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

1.1. Product identifier

Product form : Substance
Substance name : Glycine
Chemical name : 2-Aminoacetic acid
CAS No : 56-40-6
Product code : LC14875
Formula : C2H5NO2

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

Use of the substance/mixture : For laboratory and manufacturing use only.

1.3. Details of the supplier of the safety data sheet

LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
Not classified

2.2. Label elements

GHS-US labeling
No labeling applicable

2.3. Other hazards

Other hazards not contributing to the classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type : Mono-constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycine (Main constituent)</td>
<td>(CAS No) 56-40-6</td>
<td>100</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed
Obtain medical assistance.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture
Explosion hazard: Most organic solids are liable to dust explosion hazard. No data available on direct explosion hazard.

5.3. Advice for firefighters
Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep container closed when not in use.
Incompatible materials: Sources of ignition. Direct sunlight.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Glycine (56-40-6)
ACGIH: Not applicable
OSHA: Not applicable
8.2. Exposure controls

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation.

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.
Eye protection: Chemical goggles or safety glasses.
Respiratory protection: Wear appropriate mask.
Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Solid
Appearance: Crystalline powder.
Molecular mass: 75.07 g/mol
Color: White
Odor: None.
Odor threshold: No data available
pH: No data available
Relative evaporation rate (butyl acetate=1): No data available
Melting point: 182 °C
Freezing point: No data available
Boiling point: No data available
Flash point: > 176.67 °C
Auto-ignition temperature: No data available
Decomposition temperature: 233 °C
Flammability (solid, gas): No data available
Vapor pressure: No data available
Relative vapor density at 20 °C: No data available
Relative density: No data available
Specific gravity / density: 1.1607 g/cm³
Solubility: Soluble in water. Insoluble in organic solvents.
Water: 25 g/100ml
Log Pow: -3.21
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidizing properties: No data available
Explosive limits: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.
### 10.5. Incompatible materials
Strong oxidizers. Strong bases.

### 10.6. Hazardous decomposition products

### SECTION 11: Toxicological information
#### 11.1. Information on toxicological effects

| Acute toxicity | : Not classified |
| Glycine (56-40-6) | |
| LD50 oral rat | 7930 mg/kg |
| ATE US (oral) | 7930.000 mg/kg body weight |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| Specific target organ toxicity (single exposure) | : Not classified |
| Specific target organ toxicity (repeated exposure) | : Not classified |
| Aspiration hazard | : Not classified |
| Potential Adverse human health effects and symptoms | : Based on available data, the classification criteria are not met. |

### SECTION 12: Ecological information
#### 12.1. Toxicity
No additional information available

#### 12.2. Persistence and degradability

| Glycine (56-40-6) | |
| Persistence and degradability | Not established. |

#### 12.3. Bioaccumulative potential

| Glycine (56-40-6) | |
| Log Pow | -3.21 |
| Bioaccumulative potential | Not established. |

#### 12.4. Mobility in soil
No additional information available

#### 12.5. Other adverse effects

| Effect on ozone layer | : |
| Other information | : Avoid release to the environment. |

### SECTION 13: Disposal considerations
#### 13.1. Waste treatment methods

| Waste disposal recommendations | : Dispose in a safe manner in accordance with local/national regulations. |
| Ecology - waste materials | : Avoid release to the environment. |

### SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

#### Additional information

| Other information | : No supplementary information available. |
Glycine Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ADR
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations
Glycine (56-40-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations
CANADA
Glycine (56-40-6)
Listed on the Canadian DSL (Domestic Sustances List)
WHMIS Classification
Uncontrolled product according to WHMIS classification criteria

EU-Regulations
No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]
Not classified

15.2.2. National regulations
Glycine (56-40-6)
Not listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations
No additional information available

SECTION 16: Other information

Other information : None.

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard : 1 - Must be preheated before ignition can occur.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating
Health : 0 Minimal Hazard - No significant risk to health
Flammability : 1 Slight Hazard
Physical : 0 Minimal Hazard
Personal Protection : E

SDS US (GHS HazCom 2012)

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and LabChem Inc assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his application.