



# L-Cystine dihydrochloride

## Safety Data Sheet

### SECTION 1 - Chemical Product and Company Identification

#### 1.1 Product Identifiers

Product Name : L-Cystine dihydrochloride  
 CAS# : 30925-07-6  
 EC# : 250-391-9  
 Synonyms : 2-amino-3-[(2-amino-2-carboxyethyl) disulfanyl]propanoic acid; dihydrochloride

#### 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  
 610-599-3400  
[ehs@biospectra.us](mailto: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 - Hazards Identification

#### 2.1 Classification of the Substance or Mixture

##### GHS Classification in accordance with 29 CFR 1910

Acute Toxicity, Oral : Not applicable  
 Skin Irritation : Not applicable  
 Eye Irritation : Not applicable  
 Acute Aquatic Toxicity : Not applicable  
 Chronic Aquatic Toxicity : Not applicable  
 Specific Target Organ Toxicity : Not applicable

#### 2.2 GHS Label Element Including Precautionary Statements

Pictogram : 

Signal Word : Warning

Hazard Statement(s) : H315 - Causes skin irritation  
 : H320 - Causes eye irritation

Precautionary Statement(s) : P280 - Wear protective gloves/eye protection/face protection/protective clothing.  
 : 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 lenses, if present and easy to do. Continue rinsing.  
 : P332+P313 - If skin irritation occurs: Get medical advice/attention.  
 : P337+P313 - If eye irritation persists: Get medical advice/attention.

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**2.3 Hazards not Classified or not Covered by the GHS**

Not applicable.

**SECTION 3 - Composition, Information on Ingredients****3.1 Substances**

Component	Classification	Concentration
L-Cystine dihydrochloride	N/A	≥99%

Synonyms	: 2-amino-3-[(2-amino-2-carboxyethyl) disulfanyl]propanoic acid; dihydrochloride
Formula	: $C_6H_{12}N_2O_4S_2 \cdot 2HCl$
Molecular weight	: 313.22 g/mol
CAS#	: 30925-07-6
EC#	: 250-391-9

**SECTION 4 - First Aid Measures****4.1 Description of Necessary First Aid Measures****General Advice**

Eyes	: Remove any contact lenses. Flush eyes with water for at least 15 minutes
Skin	: Wash off with soap and plenty of water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Ingestion	: DO NOT induce vomiting unless directed to do so by a medical professional. Never give anything by mouth to an unconscious person. Rinse mouth with water. If large quantities are swallowed, call a physician immediately.
Inhalation	: If breathed in, move person into fresh air. If not breathing, give artificial respiration

**SECTION 5 - Firefighting Measures****5.1 Extinguishing Media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Specific Hazards Associated with this Chemical**

Carbon oxides, Nitrogen oxides, Sulphur oxides, Hydrogen chloride gas.

**5.3 Special Equipment/Precautions for Firefighters**

Wear self-contained breathing apparatus for firefighting is necessary.

**SECTION 6 - Accidental Release Measures****6.1 Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas.

**6.2 Environmental Precautions**

Do not let enter drains.

**6.3 Methods and Materials for Containment and Cleaning Up**

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

**SECTION 7 - Handling and Storage****7.1 Precautions for Safe Handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventative fire protection.

**7.2 Conditions for Storage Including any Incompatibilities**

Keep away from heat. Keep away from sources of ignition. Keep container tightly closed, store in a dry and well-ventilated place.

**SECTION 8 - Exposure Controls, Personal Protection**

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**8.1 Control Parameters**

Chemical does not contain any substances with occupational exposure limits.

**8.2 Engineering Controls**

Use adequate ventilation to keep airborne concentrations low.

**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 0.11mm.

**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 P1 (EN143) dust masks.

**SECTION 9 – Physical and Chemical Properties****9.1 Chemical Property Information**

Physical State	: Solid
Appearance	: White to pale yellow
Odor	: Not available
pH	: Not available
Vapor Pressure	: Not available
Vapor Density	: Not available
Viscosity	: Not available
Melting Point	: 228-232 °C
Boiling Point	: Not available
Flashpoint	: Not available
Solubility	: Not available
Relative Density	: Not available
Molecular Formula	: C <sub>6</sub> H <sub>12</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub> ·2HCl
Molecular Weight	: 313.22 g/mol

**SECTION 10 - Stability and Reactivity****10.1 Chemical Stability**

Stable under recommended storage conditions.

**10.2 Conditions to Avoid**

Excessive heat.

**10.3 Incompatibilities with Other Materials**

Strong oxidizing agents.

**10.4 Hazardous Decomposition Products**

Carbon oxides, Nitrogen oxides, Sulphur oxides, Hydrogen chloride gas.

**10.5 Hazardous Polymerization**

Not applicable.

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**SECTION 11 - Toxicological Information**

**11.1 Toxicological Effects**

- LD50/LC50 : Not applicable
- Carcinogenicity : Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA
- Serious Eye Damage/ Irritation : May cause irritation
- Skin Corrosion/Irritation : May cause irritation
- Respiratory or Skin Sensitization : May cause irritation
- Epidemiology : Not applicable
- Teratogenicity : Not applicable
- Reproductive Effects : Not applicable
- Neurotoxicity : Not applicable
- Mutagenicity : Not applicable
- Other Studies : Not applicable
- RTECS : Not applicable

**SECTION 12 - Ecological Information**

**12.1 Ecotoxicity**

Not applicable.

**12.2 Persistence and Degradability**

Not applicable.

**12.3 Bioaccumulative Potential**

Not applicable.

**12.4 Mobility in Soil**

Not applicable.

**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.

**SECTION 14 - Transport Information**

Regulations	US DOT	IATA	IMDG
Shipping Name:	Not Dangerous Goods	Not Dangerous Goods	Not Dangerous Goods
Hazard Class:			
UN Number:			
Packing Group:			

**SECTION 15 - Regulatory Information**

- OSHA Hazards : Not applicable

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**SARA:**

- SARA Section 302 : No chemicals in this material are subject to the reporting requirements of SARA Title II, Section 302.
- SARA Section 311/312 : No SARA Hazards.
- SARA Section 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**STATE SPECIFIC:**

- Massachusetts Right To Know Components : L-Cystine dihydrochloride CAS# 30925-07-6
- Pennsylvania Right To Know Components : L-Cystine dihydrochloride CAS# 30925-07-6
- New Jersey Right To Know Components : L-Cystine dihydrochloride CAS# 30925-07-6
- 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.

**SECTION 16 - Additional Information**

**16.1 Hazard Ratings:**

NFPA Rating	
Health Hazard	1
Fire Hazard	1
Reactivity Hazard	1

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.

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