Section 1 - Product and Company Information

Product Name: GLYCINE, ELECTROPHORESIS REAGENT
Product Number: 68808
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3650 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 314 771 5765
Emergency Phone: 414 273 3850 Ext. 5996
Fax: 800 225 5052

Section 2 - Composition/Information on Ingredient

Substance Name: GLYCINE
CAS #: 56-0-8
SARA 313: No

Formula: C2H6N2O2
Synonyms: Acdop, Aminoacetic acid, 2-Aminoacetic acid, Aminoethanolic acid, Glicamin, Glycocal, Glycathex, Glycathine, Hamptine glycate, Padil

Section 3 - Hazards Identification

Emergency Overview
Caution: Avoid contact and inhalation.

HMIS Rating
Health: 1
Flammability: 0
Reactivity: 0

NFPA Rating
Health: 1
Fire: 0
Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 - First Aid Measures

Oral Exposure
If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure
If inhaled, move to fresh air. If breathing becomes difficult, call a physician.

Dermal Exposure
In case of contact, immediately wash skin with soap and copious amounts of water.

Eye Exposure
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

Explosion Data
Dust Potential
This material, like most materials in powder form, is capable of creating a dust explosion.

Autoignition Temp: N/A

Extinguishing Media
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s)
Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s)
Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

Methods for Cleaning Up
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

Handling
User Exposure
Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Suitable: Keep tightly closed. Store in a cool dry place.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
Government approved respirator.

Hand
Compatible chemical-resistant gloves.

Eye
Chemical safety goggles.
Section 9 - Physical/Chemical Properties

Appearance
Physical State
Solid

Molecular Weight: 75.27 AMU

pH
N/A

BP/VP Range
N/A

MP/RP Range
240 °C

Freezing Point
N/A

Vapor Pressure
N/A

Vapor Density
N/A

Saturated Vapor Conc.
N/A

SG/Density
N/A

Bulk Density
N/A

Odor Threshold
N/A

Volatile%
N/A

VOC Content
N/A

Water Content
N/A

Solvent Content
N/A

Evaporation Rate
N/A

Viscosity
N/A

Partition Coefficient
N/A

Decomposition Temp.
N/A

Flash Point °F
N/A

Flash Point °C
N/A

Explosion Limits
N/A

Flammability
N/A

Autoignition Temp
N/A

Solubility

Solvent: 1 M in HCl 1 M, 20°C, complete, colorless

N/A = not available

Section 10 - Stability and Reactivity

Stability

Stable.

Materials to Avoid

Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide, Nitrogen oxides, Ammonia.

Section 11 - Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through the skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

RTECS Number: M87605000

Toxicity Data

Oral - Rat: 7,930 mg/kg (LD50)

Subcutaneous - Rat: 5200 mg/kg (LD50)

Intravenous - Rat: 3000 mg/kg (LD50)

Oral - Mouse: 4,900 mg/kg (LD50)

Intraperitoneal - Mouse: 4450 mg/kg (LD50)

Subcutaneous - Mouse: 5090 mg/kg (LD50)

Intravenous - Mouse: 2370 mg/kg (LD50)

Chronic Exposure - Mutagen

Species

Dose

Human

100 μg/L

Cell Type

lymphocyte

Mutation test

Sister chromatid exchange

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT

Proper Shipping Name: None.

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.
Section 15 - Regulatory Information

EU Additional Classification
S: 22, 24/25
Do not breathe dust. Avoid contact with skin and eyes.

US Classification and Label Text
US Statements
Caution: Avoid contact and inhalation.

United States Regulatory Information
SARA Listed: No

TSCA Inventory Item: Yes

Canada Regulatory Information
WHMIS Classification
This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.