

MSDS Number: **G6821** \* \* \* \* \* Effective Date: **09/15/09** \* \* \* \* \* Supersedes: **07/05/07**

<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: 703-527-3887
		<b>NOTE:</b> 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.
All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.		

## GLYCOLIC ACID

### 1. Product Identification

**Synonyms:** Hydroxyacetic acid; hydroxyethanoic acid  
**CAS No.:** 79-14-1  
**Molecular Weight:** 76.05  
**Chemical Formula:** HOCH<sub>2</sub>COOH  
**Product Codes:**  
J.T. Baker: M821  
Mallinckrodt: 2473

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Glycolic Acid	79-14-1	100%	Yes

### 3. Hazards Identification

#### Emergency Overview

**DANGER! 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: 0 - None  
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.

## 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:**

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

**Explosion:**

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust 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. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

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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 (dust, solids); 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 dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**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.

**Other Control Measures:**

There is insufficient data in the published literature to assign complete numerical SAF-T-DATA\* ratings and laboratory protective equipment for this product. Special precautions must be used in storage, use and handling. Protective equipment for laboratory bench use should be chosen using professional judgment based on the size and type of reaction or test to be conducted and the available ventilation, with overriding consideration to minimize contact with the chemical.

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## 9. Physical and Chemical Properties

**Appearance:**

White crystals.

**Odor:**

Odorless.

**Solubility:**

Soluble in water.

**Specific Gravity:**

1.49 @ 25C

**pH:**

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

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

0

**Boiling Point:**

100C (212F)

**Melting Point:**

80C (176F)

**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.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Strong oxidizers.

**Conditions to Avoid:**

Incompatibles.

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## 11. Toxicological Information

Oral rat LD50: 1950 mg/Kg (dry material)

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Glycolic Acid (79-14-1)	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 managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. 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 SOLID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID)**Hazard Class:** 8**UN/NA:** UN3261**Packing Group:** II**Information reported for product/size:** 100G**International (Water, I.M.O.)****Proper Shipping Name:** CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID)**Hazard Class:** 8**UN/NA:** UN3261**Packing Group:** II**Information reported for product/size:** 100G**International (Air, I.C.A.O.)****Proper Shipping Name:** CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (GLYCOLIC ACID)**Hazard Class:** 8**UN/NA:** UN3261**Packing Group:** II**Information reported for product/size:** 100G

## 15. Regulatory Information

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

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

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

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

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

**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.

## 16. Other Information

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

**Label Hazard Warning:**

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

**Label Precautions:**

Do not breathe dust.

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. If swallowed, call a physician immediately. Call a physician immediately.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

No Changes.

**Disclaimer:**

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