



SECTION 1 - Chemical Product and Company Identification

1.1 Product Identifiers

Product Name : L-Cysteamine Hydrochloride (2-MEA)
 CAS # : 156-57-0
 EC# : 205-858-1
 RTECS# : KJ0200000

1.2 Recommended Use of the Chemical and Restrictions of Use

Chemical manufacturing

1.3 Supplier Details

Supplier : BioSpectra Inc.
 100 Majestic Way
 Bangor, PA 18013
 T: 610.599.3400
ehs@biospectra.us

1.4 Emergency Numbers

Emergency Numbers : US & Canada: 1-800-424-9300
 : Outside the US & Canada: +1 703-527-3887

SECTION 2 – Hazard Identification

2.1 Classification of the Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 and Regulation (EC) No 1272/2008 (EU-GHS/CLP)

Acute Toxicity: Oral (Category 4) : H302
 Skin Corrosion/Irritation (Category 2) : H315
 Serious Eye Damage/Eye Irritation : H319
 Specific Target Organ Toxicity (single exposure) (Category 3) : H335

2.2 GHS Label Element Including Precautionary Statements

Pictograms:



Signal Word:

Warning

Hazard Statement(s)

: H302: Harmful if Swallowed
 H315: Causes skin irritation
 H319: Causes serious eye irritation
 H335: May cause respiratory irritation

Precautionary Statement(s)

- : P264 - Wash thoroughly after handling
- : P270 - Do not eat, drink or smoke when using this product
- : P301+P312 - IF SWALLOWED: Call POISON CONTROL or a doctor/physician if you feel unwell
- : P302 + P352- IF ON SKIN: Wash with plenty of soap and water.
- : P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do so. Continue Rinsing.
- : P422: Store contents under nitrogen or argon.
- : P501 - Dispose of contents/container according to applicable federal/state/local regulations.

2.3 Hazards not Classified or not Covered by the GHS

Not Applicable

SECTION 3 - Composition, Information on Ingredients

3.1 Substances

- Synonyms : 2 Aminoethanethiol Hydrochloride
- Formula : $C_2H_7NS \cdot HCl$
- Molecular Weight : 113.61 g/mol

Component	Classification	Concentration
2-MEA	Acute Toxicity: Oral (Category 4)	≤100%

SECTION 4 - First Aid Measures

4.1 Description of Necessary First Aid Measures

- Eyes : Immediately flush eyes with tepid water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if irritation persists.
- Skin : Immediately flush exposed area with tepid water for at least 15 minutes. Seek medical care if irritation continues
- Ingestion : Do not induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person. If victim is conscious wash out mouth with water. Get medical attention.
- Inhalation : Remove from exposure to fresh air immediately. If not breathing provide artificial respiration. Get immediate medical attention.

4.2 Most Important Symptoms/Effects, Acute and Delayed

Refer to Section 2.2 for Precautionary Statements, if applicable.

4.3 Indication of Immediate Medical Attention and Special Treatment

Not Applicable.

SECTION 5 - Firefighting Measures

5.1 Extinguishing Media

Substance is not flammable or combustible, use media most appropriate to extinguish surrounding fire.

5.2 Specific Hazards Associated with this Chemical

Carbon oxides, Nitrogen oxides (NO_x), Sulfur oxides, Hydrogen Chloride gas

5.3 Special Equipment/Precautions for Firefighters

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

5.4 Other Information

Not Applicable.

SECTION 6 - Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Avoid breathing vapors, mist, or gas. Use proper personal protective equipment as indicated in Section 8.

6.2 Environmental Precautions

Do not allow to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section.

6.4 Other Information

See Section 13 for disposal considerations.

SECTION 7 - Handling and Storage

7.1 Precautions for Safe Handling

Use proper personal protective equipment as indicated in Section 8.

7.2 Conditions for Storage Including any Incompatibilities

Store in a tightly closed container, under nitrogen or argon blanket, at 2-8°C (36-46°F). Store in a dry, well-ventilated area away from incompatible substances.

7.3 Other Information

Not Applicable.

SECTION 8 - Exposure Controls, Personal Protection

8.1 Control Parameters

This product does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

8.2 Engineering Controls

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

8.3 Personal Protective Measures

Eyes

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin

Wear appropriate gloves to prevent skin exposure. Wear impervious gloves: Nitrile rubber with layer thickness 0.11 mm.

Clothing

Wear appropriate impervious protective clothing to minimize contact with skin.

Respirators

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Where protection from nuisance levels of dust are desired use type N95 (US) or type P2 (EN143) dust masks.

