# Material Safety Data Sheet

Glycine



ACC# 10490

## Section 1 - Chemical Product and Company Identification

MSDS Name: Glycine

Catalog Numbers: AC9544669, ACE200, S80028, BP381 1, BP381 5, BP381 500, BP381-1, BP381-5, BP381-500, BP3811, BP3815, BP381500, G46 1, G46 500, G46-1, G46-500, G461, G4612KG, G46500, G48, G48-20, G48-4, G48-500, G48200LB, G48212, G48500, G4912, G48212, BC652480, VXC4642XCX

G49212, NC952489, XXG4612KGX

Synonyms: Aminoacetic Acid; Aminoethanoic Acid.

**Company Identification:** 

Fisher Scientific 1 Reagent Lane Fair Lawn, NJ 07410

For information, call: 201-796-7100 Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
56-40-6	GLYCINE	>98%	200-272-2

**Hazard Symbols:** None listed. **Risk Phrases:** None listed.

## Section 3 - Hazards Identification

### **EMERGENCY OVERVIEW**

Appearance: white. **Caution!** May be absorbed through intact skin. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: No data found.

#### **Potential Health Effects**

Eye: May cause eye irritation.

**Skin:** May cause skin irritation. Low hazard for usual industrial handling. May be absorbed through the skin.

Ingestion: Ingestion of large amounts may cause gastrointestinal irritation. Low hazard for

usual industrial handling.

Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.

Chronic: No information found.

## Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid if irritation develops or persists. Wash clothing before reuse. Flush skin with plenty of soap and water.

**Ingestion:** Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. **Extinguishing Media:** Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
GLYCINE	none listed	none listed	none listed

OSHA Vacated PELs: GLYCINE: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR \$1910.134 and

ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever

workplace conditions warrant a respirator's use.

## Section 9 - Physical and Chemical Properties

Physical State: Solid Appearance: white Odor: none reported pH: 4.0 (1.4% sol.)

Vapor Pressure: Negligible.
Vapor Density: Not available.
Evaporation Rate: Negligible.
Viscosity: Not available.
Boiling Point: Not available.

Freezing/Melting Point:504 deg F

Autoignition Temperature: Not available.

Flash Point: Not available.

Decomposition Temperature: 504 deg F

NFPA Rating: (estimated) Health: 1; Flammability: 0; Reactivity: 0

Explosion Limits, Lower: Not available.

Upper: Not available.

**Solubility:** 25 g/100ml (25 C) in water. **Specific Gravity/Density:** 1.6 (water=1)

Molecular Formula:C2H5NO2 Molecular Weight:75.0405

## Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, dust generation, excess heat.

Incompatibilities with Other Materials: Oxidizing agents.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, irritating and

toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

## Section 11 - Toxicological Information

RTECS#:

CAS# 56-40-6: MB7600000

LD50/LC50: CAS# 56-40-6:

Oral, mouse: LD50 = 4920 mg/kg; Oral, rat: LD50 = 7930 mg/kg;

Carcinogenicity:

CAS# 56-40-6: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information available. **Teratogenicity:** No information available.

Reproductive Effects: No information available.

**Neurotoxicity:** No information available. **Mutagenicity:** No information available.

Other Studies: See actual entry in RTECS for complete information.

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

## Section 14 - Transport Information

	US DOT	IATA	RID/ADR	IMO	Canada TDG
Shipping Name:	No information available.				No information available.
Hazard Class:					
<b>UN Number:</b>					
Packing Group:					

## Section 15 - Regulatory Information

#### **US FEDERAL**

### **TSCA**

CAS# 56-40-6 is listed on the TSCA inventory.

### **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

### **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

### SARA

### Section 302 (RQ)

None of the chemicals in this material have an RQ.

### Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

### Section 313

No chemicals are reportable under Section 313.

### Clean Air Act:

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 56-40-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level: None of the chemicals in this product are listed.

## **European/International Regulations**

**European Labeling in Accordance with EC Directives** 

### **Hazard Symbols:**

Not available.

### Risk Phrases:

#### **Safety Phrases:**

### WGK (Water Danger/Protection)

CAS# 56-40-6: 0

### Canada

CAS# 56-40-6 is listed on Canada's DSL List. CAS# 56-40-6 is listed on Canada's DSL List.

This product has a WHMIS classification of Not controlled...

CAS# 56-40-6 is not listed on Canada's Ingredient Disclosure List.

### **Exposure Limits**

CAS# 56-40-6: OEL-RUSSIA:STEL 5 mg/m3

## Section 16 - Additional Information

MSDS Creation Date: 7/13/1999 Revision #1 Date: 8/02/2000 The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.