

## SECTION 1: Product and Company Identification

### Identification of the substance or mixture

**Catalog #:** 10276, 10276-1  
**Product Name:** L-Lysine monohydrochloride  
**CAS-No.:** 657-27-2

### Company Identification

Cepharm Life Sciences Inc.  
11830 W Market Place, Suite K  
Fulton, MD 20759  
USA  
Toll Free: 1-800-257-1565  
Phone: 410-636-4954

**24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Toll Free: 1-800-424-9300/ +1 703-527-3887 CCN 1010970**

**For Research Use Only. Not for use in diagnostic procedures.**

## SECTION 2: Hazards identification

### **Classification of the substance or mixture**

Not a hazardous substance or mixture.

### **GHS Label Elements, including Precautionary Statements**

Not a hazardous substance or mixture.

**Hazards not otherwise classified (HNOC) or not covered by GHS - none**

## SECTION 3: Composition / Information on Ingredients

### **Substances**

Synonyms	:	(S)-2,6-Diaminohexanoic acidmonohydrochloride
Formula	:	C6H14N2O2 · HCl
Molecular weight	:	182.65 g/mol
CAS-No.	:	657-27-2
EC-No.	:	211-519-9

No components need to be disclosed according to the applicable regulations.

## SECTION 4: First Aid Measures

### **Description of first aid measures**

#### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

#### **In case of skin contact**

Wash off with soap and plenty of water.

#### **In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**Indication of any immediate medical attention and special treatment needed**

No data available.

**SECTION 5: Firefighting Measures****Extinguishing Media****Suitable extinguishing media**

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

**Special hazards arising from the substance or mixture**

Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

**Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**

No data available.

**SECTION 6: Accidental Release Measures****Personal precautions, protective equipment and emergency procedures**

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

For personal protection see section 8.

**Environmental precautions**

No special environmental precautions required.

**Methods and materials for containment and cleaning up**

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

**Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling & Storage****Precautions for safe handling**

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 processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

**Conditions for safe storage, including any incompatibilities**

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

Keep in a dry place.

Storage class (TRGS 510): Non-Combustible Solids

**Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

**SECTION 8: Exposure Controls / Personal Protection****Control parameters****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Exposure controls****Appropriate engineering controls**

General industrial hygiene practice.

**Personal Protective Equipment**

**Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure**

No special environmental precautions required.

**SECTION 9: Physical and Chemical Properties****Information on basic physical and chemical properties**

a) Appearance	Form: powder Color: white
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	5.0 - 6 at 91.3 g/l at 25 °C (77 °F)
e) Melting point/freezing point	Melting point/range: 263 °C (505 °F)
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapor pressure	no data available
l) Vapor density	no data available
m) Relative density	1.28 g/cm <sup>3</sup> at 20 °C (68 °F)
n) Water solubility	91.3 g/l at 20 °C (68 °F) - completely soluble
o) Partition coefficient: n-octanol/water	no data available
p) Auto-ignition temperature	no data available
q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

**Other safety information**

Surface tension 74 mN/m at 20 °C (68 °F)

**SECTION 10: Stability & Reactivity****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

No data available

**Conditions to avoid**

No data available

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Other decomposition products - No data available  
In the event of fire: see section 5

## SECTION 11: Toxicological Information

### Information on toxicological effects

#### Acute toxicity

No data available  
Inhalation: No data available  
Dermal: No data available  
No data available

#### Skin corrosion/irritation

Skin - Rabbit  
Result: No skin irritation  
(OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit  
Result: No eye irritation  
(OECD Test Guideline 405)

#### Respiratory or skin sensitization

Maximization Test (GPMT) - Guinea pig  
Result: Did not cause sensitization on laboratory animals.  
(OECD Test Guideline 406)

#### Germ cell mutagenicity

Mammal  
Result: negative

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.  
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.  
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.  
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

No data available

#### Aspiration hazard

No data available

#### Additional Information

Repeated dose toxicity - Rat - male - Feed - No observed adverse effect level - 914 mg/kg  
Repeated dose toxicity - Rat - female - Feed - No observed adverse effect level - 968 mg/kg  
RTECS: OL5650000  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## SECTION 12: Ecological Information

#### Toxicity

Toxicity to fish	semi-static test LC50 - <i>Oryzias latipes</i> - > 103 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	semi-static test EC50 - <i>Daphnia magna</i> (Water flea) - > 106 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	EC50 - <i>Pseudokirchneriella subcapitata</i> (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

no data available

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

No data available

**SECTION 13: Disposal Considerations****Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product

**SECTION 14: Transport Information****DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**SECTION 15: Regulatory Information****SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 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.

**SARA 311/312 Hazards**

No SARA Hazards

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Lysine hydrochloride CAS-No. 657-27-2 Revision Date

**New Jersey Right to Know Components**

Lysine hydrochloride CAS-No. 657-27-2 Revision Date

**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: Other Information****HMIS Rating**

Health hazard:	0
Chronic Health Hazard:	
Flammability:	0
Physical Hazard	0

**NFPA Rating**

Health hazard:	0
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Fire Hazard: 0  
Reactivity Hazard: 0

**Disclaimer:**

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 does not represent any guarantee of the properties of the product. Cepham Life Sciences Incorporated and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.