

L-lysine hydrochloride 657-27-2 MSDS

Section 1 - Chemical Product MSDS Name:L-(+)-Lysine Monohydrochloride 99+% Material Safety Data Sheet

Synonym:L-(+)-2,6-Diaminocaproic acid hydrochloride; L-(+)-2,6-Diaminohexanoic acid hydrochloride

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content
657-27-2	L-(+)-Lysine monohydrochloride	99+%

Hazard Symbols: None Listed.

Risk Phrases: None Listed.

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

The toxicological properties of this material have not been fully investigated.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

Expected to be a low ingestion hazard.

Inhalation:

May cause respiratory tract irritation.

Chronic:

Not available.

Section 4 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.

Skin:

Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

Inhalation:

Remove from exposure to fresh air immediately.

Notes to Physician:

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container.

Section 7 - HANDLING and STORAGE

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment Eyes: Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear a chemical apron.

Respirators:

A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Appearance: white

Odor: Practically odorless.

pH: 5.8(100g/l H₂O 20°C)

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 263-264 deg C

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: > 240 deg C

Solubility in water: Soluble in water: 649.5 g/l (20°C)

Specific Gravity/Density: Not available.

Molecular Formula: C₆H₁₄N₂O₂ · HCl

Molecular Weight: 182.65

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Hydrogen chloride, nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 657-27-2: OL5650000 LD50/LC50:

CAS# 657-27-2: Oral, rat: LD50 = 10 gm/kg.

Carcinogenicity:

L-(+)-Lysine monohydrochloride - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Product is a form of the natural amino acid L-Lysine and can therefore be degraded microbiologically.

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 657-27-2: 0

United Kingdom Occupational Exposure Limits

Canada

CAS# 657-27-2 is listed on Canada's DSL List.

CAS# 657-27-2 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 657-27-2 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A