



L-Cystine Dihydrochloride

Safety Data Sheet

According to Regulation (EC) 1272/2008

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 : (2R)-2-amino-3-[[[(2R)-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

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

Skin Irritation (Category 1B)
 Eye Irritation (Category 1)

2.2 GHS Label Element Including Precautionary Statements

Pictogram : 

Signal Word : Danger

Hazard Statement(s) : H314 - Causes severe skin burns and eye damage
 : H318 – Cause serious eye damage

Precautionary Statement(s) : P260: Do not breath dust/fume/gas/mist/vapors/spray
 P264: Wash hands thoroughly after handling.
 P280: Wear protective gloves/eye protection/face protection/protective clothing.
 : P301 + P330 +P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P302+P352: IF ON SKIN: Take off immediately all contaminated clothing. Wash with plenty of soap and water. Immediately rinse with water for several minutes.
 : P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Hazards not Classified or not Covered by the GHS

Not applicable.

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

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

Synonyms	:	(2R)-2-amino-3-[[[(2R)-2-amino-2-carboxyethyl] disulfanyl]propanoic acid; dihydrochloride
Formula	:	C ₆ H ₁₂ N ₂ O ₄ S ₂ ·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. 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**8.1 Control Parameters**

Chemical does not contain any substances with occupational exposure limits.

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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	: 0 Pa @ 20 °C
Vapor Density	: Not available
Viscosity	: Not available
Melting Point	: 211.36 °C
Boiling Point	: Not available
Flashpoint	: Not available
Solubility	: 1.006 g/L @ 19.5°C
Relative Density	: 1.518 @ 20 °C
Molecular Formula	: C ₆ H ₁₂ N ₂ O ₄ S ₂ ·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	:	>2000 mg/km with no adverse effect
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	ADR/RID
Shipping Name:	Corrosive Solid, acidic, organic, n.o.s	Corrosive Solid, acidic, organic, n.o.s	Corrosive Solid, acidic, organic, n.o.s	Corrosive Solid, acidic, organic, n.o.s
Hazard Class:	8	8	8	8
UN Number:	UN3261	UN3261	UN3261	UN3261
Packing Group:	II	II	II	II

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SECTION 15 - Regulatory Information

OSHA Hazards : Not applicable

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 : Skin & Eye Irritation; Category 1

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**

NFPA Rating	
Health Hazard	1
Fire Hazard	1
Reactivity Hazard	1

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Signature Manifest

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Author Approval

Name/Signature	Title	Date	Meaning/Reason
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