SECTION 9 - Physical and Chemical Properties

9.1 Physical and Chemical Property Information

Physical and Chemical Property Information

Appearance	: White Crystals
Odor	: Characteristic
Odor threshold	: Not Applicable
pH	: 3.3-5.0 (1M aq solution)
Melting Point/Freezing Point	: 66-69 °C (151-156°F)
Initial Boiling Point and Boiling Range	: No Data Available
Flash Point	: No Data Available
Evaporation Rate	: No Data Available
Flammability	: No Data Available
Upper/lower Flammability or Explosive limits	: No Data Available
Vapor Pressure	: No Data Available
Vapor Density	: No Data Available
Relative Density	: No Data Available
Water Solubility	: 113.6 g/L @ 20°C
Partition Coefficient: n-octanol/water	: -2.14 log Pow(calculated)
Auto Ignition Temperature	: No Data Available
Decomposition Temperature	: 150 °C (302 °F)
Viscosity	: No Data Available
Explosive Properties	: No Data Available
Oxidizing Properties	: No Data Available

SECTION 10 - Stability and Reactivity

10.1 Chemical Stability

Stable under normal conditions of use and storage.

10.2 Conditions to Avoid

Incompatibles, moisture, and all metals (including stainless steel)

10.3 Incompatibilities with Other Materials

Strong oxidizers, metals including stainless steel

10.4 Hazardous Decomposition Products: Occurs Under Fire Conditions

In event of fire, see section 5.

SECTION 11 - Toxicological Information

11.1 Toxicological Effects

LD50/LC50	: LD50: Oral - Mouse – 1352 mg/kg.
Carcinogenicity	: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology	: No Data Available.
Teratogenicity	: No Data Available.
Reproductive Effects	: No Data Available.
Neurotoxicity	: No Data Available.

Mutagenicity : Rat-Liver-Cytogenetic analysis, Mouse-Micronucleus test.
 Specific target organ toxicity -single exposure : No Data Available.
 Other Studies : Not Applicable.

11.2 Additional Information

RTECS : KJ0200000

To the best of our knowledge the associated physical, chemical and toxicological properties of this chemical have not undergone thorough investigation, all known information is contained in this SDS.

SECTION 12 - Ecological Information

12.1 Ecotoxicity

No Data Available .

12.2 Persistence and Degradability

Inherent biodegradability

12.3 Bioaccumulative Potential

Does not bioaccumulate

12.4 Mobility in Soil

No Data Available

12.5 Result of PBT and vPvB Assessment

PBT/vPvB Assessment not available, chemical safety assessment not required/conducted.

12.6 Other Adverse Effects

Not Applicable.

SECTION 13 - Disposal Considerations

13.1 Disposal Methods

Dispose of in a manner consistent with Federal, State, and Local Regulations. Do not discharge to drains, sewage systems, or the environment.

SECTION 14 - Transport Information

Regulations	US DOT	IATA	IMDG	ADR
Shipping Name	Not Dangerous Goods	Aviation regulated solid, n.o.s. (Mercaptamine hydrochloride)	Not Dangerous Goods	Not Dangerous Goods
Hazard Class		9		
UN Number		3335		
Packing Group		III		

Section 15 - Regulatory Information

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

TSCA : CAS# 156-57-0 is listed on the TSCA inventory.

SARA:

SARA 302 : Not subject to reporting requirements of SARA Title III, Section 302.

SARA 313 : Not subject to reporting requirements of SARA Section 313.

SARA 311/312 : Acute Health Hazard

STATE SPECIFIC:

Massachusetts Right to Know Components : L-Cysteamine Hydrochloride (CAS # 156-57-0)
Pennsylvania Right to Know Components : L-Cysteamine Hydrochloride (CAS # 156-57-0)
New Jersey Right to Know Components : L-Cysteamine Hydrochloride (CAS # 156-57-0)
California Prop. 65 Components : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

15.2 Chemical Safety Assessment

No Data Available.

Section 16 - Additional Information

16.1 Hazard Ratings

NFPA Rating	
Health Hazard	1
Fire Hazard	0
Reactivity Hazard	0

The information conveyed in this Safety Data Sheet is only a representation of what BioSpectra has found to be accurate based on the current information that is available in regards to this compound. BioSpectra makes no warranty, expressed or implied, with respect to such information, and therefore assumes no liability resulting from product usage. It is strongly recommended that users of this product perform their own investigations to determine the accuracy and suitability of the information for their specific purposes. In no way will BioSpectra assume liability for any claims, losses, damages to any third party, any lost profits or any special, indirect, incidental, consequential or exemplary damages that may arise, even if BioSpectra has been advised of the possibility of such damages.