SAFETY DATA SHEET



Conforms to regulation (EC) no. EU 453/2010

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: Glycine **Product Number: EC-405**

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against

Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer

National Diagnostics 305 Patton Drive Atlanta, GA 30036 (404) 699-2121 (800) 526-3867

info@nationaldiagnostics.com

1.4 Emergency Telephone Number

ChemTel Inc.

Contract number MIS8894340 1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands) 01-800-099-0731 (Mexico) 400-120-0751 (China) 000-800-100-4086 (India) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) +1-813-255-3924 (All other regions)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

Not a hazardous substance or mixture according to regulation (EC) No. 1272/2008.

2.2 Label Elements

This product has no labeling elements associated with EC directives or respective national laws.

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Chemical Names/Description

Glycocol, Aminoacetic acid

Chemical Formula

 $C_2H_5NO_2$

Component List

Component	% Comp.	CAS#	EC#
Glycine	99	56-40-6	200-272-2

SECTION 4 - FIRST AID MEASURES

4.1 Description of First Aid Measures

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion

Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

Wash exposed area with soap and water. Get medical advice if irritation develops.

Eyes

Wash thoroughly with running water. Get medical advice if irritation develops.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Coughing, soreness in the respiratory tract, chest tightening, difficulty breathing.

Ingestion

Nausea.

Skin

Mild reddening.

Eyes

Mild reddening.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use any means suitable for existing surrounding fire.

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products

Nitrogen oxides may be released during a fire.

Hazardous Decomposition Products

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

5.3 Advice for Firefighters

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.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Wear appropriate protective equipment as specified in Section 8.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Non-hazardous material. Flush with water to sewer if allowed by federal, state, and local regulations.

6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep in a tightly closed container, stored in a cool, dry area away from sources of heat or ignition. Protect from physical damage. Isolate from incompatible materials (section 10)

Incompatibles

No incompatibility data found.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

ACGIH Threshold Limit Value (TLV): 15 mg/m3
OSHA Permissible Exposure Limit (PEL): None established

8.2 Exposure Controls

Engineering Controls

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

Respiratory Protection

If the exposure limit is exceeded, wear a supplied air, full-facepiece respirator, airlined hood, or full-facepiece self-contained breathing apparatus.

Eye Protection

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

Skin Protection

Wear protective gloves and clean body covering clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	White crystals	b. Odor	None
c. Odor Threshold	N.A.	d. pH	4.0 (0.2 M solution)
e. Melting/Freezing Point (°C)	182	f. Boiling point (^o C)	N.A.
g. Flash Point (°C)	N.A.	h. Evaporation Rate	No information found
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	No information found	I. Vapor Density (Air = 1)	No information found
m. Relative Density	1.16	n. Water Solubility	25g/100 ml water
o. Partition Coefficient n-octanol/water		p. Autoignition Temperature (°C)	N.A.
q. Decomposition Temperature (°C)		r. Viscosity	No data available.
s. Explosive Properties	N.A.	t. Oxidizing Properties	N.A.

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical Stability

Stable under ordinary conditions of use and storage.

10.3 Possibility of Hazardous Reactions

Will not occur under normal conditions of use (See Sections 10.4 & 10.5).

10.4 Conditions to Avoid

No information found.

10.5 Incompatible Materials

No incompatibility data found.

10.6 Hazardous Decomposition Products

Carbon dioxide and carbon monoxide may form when heated to decomposition.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

8010

Dermal Rabbit LD50 (mg/kg)

No Data

Component Cancer List Status

NTP	Carci	nogen
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	Known	Anticipated	IARC Category
Glycine	No	No	None

Potential Health Effects

Inhalation

High concentrations of dust may be slightly irritating to the lungs.

Ingestion

Large oral doses may cause nausea.

Skin

May cause mild irritation to the skin.

Eves

May cause mild irritation to the eyes.

Carcinogenicity

According to definitions of the U.S. Hazard Communication Standard and the Canadian WHMIS Regulation, this material is not listed on the NTP, IARC, ACGIH, or OSHA carcinogen lists, and there are no studies implicating components as cancer causing agents in humans or animals.

Mutagenicity

No information found.

Reproductive Toxicity

No information found.

Teratogenic Effects

No information found.

Routes of Entry

Inhalation of dust.

Target Organ Statement

Persons with pre-existing skin or lung disorders may be more susceptible to irritation effects.

SECTION 12 - ECOLOGICAL INFOMATION

12.1 Toxicity

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data
	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

12.2 Persistence and Degradability

No data

12.3 Bioaccumulative Potential

No data

12.4 Mobility in Soil

No data

12.5 Results of PBT and vPvB Assessment

No data

12.6 Other Adverse Effects

None

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	Not Regulated.	Not Regulated.	Not Regulated.	Not Regulated.
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture United States

TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
Glycine	No	No	No	No	No

Europe

EEC Regulatory

All intentional ingredients are listed on the European EINECS Inventory.

SECTION 16 - OTHER INFORMATION

Revisional Updates

4/26/2019 - Updated Section 1.4 5/29/2015 - Updated Sections 2.1 and 3.1 4/16/2013 - Released Version 1.0

NFPA Codes

Health 0 Flammability 0 Reactivity 0

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