

<b>MSDS</b>	<b>Material Safety Data Sheet</b>	24 Hour Emergency Telephone: 908-859-2151 CHEMTREC: 1-800-424-9300
		National Response in Canada CANUTEC: 613-996-6666
From: Mallinckrodt Baker, Inc. 222 Red School Lane Phillipsburg, NJ 08865		Outside U.S. and Canada Chemtrec: 763-527-3887
Mallinckrodt CHEMICALS		NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.
J.T.Baker		
All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.		

## GLYCOLIC ACID (68 – 72%)

### 1. Product Identification

**Synonyms:** Hydroxyacetic acid; hydroxyethanoic acid  
**CAS No.:** 79-14-1  
**Molecular Weight:** Not applicable to mixtures.  
**Chemical Formula:** HOCH<sub>2</sub>COOH in H<sub>2</sub>O  
**Product Codes:**  
J.T. Baker: M822  
Mallinckrodt: 2742

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Glycolic Acid	79-14-1	68 – 72%	Yes
Water	7732-18-5	28 – 32%	No

### 3. Hazards Identification

#### Emergency Overview

**DANGER! CORROSIVE. HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE IRRITATION AND BURNS TO EVERY AREA OF CONTACT.**

**SAF-T-DATA<sup>(tm)</sup>** Ratings (Provided here for your convenience)

Health Rating: 3 – Severe  
Flammability Rating: 1 – Slight  
Reactivity Rating: 1 – Slight  
Contact Rating: 4 – Extreme (Corrosive)  
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES  
Storage Color Code: White (Corrosive)

#### Potential Health Effects

Information on the human health effects from exposure to this substance is limited.

#### Inhalation:

Inhalation is irritating to the mucous membrane and upper respiratory tract. In extreme cases, severe irritation and burns may result.

#### Ingestion:

Material causes irritation and burns to digestive tract.

#### Skin Contact:

Causes irritation and burns to the skin.

#### Eye Contact:

Can cause severe irritation or burns with eye damage.

#### Chronic Exposure:

No information found.

**Aggravation of Pre-existing Conditions:**  
No information found.

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## 4. First Aid Measures

**Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

**Ingestion:**

DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Skin Contact:**

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

**Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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## 5. Fire Fighting Measures

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Water spray, dry chemical, alcohol foam, or carbon dioxide.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Neutralize with alkaline material (soda ash, lime), then absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

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## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

None established.

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to the substance is apparent and engineering controls are not feasible, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

**Eye Protection:**

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. Physical and Chemical Properties

**Appearance:**

White to straw colored liquid.

**Odor:**

Burnt sugar odor

**Solubility:**

Soluble in water.

**Specific Gravity:**

1.27

**pH:**

Aqueous solution: 2.5 (0.5 %), 1.7 (10 %)

**% Volatiles by volume @ 21C (70F):**

No information found.

**Boiling Point:**

No information found.

**Melting Point:**

10C (50F)

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

No information found.

**Evaporation Rate (BuAc=1):**

No information found.

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## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**

Carbon dioxide and carbon monoxide may form when heated to decomposition. Can react with most common metals to release flammable hydrogen gas.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Strong oxidizers.

**Conditions to Avoid:**

Incompatibles.

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## 11. Toxicological Information

For Glycolic Acid: Oral rat LD50: 1950 mg/Kg; Irritation Data (std Draize, eye, rabbit) 2 mg, severe. Investigated as a tumorigen and a reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Glycolic Acid (79-14-1)	No	No	None
Water (7732-18-5)	No	No	None

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## 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

No information found.

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## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 14. Transport Information

**Domestic (Land, D.O.T.)**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID)  
**Hazard Class:** 8  
**UN/NA:** UN3265  
**Packing Group:** II  
**Information reported for product/size:** 500ML

**International (Water, I.M.O.)**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID)  
**Hazard Class:** 8  
**UN/NA:** UN3265  
**Packing Group:** II  
**Information reported for product/size:** 500ML

**International (Air, I.C.A.O.)**

**Proper Shipping Name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID)  
**Hazard Class:** 8  
**UN/NA:** UN3265  
**Packing Group:** II  
**Information reported for product/size:** 500ML

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## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Glycolic Acid (79-14-1)	Yes	Yes	Yes	Yes
Water (7732-18-5)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
Glycolic Acid (79-14-1)	Yes	Yes	No	Yes
Water (7732-18-5)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----			
Ingredient	-SARA 302-		-SARA 313-
	RQ	TPQ	List Chemical Catg.
Glycolic Acid (79-14-1)	No	No	No
Water (7732-18-5)	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
Ingredient	CERCLA	-RCRA-	-TSCA-
		261.33	8(d)
Glycolic Acid (79-14-1)	No	No	No
Water (7732-18-5)	No	No	No

Chemical Weapons Convention: No      TSCA 12(b): No      CDTA: No  
SARA 311/312: Acute: Yes      Chronic: No      Fire: No      Pressure: No  
Reactivity: No      (Mixture / Liquid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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## 16. Other Information

**NFPA Ratings:** Health: **3** Flammability: **1** Reactivity: **0**

**Label Hazard Warning:**

DANGER! CORROSIVE. HARMFUL IF SWALLOWED OR INHALED. CAUSES SEVERE IRRITATION AND BURNS TO EVERY AREA OF CONTACT.

**Label Precautions:**

Do not breathe vapor or mist.

Do not get in eyes, on skin, or on clothing.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

**Label First Aid:**

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician. If inhaled, remove to fresh air.

If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 3.

**Disclaimer:**

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