

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 /

Rules and Regulations

Date of issue: 18/03/2011 Revision date: 28/12/2016 Supersedes: 09/06/2011 Version: 3.0

CLM-3911

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

1.1. Product identifier

Product form : Substance

Substance name : ETHANOLAMINE:HCL (1-13C, 99%)

EC no : 217-900-6 (Unlabeled)
CAS No : 2002-24-6 (Unlabeled)

Product code : CLM-3911

Formula : HO*CH2CH2NH2·HCI

Synonyms : 2-Aminoethanol hydrochloride / 2-Hydroxyethylammonium chloride

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]

Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335

Full text of H-statements: see section 16

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

Xi: R36/37/38

Full text of R-phrases: see section 16

GHS-US classification

Skin Irrit. 2 H315 Eye Irrit. 2A H319 STOT SE 3 H335

Adverse physicochemical, human health and environmental effects

No additional information available

28/12/2016 EN (English) 1/7

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. Label elements

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

Hazard pictograms (CLP)



GHS0

Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (CLP) : P261 - Avoid breathing dust, fume, gas, mist, spray, vapours

P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective clothing, protective gloves
P302+P352 - IF ON SKIN: Wash with plenty of water

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing

P312 - Call a doctor if you feel unwell

GHS-US labelling

Hazard pictograms (GHS-US)



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing dust, fume, gas, mist, spray, vapours

P264 - Wash both hands thoroughly after handling P271 - Use only outdoors or in a well-ventilated area P280 - Wear protective clothing, protective gloves

P302+P352 - IF ON SKIN: Wash with plenty of soap and water

P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable

for breathing

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

lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER or doctor/physician if you feel unwell P321 - Specific treatment (see Hazard pictograms (CLP) on this label) P332+P313 - If skin irritation occurs: Get medical advice/attention P337+P313 - If eye irritation persists: Get medical advice/attention P362 - Take off contaminated clothing and wash before reuse

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to Comply with applicable regulations

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%	Classification according to Directive 67/548/EEC
ETHANOLAMINE:HCL (1-13C, 99%) (Main constituent)	(CAS No) 2002-24-6 (Unlabeled) (EC no) 217-900-6 (Unlabeled)	100	Xi; R36/37/38
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ETHANOLAMINE:HCL (1-13C, 99%) (Main constituent)	(CAS No) 2002-24-6 (Unlabeled) (EC no) 217-900-6 (Unlabeled)	100	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

28/12/2016 EN (English) 2/7

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

Name	Product identifier	%	GHS-US classification
ETHANOLAMINE:HCL (1-13C, 99%) (Main constituent)	(CAS No) 2002-24-6 (Unlabeled)	100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Move out of dangerous area. Consult a physician and show this safety data sheet.

First-aid measures after inhalation : If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a

physician.

First-aid measures after skin contact : Wash with soap and plenty of water. Consult a physician.

First-aid measures after eye contact : Flush eye with water for 15 minutes. Get medical attention.

First-aid measures after ingestion : Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a

physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May be harmful if inhaled. May cause respiratory tract irritation.

Symptoms/injuries after skin contact : May be harmful if absorbed through the skin. Causes skin irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Wear self contained breathing apparatus for fire fighting if necessary.

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 : Avoid dust formation. Avoid breathing vapors, mist, or gas.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up and shovel. Keep in suitable, closed containers for disposal.

processing occurs.

6.4. Reference to other sections

No additional information available

Precautions for safe handling

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire

protec

: Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

28/12/2016 EN (English) 3/7

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep container tightly closed in a dry and well-ventilated place.

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

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Gloves. Safety glasses. Protective clothing. Respiratory protection of the dependent type.









Hand protection : protective gloves

Eye protection : Wear safety glasses with side shields (or goggles) and a face shield.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance

at the work place.

Respiratory protection : When appropriate, use NIOSH/CEN approved respirator.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Solid.

Molecular mass : 98.54 g/mol (Labeled)

Colour : White.

