear protective gloves, protective clothing, eye protection and face protection.

Response: Contact a POISON CENTER or doctor. Refer to Section 4 of this SDS.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor.

IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or 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 or doctor.

Storage: Store locked up.

Disposal: Dispose of contents in accordance with national and local regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

No information available.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Glycolic acid	Hydroxyacetic acid	79-14-1	49-51%
Water	Aqua; H2O	7732-18-5	49-51%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled	Move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight fitting clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention.
In case of skin contact	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.
In case of eye contact	Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after the first 2 minutes and continue rinsing. Seek immediate medical attention, preferably from an ophthalmologist.
If swallowed	Rinse mouth with water if victim is conscious. Remove dentures, if any. Give 2 glasses of water or milk to drink if victim is conscious, alert and able to swallow. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Obtain medical attention immediately. To prevent aspiration of swallowed product, lay victim on side with the head lower than the waist.

4.2 Most important symptoms and effects, both acute and delayed

Eyes: Causes burns to eyes and surrounding tissue. Symptoms may include redness, swelling, pain, tearing, burns, blurred vision, permanent eye damage and possible blindness. Mist or vapor can cause severe eye irritation and eye damage.

Skin: Causes severe skin irritation and burns.

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: May be harmful if swallowed. Causes burns to the lips, mouth, throat and gastrointestinal tract. Causes headache, nausea, vomiting, abdominal pain, diarrhea, tiredness, incoordination, collapse and unconsciousness. May cause perforation of the esophagus and stomach. May cause severe and permanent damage to the digestive tract.

Chronic: Chronic exposure may result in damage to liver and kidneys.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing media suitable for surrounding fire.

Unsuitable extinguishing media None known.

5.2 Specific hazards arising from the substance or mixture

Closed containers may explode 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.

5.3 Special protective equipment and precautions for firefighters

Full protective equipment including self-contained breathing apparatus should be used. 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.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
3	1	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing designated in Section 8. Approach spill from upwind. Remove all sources of ignition. Ventilate the area. Spill creates a slip hazard.

6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Carefully neutralize spill with lime or soda ash. Cover spill with a large quantity of inert absorbent. Do not use combustible material such as sawdust. Collect product and place into an approved container for proper disposal. Do not use a metal container for disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear all appropriate personal protective equipment specified in Section 8. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Spills should be cleaned up promptly. Wash contaminated clothing before reuse. Destroy contaminated shoes. Keep away from heat and incompatible materials.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Store in accordance with local regulations. Store in original container in a dry, cool and well ventilated area, away from incompatible materials (see Section 10.5) and food and drink. Keep in original container, or transfer only to approved containers having correct labeling. DO NOT store in metal containers. Keep containers tightly closed when not in use. Protect container from physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store protected from light and air. Keep away from alkalis. Keep away from metals. Use appropriate containment to avoid environmental contamination. Ventilate enclosed areas. Do not take internally. Keep locked up and out of reach of children.

Incompatibilities

Strong bases, sulfides, cyanides, metals, reducing agents.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

Contains no substances with occupational exposure limit values.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

No information available.

US. ACGIH Threshold Limit Values

No information available.

US. NIOSH: Pocket Guide to Chemical Hazards

No information available.

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1 for additional data.

Personal protective equipment

Eye/face protection

Wear protective goggles or safety glasses with non-perforated side shields and a face shield. Refer to 29 CFR 1910.133, ANSI Z87.4 or Standard EN 166.

Skin protection

Wear Nitrile rubber gloves or those recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of gloves must be greater than the intended use period.

Body Protection

Protective clothing. Protective boots, if the situation requires.

Respiratory protection

None required with normal handling. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements. If there are no applicable exposure limit requirements, wear respiratory protection when adverse effects (e.g. respiratory irritation or discomfort) have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. An organic vapor cartridge with a particulate pre-filter is an example of an effective air-purifying respirator.

Control of environmental exposure

Do not empty into drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Clear, pale yellow
Odor	Sweet
Odor Threshold	No data available
pH	No information available
Melting Point/Range	10 °C (50 °F), precipitates
Boiling Point/Range	113 °C / 235.4 °F
Evaporation Rate	No data available
Flammability (solid)	Not applicable
Flammability or explosive limit	Not applicable
Upper	No data available
Lower	No data available
Vapor Pressure	No data available
Vapor Density	No information available
Density	No information available
Solubility	No information available
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	Not applicable
Decomposition Temp	No information available
Viscosity	11.28 mPa.s at 16 ° C
Molecular Formula	C ₂ H ₄ O ₃
Molecular Weight	76.05 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No special reactivity has been reported.

10.2 Chemical stability

This product is stable under recommended storage conditions, handling and use.

10.3 Possibility of hazardous reactions

Risk of violent reaction and explosion with metals. Contact may generate flammable hydrogen gas. Hazardous polymerization does not occur.

10.4 Conditions to avoid

Elevated temperatures. Contact with incompatible materials.

10.5 Incompatible materials

Strong bases, sulfides, cyanides, metals, reducing agents.

10.6 Hazardous decomposition products

Thermal decomposition products include oxides of carbon.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycolic acid	2,040 mg/kg (Rat)	-	-

Skin corrosion/irritation

Cause severe skin irritation and burns.

Serious eye damage/eye irritation

Causes burns and eye damage. Risk of blindness.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Glycolic acid	79-14-1	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure

No data available.

Specific target organ toxicity - repeated exposure

No data available.

Reproductive toxicity

No data available.

Chronic effects

No data available.

11.2 Additional Information

No additional information.

SECTION 12: Ecological information**12.1 Toxicity**

Large discharges of this product to the environment may decrease the pH of aquatic systems to a value <2, which may be fatal to aquatic life and soil micro-organisms.

Product		Species	Test Results
Glycolic acid	LC50	Oncorhynchus mykiss	>100 mg/L/96h, semi-static
	EC50	Daphnia magna	>100 mg/L/48h, semi-static
	ErC50	Pseudokirchneriella	>100 mg/L/72h, static

12.2 Persistence and degradability

Readily biodegradable.

12.3 Bio accumulative potential

Product will not bioaccumulate.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: Disposal considerations**13.1 Waste Disposal Methods**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-no	UN3265
Proper Shipping Name	Corrosive liquid, acidic, organic, n.o.s. (Glycolic Acid)
Hazard Class	8
Packing Group	II

IMDG

UN-no	UN3265
Proper Shipping Name	Corrosive liquid, acidic, organic, n.o.s. (Glycolic Acid)
Hazard Class	8
Packing Group	II

IATA

UN-no	UN3265
Proper Shipping Name	Corrosive liquid, acidic, organic, n.o.s. (Glycolic Acid)
Hazard Class	8
Packing Group	II

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

California Proposition 65

Not listed.

SECTION 16: Other information

Issue Date: 07/30/2019

Revised on 07/17/2026

SECTION 17: Disclaimer

The information provided on this 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.