Glycine,Reagent Grade

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : **Glycine,Reagent Grade**

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: **S25696A**

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific
9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education
15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:

Not classified for physical or health hazards under GHS.

Hazard statements:
Precautionary statements:

Combustible Dust Hazard: :
May form combustible dust concentrations in air (during processing).

Other Non-GHS Classification:

WHMIS
NFPA/HMIS

NFPA SCALE (0-4)

HMIS RATINGS (0-4)

SECTION 3 : Composition/information on ingredients

Ingredients:		
CAS 56-40-6	Glycine	98 %

Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Loosen clothing as necessary and position individual in a comfortable position.Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen.Do not perform mouth-to-mouth on an unconscious person.Get medical assistance if cough or other symptoms appear.

After skin contact: Wash hands and exposed skin with soap and plenty of water for 15-20 minutes.Seek medical attention if irritation persists or if concerned.

After eye contact: Protect unexposed eye. Remove contact lenses while rinsing.Occasionally lift the upper and lower eyelids while rinsing.Immediately flush eyes with water for at least 15 minutes.Get medical assistance.

After swallowing: Do not induce vomiting. Get medical assistance.

Most important symptoms and effects, both acute and delayed:

Shortness of breath.Irritation.Nausea.Headache.;

Indication of any immediate medical attention and special treatment needed:

If necessary use trained response staff or contractor. Notes to Physician: Treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Advice for firefighters:

Protective equipment: Wear protective eyeware, gloves, and clothing. Refer to Section 8.

Additional information (precautions): Avoid contact with skin, eyes, and clothing.Avoid generating dust. May cause skin irritation. May cause eye irritation.May cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea.May cause respiratory tract irritation.

SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Normal ventilation is adequate.Use proper personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation.

Environmental precautions:

Prevent from reaching drains, sewer, or waterway.

Methods and material for containment and cleaning up:

Sweep up and containerize for disposal. Avoid generating dust. Always obey local regulations.If necessary use trained response staff or contractor. Provide ventilation. Wear protective eyeware, gloves, and clothing. Refer to Section 8.Store away from incompatible materials. Refer to Section 5.Dispose of empty containers as unused product. Refer to Section 13.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:

Refer to Section 5.Refer to Section 8.Wash hands after handling.Remove contaminated clothing and wash before reuse.Avoid inhalation and ingestion.Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. Use only in well ventilated areas.Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a cool, dry, and well-ventilated area. Store away from incompatible materials. Refer to Section 5 and 10.

SECTION 8 : Exposure controls/personal protection

Control Parameters:	56-40-6, Glycine, ACGIH TLV: NA, OSHA PEL: NA
Appropriate Engineering controls:	Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Normal ventilation is adequate.
Respiratory protection:	Not required under normal conditions of use. Normal ventilation is adequate.
Protection of skin:	Select glove material impermeable and resistant to the substance.Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.
Eye protection:	Safety glasses with side shields or goggles.
General hygienic measures:	Wash hands before breaks and at the end of work. Wash hands and exposed skin with soap and plenty of water. Perform routine housekeeping to prevent dust generation.Before wearing wash contaminated clothing.

SECTION 9 : Physical and chemical properties

Appearance (physical state,color):	White Solid	**Explosion limit lower**: **Explosion limit upper**:	Non Explosive Non Explosive
Odor:	Odorless	**Vapor pressure**:	Not Applicable
Odor threshold:	Not Applicable	**Vapor density**:	Not Applicable
pH-value:	5.9-6.4	**Relative density**:	
Melting/Freezing point:	182-236°C	**Solubilities**:	Soluble in water
Boiling point/Boiling range:	Not Applicable	**Partition coefficient (n-octanol/water)**:	No Information
Flash point (closed cup):	Not Applicable	**Auto/Self-ignition temperature**:	Not Applicable
Evaporation rate:	Not Applicable	**Decomposition temperature**:	232°C

Flammability (solid,gaseous):	Not Available	**Viscosity**:	a. Kinematic:Not Applicable b. Dynamic: Not Applicable
Density: No Information **Molecular Weight: :**75.05 g/mol			

SECTION 10 : Stability and reactivity

Reactivity: None under normal processing.
Chemical stability: Stable under normal conditions.Moisture sensitive.
Possible hazardous reactions: None under normal processing.
Conditions to avoid: Dust generation, excess heat, moisture, incompatible materials.
Incompatible materials: Strong oxidizing agents.
Hazardous decomposition products: Nitrogen oxides.Carbon oxides.Irritating and highly toxic gases or fumes.

SECTION 11 : Toxicological information

Acute Toxicity:		
Oral:	7,930 mg/kg	LD50 Rat
Chronic Toxicity: No additional information.		
Corrosion Irritation: No additional information.		
Sensitization:		No additional information.
Single Target Organ (STOT):		No additional information.
Numerical Measures:		No additional information.
Carcinogenicity:		No additional information.
Mutagenicity:		Other Adverse Effects: Major inhibitory neurotransmitter.
Reproductive Toxicity:		No additional information.

SECTION 12 : Ecological information

Ecotoxicity

Ecotoxicity: Do not empty into drains.

Persistence and degradability:
Bioaccumulative potential:
Mobility in soil:
Other adverse effects:

SECTION 13 : Disposal considerations

Waste disposal recommendations:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification.

SECTION 14 : Transport information

UN-Number

UN proper shipping name

Transport hazard class(es)
Packing group:
Environmental hazard:Do not empty into drains.
Transport in bulk:
Special precautions for user:

SECTION 15 : Regulatory information

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients is listed

SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16 : Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the

SDS contains all the information required by the Controlled Products Regulations.Note:. The responsibility to provide a safe workplace remains with the user.The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.The information contained herein is, to the best of our knowledge and belief, accurate.However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material.It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:
IMDG: International Maritime Code for Dangerous Goods
PNEC: Predicted No-Effect Concentration (REACH)
CFR: Code of Federal Regulations (USA)
SARA: Superfund Amendments and Reauthorization Act (USA)
RCRA: Resource Conservation and Recovery Act (USA)
TSCA: Toxic Substances Control Act (USA)
NPRI: National Pollutant Release Inventory (Canada)
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
DNEL: Derived No-Effect Level (REACH)

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