Odour : No data available
Odour threshold : No data available
pH : No data available
Relative evaporation rate (butylacetate=1) : No data available

Melting point : 82 - 84 °C (180 - 183 °F)

Freezing point No data available **Boiling point** : No data available : No data available Flash point Auto-ignition temperature No data available Decomposition temperature No data available Flammability (solid, gas) : No data available : No data available Vapour pressure Relative vapour 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 Explosive properties : No data available Oxidising 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 if stored under recommended conditions.

28/12/2016 EN (English) 4/7

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Possibility of hazardous reactions

No additional information available

10.4. **Conditions to avoid**

Not available.

Incompatible materials 10.5.

Bases, oxidizing agents.

Hazardous decomposition products

Under fire conditions: Carbon oxides, nitrogen oxides, Hydrogen chloride gas.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity : Not classified

ETHANOLAMINE:HCL (1-13C, 99%) (2002-24-6 (Unlabeled))

LD50 Subcutaneous - Mouse - 4,053 mg/kg

Skin corrosion/irritation : Causes skin irritation. Serious eye damage/irritation Causes serious eye irritation.

> No data available : Not available No data available

Germ cell mutagenicity : Not available : Not classified Carcinogenicity Reproductive toxicity : Not available

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Inhalation - May cause respiratory irritation

Specific target organ toxicity (repeated

Respiratory or skin sensitisation

exposure)

: Not classified

No data available

Aspiration hazard : Not classified

Potential adverse human health effects and

symptoms

To the best of our knowledge, the chemical, physical, and toxicological properties have not been

thoroughly investigated.

Symptoms/injuries after inhalation : May be harmful if inhaled. May cause respiratory tract irritation. Symptoms/injuries after skin contact : May be harmful if absorbed through the skin. Causes skin irritation.

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

SECTION 12: Ecological information

12.1. **Toxicity**

No additional information available

Persistence and degradability

ETHANOLAMINE:HCL (1-13C, 99%) (2002-24-6 (Unlabeled))		
Persistence and degradability	Not available.	

12	12.9. Bloaccumulative potential	
ETHANOLAMINE:HCL (1-13C, 99%) (2002-24-6 (Unlabeled))		6 (Unlabeled))
Е	Bioaccumulative potential	Not available.

12.4 Mobility in soil

12 II III III III III III III III III II		
ETHANOLAMINE:HCL (1-13C, 99%) (2002-24-6 (Unlabeled))		
Ecology - soil	Not available.	

12.5. Results of PBT and vPvB assessment

No additional information available

Other adverse effects

: Not available. Other adverse effects

28/12/2016 EN (English) 5/7

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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

environmental control regulations.

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

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

14.2. UN proper shipping name

Not applicable

14.3. Additional information

Other information : No supplementary information available.

Special transport precautions : DOT/IMDG/IATA: Not dangerous goods.

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 : DOT/IMDG/IATA: Not dangerous goods.

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

ETHANOLAMINE:HCL (1-13C, 99%) (2002-24-6 (Unlabeled))

SARA Section 311/312 Hazard Classes Immediate (acute) health hazard

15.2. International regulations

CANADA

ETHANOLAMINE:HCL (1-13C, 99%) (2002-24-6 (Unlabeled))

Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

ETHANOLAMINE:HCL (1-13C, 99%)(2002-24-6 (Unlabeled))		
State or local regulations	U.S Pennsylvania - RTK (Right to Know) List	
	U.S New Jersey - Right to Know Hazardous Substance List	

This product does not contain any chemicals known to State of California to cause cancer,

28/12/2016 EN (English) 6/7

Safety Data Sheet

according to Regulation (EC) No. 453/2010 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ETHANOLAMINE:HCL (1-13C, 99%)(2002-24-6 (Unlab	peled))
	birth defects, or any other reproductive harm.

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.

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

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R36/37/38	Irritating to eyes, respiratory system and skin
Xi	Irritant

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

temporary incapacitation or residual injury.

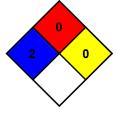
NFPA fire hazard : 0 - Materials that will not burn under typical dire conditions,

including intrinsically noncombustible materials such as

concrete, stone, and sand.

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

under fire conditions.



HMIS III Rating

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

Flammability : 0 Minimal Hazard Physical : 0 Minimal Hazard

CIL Multi-Solvent Mixture SDS

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

28/12/2016 EN (English) 7/7