



24 Madison Road, Fairfield, New Jersey 07004, USA  
Tel: 800-771-JEEN (5336), Tel: 973-439-1401, Fax: 973-439-1402,  
email: [info@jeen.com](mailto:info@jeen.com) , Website: [www.jeen.com](http://www.jeen.com)

## MATERIAL SAFETY DATA SHEET

### Section 1 – Product and Company Identification

Issued by: JEEN International Corporation  
24 Madison Road  
Fairfield, NJ 07004  
Tel#: 973-439-1401

**Chemtrec Emergency Tel.# 800-424-9300**

**Chemtrec Int'l Tel.# 703-527-3887(Collect Calls Accepted)**

Latest Revision: July 17, 2001

Product Name: **JEECHEM Glycolic Acid, 70%, CG**  
CAS Number: 79-14-1  
Formula: HO-CH<sub>2</sub>COOH  
CAS Name: Acetic Acid, Hydroxy  
Synonyms: Hydroxyacetic Acid, Hydroxyethanoic Acid, HAA

### Section 2 – Composition/Information on Ingredients

#### Components

Material	CAS Number	%
Glycolic Acid:	79-14-1	70.0
Water:	7732-18-5	30.0

#### Note for Glycolic Acid Component:

The total acid specification for the 70% solution is 70 –72%, and the typical free acid is 64.1 – 66.7. At high concentrations, free glycolic acid exists in equilibrium with low molecular weight, polyester oligomers. Upon dilution, neutralization, etc., these components revert to free glycolic acid.

### Section 3 – Hazards Identification

#### Potential Health Effects:

Inhalation may cause irritation of mucous membranes with upper respiratory and bronchial irritation.

Skin contact may cause severe skin irritation with discomfort or rash. Higher or prolonged exposure may cause skin burns or ulceration.

Eye contact may cause eye corrosion with corneal or conjunctival ulceration. Permanent eye damage can occur.

Ingestion may cause corrosion of mucous membranes with stomach discomfort, nausea, and prostration. Kidney damage or fatality may occur from gross overexposure.

#### Carcinogenicity Information:

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

### Section 4 – First Aid Measures

#### First Aid

**Inhalation:** If inhaled, immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Skin Contact:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.

**Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

**Ingestion:** If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.



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### Section 5 – Fire Fighting Measures

Flammable Properties:	May burn but do not ignite readily.
Fire and Explosion Hazards:	Contact with active metals may produce flammable hydrogen gas. May burn.
Fire and Explosion Hazards:	Contact with metals may produce flammable hydrogen gas.
Extinguishing Media:	Use media appropriate for surrounding material.
Fire Fighting Instructions:	Small fire: Use dry chemical, CO2 or water spray. Large fire: Use water spray, fog, or foam – Do NOT use water jets. If it is safe to do so, move undamaged containers from the fire area. Cool containers with flooding quantities of water until well after the fire is out.

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### Section 6 – Accidental Release Measures

#### Safeguards (Personnel)

Note: Review Fire Fighting Measures and Handling (Personnel) Sections before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up.

#### Accidental Release Measures:

Neutralize spills with lime or soda ash. Flush spill area with plenty of water. If this material is spilled and not recovered, or is recovered as a waste for treatment or disposal, the CERCLA Reportable Quantity is 100 lbs. (Release of an unlisted hazardous Waste Characteristic of Corrosivity.)

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### Section 7 – Handling and Storage

Handling (Personnel):	Do not get in eyes, on skin or on clothing. Avoid breathing mist. Wash thoroughly after handling.
Storage:	Keep in a well ventilated area. Protect bulk storage area from sparks and flame. Keep packages tightly closed. Store above 10°C (50°F) melting point.

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### Section 8 – Exposure Controls/Personal Protection

#### Engineering Controls:

Good general ventilation should be provided to keep mist concentrations below the recommended exposure limit.

#### Personal Protective Equipment:

Chemical splash goggles and rubber gloves. Wear a butyl rubber acid suit and NIOSH permissible respiratory protection if there is a reasonable possibility for exposure.

#### Exposure Guidelines

##### Exposure Limited

High Purity Glycolic Acid – 70%

PEL (OSHA):	None Established
TLV (ACGIH):	None Established
AEL* (DuPont):	10 mg/m <sup>3</sup> , 8 & 12 Hr. TWA

\*AEL is JEEN International's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.



