

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 24/08/2017 Revision date: : Version: 1.0

DLM-10483

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

1.1. Product identifier

Product form : Substance

Substance name : GLYCINE, N-ISOVALERYL (ISOVALERYL-D9, 98%)

CAS No : 1330037-21-2
Product code : DLM-10483

Formula : (CD3)2CDCD2CONHCH2COOH

Synonyms : [(3-Methylbutanoyl)amino]acetic acid / N-(3-Methylbutanoyl)glycine

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

1.2.1. Relevant identified uses

Main use category : Professional use

Industrial/Professional use spec : For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810

USA

USA: 1-800-322-1174 Int: 1-978-749-8000 <u>cilsales@isotope.com</u> www.isotope.com

Emergency telephone number

Emergency numbers:

Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 H319

Full text of hazard classes and H-statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36

Full text of R-phrases: see section 16

GHS-US classification

Eve Irrit. 2 H319

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Harmful if swallowed. May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation.

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



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Signal word (CLP) : Warning

Hazard statements (CLP) H319 - Causes serious eye irritation

P264 - Wash hands, forearms and face thoroughly after handling Precautionary statements (CLP)

P280 - Wear protective clothing, protective gloves

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing P337+P313 - If eye irritation persists: Get medical advice/attention

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US) : Warning

: H319 - Causes serious eye irritation Hazard statements (GHS-US)

Precautionary statements (GHS-US) : P264 - Wash hands, forearms and face thoroughly after handling

P280 - Wear protective clothing, protective gloves

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P337+P313 - If eye irritation persists: Get medical advice/attention

Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

Name	Product identifier	%	Classification according to Directive 67/548/EEC
GLYCINE, N-ISOVALERYL (ISOVALERYL-D9, 98%)	(CAS No) 1330037-21-2 (EC No) (EC Index No)	100	Xi; R36
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
GLYCINE, N-ISOVALERYL (ISOVALERYL-D9, 98%)	(CAS No) 1330037-21-2 (EC No) (EC Index No)	100	Eye Irrit. 2, H319

Full text of R- and H- phrases: see section 16

Name	Product identifier	%	GHS-US classification
GLYCINE, N-ISOVALERYL (ISOVALERYL-D9, 98%) (Main constituent)	(CAS No) 1330037-21-2	100	Eye Irrit. 2, H319

Full text of H-phrases: see section 16

3.2. **Mixtures**

Not applicable

SECTION 4: First aid measures

Description of first aid measures

First-aid measures general : Call a poison center/doctor/physician if you feel unwell.

: Remove person to fresh air and keep comfortable for breathing. Call a poison First-aid measures after inhalation

center/doctor/physician if you feel unwell.

Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get First-aid measures after skin contact

First-aid measures after eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation.

Symptoms/injuries after skin contact : May be harmful in contact with skin. May cause skin irritation.

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Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms/injuries after ingestion : May be harmful if swallowed.

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

Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media : Water spray. Alcohol resistant foam. Dry powder. Dry chemical. Carbon dioxide.

Special hazards arising from the substance or mixture

No additional information available

Advice for firefighters

Firefighting instructions

: Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting Wear respiratory protection. Self-contained breathing apparatus. Do not attempt to take action

without suitable protective equipment. Complete protective clothing.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

Wear recommended personal protective equipment. Avoid breathing dust, mist or spray. Avoid dust formation. Ensure there is adequate ventilation. Evacuate the danger area.

Emergency procedures

Ventilate spillage area. Avoid breathing vapors, mist, dust. Avoid contact with skin and eyes.

For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. **Environmental precautions**

Prevent entry to sewers and public waters. Avoid release to the environment.

Methods and material for containment and cleaning up

For containment

: Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. This material and its container must be disposed of in a safe way, and as per local legislation.

Methods for cleaning up Other information

: Dispose of materials or solid residues at an authorized site.

Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling

: Avoid contact with skin and eyes. Avoid dust formation. Provide good ventilation in process area to prevent formation of vapor. Use only outdoors or in a well-ventilated area. Avoid breathing dust, mist, vapors. Wear personal protective equipment. May form combustible dust concentrations in air. Combustible Dust.

