



Cysteamine Hydrochloride (2-MEA)

Safety Data Sheet

According to Regulation (EC) 1272/2008

SECTION 1 - Chemical Product and Company Identification

1.1 Product Identifiers

Product Name : 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

: BioSpectra Inc. 100 Majestic Way

Supplier Bangor, PA 18013 T: 610.599.3400

ehs@biospectra.us

1.4 Emergency Numbers

: US & Canada: 1-800-424-9300

Emergency Numbers : 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 : H335

exposure) (Category 3)

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

 $\begin{array}{lll} Formula & : & C_2H_7NS\cdot HCl \\ Molecular Weight & : & 113.61\ g/mol \end{array}$

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 (NOx), 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

Eves

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 0.11mm.

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

3.3-5.0 (1M aq solution) рН 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	Not
Hazard Class		9	Dangerous	Dangerous
UN Number		3335	Goods	Goods
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 Pennsylvania Right to Know Components

Cysteamine Hydrochloride (CAS # 156-57-0) Cysteamine Hydrochloride (CAS # 156-57-0) Cysteamine Hydrochloride (CAS # 156-57-0)

New Jersey Right to Know 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

California Prop. 65 Components

No Data Available.

Section 16 - Additional Information

16.1 Hazard Ratings

NFPA Rating		
Health Hazard	1	
Fire Hazard	0	
Reactivity Hazard	0	

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