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### Section 9 – Physical and Chemical Properties

#### Physical Data

Boiling Point:	112° C (234°F) @ 760 mm Hg
Vapor Pressure:	11 mmHg @ 20°C
Vapor Density:	Vapor is water
Melting Point:	10 °C (50°F) (Precipitates)
Solubility in Water:	Soluble
pH:	0.5 @ 25°C (77° F)
Odor:	Like burnt sugar when in solution.
Form:	Clear Liquid
Color:	Colorless
Density:	1.25 g/cm3 @ 26°C (79°F)

### Section 10 – Stability and Reactivity

Chemical Stability:	Stable
Incompatibility with Other Materials:	Reacts with active metals (like sodium), oxidizing agents (such as strong nitric acid), cyanide salts, or sulfide salts to produce hydrogen, oxides of nitrogen, hydrogen cyanide, or hydrogen sulfide gases, respectively.
Decomposition:	Decomposition will not occur.
Polymerization:	Polymerization will not occur.

### Section 11 – Toxicological Information

#### Animal Data

Glycolic Acid	
Inhalation 4 hour LC50:	7.7 mg/L in rats
Oral LD50:	1950 mg/kg in rats

70% Glycolic Acid is a skin and eye corrosive. Glycolic Acid is not a skin sensitizer in animals.

Toxic effects described in animals from single exposure to Glycolic Acid by inhalation include body weight losses and ocular and nasal discharges. Histopathological changes observed include laryngeal ulceration, nasal lesions, and lung inflammation. Repeated exposures produced liver, spleen, thymus, and gastrointestinal tract effects. Administration of single high oral doses of Glycolic Acid produced gastrointestinal tract irritation, liver damage, increased kidney weights, and the formation of calcium oxalate crystals in the kidneys. Repeated oral doses in cats produced mortality, weight and appetite loss, depression, vomiting, coma, convulsions, and kidney failure. Dogs given similar and higher doses exhibited no toxic effects. Repeated oral dosing in rats resulted in excessive mortality, decreased body weight and hematologic and clinical chemistry changes. The primary target organ of toxicity was the kidney. Both organ weight and microscopic changes were seen in kidneys of male rats. No systemic toxicity occurred in female rats. There was no evidence of neurotoxic or immunologic effects with Glycolic Acid from this test.

No animal test reports are available to define carcinogenic hazards. At high dietary levels in animals developmental toxicity occurred only at exposure levels producing other toxic effects in the adult animal. Glycolic Acid is not considered a unique developmental hazard to the conceptus. The compound does not produce genetic damage in bacterial cell cultures. It has not produced genetic damage in tests on animals. There was not evidence of reproductive effects in rats.



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### Section 12 – Ecological Information

#### Ecotoxicological Information

Aquatic Toxicity: Slight

24 – 48 hour LC50, bluegill sunfish: 93 mg/L

96 hour LC50, fathead minnows: 168 mg/L

These data indicate that glycolic acid has slight aquatic toxicity.

Biodegradability – Readily biodegradable

After 7 days, 89.6% is biodegraded (closed bottle test).

### Section 13 – Disposal Considerations

Waste Disposal: Comply with Federal, State, and local regulations. If approved, may be neutralized with lime or soda ash and flushed to wastewater treatment system. This material may be a RCRA hazardous waste due to its corrosive characteristic (pH). Eliminate all ignition sources within at least 15m. Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing. Prevent entry into waterways, drains, and confined areas. Cover with plastic sheet to prevent spreading.

### Section 14 – Transportation Information

#### Shipping Information:

DOT/IMO Proper Shipping Name: Corrosive Liquids, Acidic, Organic, N.O.S. (Glycolic Acid)

Hazard Class: 8

UN No.: 3265

DOT/IMO Label: Corrosive

Packaging Group: II

Shipping Containers: Drums, Sample Bottles

### Section 15 - Regulatory Information

#### U.S. Federal Regulations:

TSCA Inventory Status: Reported/Included.

Title III Hazard Classifications Sections 311, 312

Acute: Yes

Chronic: No

Fire: No

Reactivity: No

Pressure: No

Lists: SARA Extremely Hazardous Substance: No

CERCLA Hazardous Material: Yes\*

SARA Toxic Chemical: No

\*See Disposal Section.

Canadian WHMIS Classification: E

Canadian Regulations: Class E Corrosive Material

### Section 16 – Other Information

#### NFPA, NPCA-HMIS

Health: 3

Flammability: 0

Reactivity: 0

Personal Protection rating to be supplied by user depending on use conditions.

Additional Information: The date in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.