Hygiene measures

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Technical measures

: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Storage conditions : Store at room temperature away from light and moisture.

Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

Control parameters

No additional information available

Exposure controls

Appropriate engineering controls

: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Ensure good ventilation of the work station.

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: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus. Personal protective equipment









Materials for protective clothing : Wear suitable protective clothing and gloves. Hand protection : Wear suitable protective clothing and gloves.

Eye protection Wear eye protection. Chemical goggles or face shield with safety glasses. Safety glasses.

Skin and body protection Wear suitable protective clothing, gloves and eye/face protection.

: No data available

Respiratory protection In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid Appearance : Solid.

Molecular mass 168.24 g/mol (Labeled)

Color

Odor No data available Odor threshold : No data available рΗ : No data available Relative evaporation rate (butyl acetate=1) : No data available

Melting point : 87 - 90 °C (189 - 194 °F)

Freezing point : No data available Boiling point : No data available Flash point No data available No data available Auto-ignition temperature Decomposition temperature : No data available Flammability (solid, gas) : Not applicable Vapor pressure No data available Relative vapor density at 20 °C : No data available Relative density : No data available Solubility No data available Log Pow No data available Log Kow No data available : No data available Viscosity, kinematic Viscosity, dynamic : No data available No data available Explosive properties : No data available

Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Oxidizing properties **Explosion limits**

No additional information available

Chemical stability

Stable if stored under recommended conditions.

Possibility of hazardous reactions

No additional information available

Conditions to avoid

No additional information available

Incompatible materials

Strong oxidizing agents.

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Hazardous decomposition products

Carbon oxides (CO, CO2). Nitrogen oxides.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity : Not classified Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

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 : Not classified

exposure

Aspiration hazard : Not classified

Potential Adverse human health effects and

Symptoms/injuries after inhalation

symptoms

: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be

construed as guaranteeing any specific property of the product. May cause respiratory irritation.

Symptoms/injuries after skin contact May be harmful in contact with skin. May cause skin irritation.

Symptoms/injuries after eye contact : Causes serious eye irritation. Symptoms/injuries after ingestion : May be harmful if swallowed.

SECTION 12: Ecological information

12.1. **Toxicity**

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Persistence and degradability

No additional information available

Bioaccumulative potential

No additional information available

Mobility in soil

No additional information available

Results of PBT and vPvB assessment

No additional information available

Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Waste treatment methods

Waste materials should be disposed of under conditions which meet Federal, State, and Local Regional legislation (waste)

environmental control regulations.

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed Product/Packaging disposal recommendations:

professional waste disposal service to dispose of this material.

Ecology - waste materials : Dispose of as unused product.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. **UN** number

Not applicable

UN proper shipping name

Not applicable

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14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : Not classified as dangerous in the meaning of transport regulations.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

14.4. Environmental hazards

Other information : No supplementary information available.

14.5. Special precautions for user

Special transport precautions : Not classified as dangerous in the meaning of transport regulations.

14.6. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

GLYCINE, N-ISOVALERYL (ISOVALERYL-D9, 98%) (1330037-21-2)		
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302.	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313.	

15.2. International regulations

CANADA

GLYCINE, N-ISOVALERYL (ISOVALERYL-D9, 98%) (1330037-21-2)

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

GLYCINE, N-ISOVALERYL (ISOVALERYL-D9, 98%)(1330037-21-2)		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	
State or local regulations	U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List	

SECTION 16: Other information

Other information : This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for

labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.

corresponding unlabeled compod

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Full text of R-, H- and EUH-phrases:

Eye Irrit. 2	Serious eye damage/eye irritation Category 2
H319	Causes serious eye irritation
R36	Irritating to eyes
Xi	Irritant

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

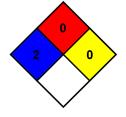
NFPA fire hazard : 0 - Materials that will not burn under typical dire conditions,

including intrinsically noncombustible materials such as

concrete, stone, and sand.

: 0 - Material that in themselves are normally stable, even

under fire conditions.



HMIS III Rating

NFPA reactivity

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard Physical : 0 Minimal Hazard

CIL Multi-Solvent Mixture SDS

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