



Safety Data Sheet

L-Lysine Monohydrochloride 98.5% Granular

SAM Nutrition
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1) IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Chemical name L-Lysine Monohydrochloride EC# 211-519-9
CAS # 657-27-2 RTECS# OL5650000

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product uses Chemical manufacturing, feed additive.

1.3. Supplier Information of the Safety Data Sheet

Company SAM Nutrition Telephone # +1 (952) 974-9174
7500 Flying Cloud Drive, Suite Fax # +1 (952) 974-8183
765 Eden Prairie, MN 55344-
3945 United States of America Email info@samhprp.com

1.4. Emergency Contact Information

Emergency # +1 (952) 974-9174

2) HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Not a hazardous substance or mixture.

2.2. GHS Label Elements

Not classified by GHS.

2.3. Unclassified Hazards/Hazards Not Otherwise Classified

None.

3) COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Molecular formula C6H14N2O2.HCl Molecular weight 182.65 g/mol
CAS Registry # 657-27-2 GHS-US classification N/A
Concentration 98.5% min Synonyms (S)-2,6-Diaminohexanoic acid monohydrochloride / L-Lysine HCL / L-Lysine Hydrochloride

3.2. Mixtures

None Not a mixture. Mono-constituent.

4) FIRST-AID MEASURES

4.1. Description of First-Aid Measures

If inhaled	Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
In case of skin contact	Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
In case of eye contact	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.
If swallowed	DO NOT induce vomiting unless instructed to do so by a medical professional. Never give anything by mouth to an unconscious person. Get medical aid immediately.

4.2. Important Systems and Effects, Both Acute and Delayed

Refer to Section 2.2 for Precautionary Statements if any are applicable.

4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

No data available.

5) FIREFIGHTING MEASURES

5.1. Extinguishing Media

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

5.2. Special Hazards Arising from the Substance or Mixture

Carbon oxides, nitrogen oxides (NO_x), HCl gas.

5.3. Advice for Firefighters

May be combustible at high temperatures. As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. 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. Explosion will appear as fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.4. Further information

None.

6) ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. Use proper personal protective equipment as indicated in Section 8.

6.2. Environmental Precautions

Do not let product enter drains.

6.3. Methods and Material for Containment and Cleaning Up

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions.

6.4. Reference to Other Sections

See Section 8: Exposure Controls/ Personal Protection and Section 13: Disposal Considerations.

7) HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Use with adequate ventilation. Take into consideration the avoidance of formation of combustible dust before processing. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

7.2. Conditions for Safe Storage

Store in a cool, dry and well-ventilated area away from incompatible substances. Keep containers tightly closed.

7.3. Specific End Use(s)

No additional recommendations.

8) EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Chemical does not contain any substances with occupational exposure limits.

8.2. Exposure Controls

Appropriate Engineering Controls

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Environmental exposure controls

Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment (PPE)

Eye/Face Protection	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.
Hand Protection	Wear appropriate protective gloves to prevent skin exposure. Wear impervious gloves: Nitrile rubber with layer thickness 0.11mm.
Skin and Body Protection	Wear appropriate protective clothing to prevent skin exposure.
Respiratory Protection	Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 149) dust masks. A respiratory protection program that meets OSHA's 29 CFR '1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Personal protective equipment symbol(s)



9) PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical state	Solid / granular
Appearance	Light yellow granules
Color	Light yellow
Odor	Practically odorless
Odor threshold	No data available
pH	5.72 (100g/l H ₂ O 20°C)
Melting point	263~264°C (505.4~507.2°F)
Flash point	No data available
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Explosion limits	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Vapor pressure	No data available
Relative density	No data available
Vapor Density	No data available

Specific gravity / density	No data available
Solubility	91.3 g/L at 20 °C
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	>240°C (> 464°F)
Viscosity	No data available

9.2. Other Information

No data available.

10) STABILITY AND REACTIVITY

10.1. Chemical Stability

Stable under recommended storage conditions.

10.2. Conditions to Avoid

No data available.

10.3. Incompatible Materials

Strong oxidizing agents.

10.4. Hazardous Decomposition Products

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

10.5. Hazardous Polymerization

Will not occur.

11) TOXICOLOGICAL INFORMATION

11.1. Acute Toxicity

Inhalation	Did not cause sensitization on laboratory animals.	(OECD Test Guideline 406)
Eye contact	Rabbit: No eye irritation.	(OECD Test Guideline 405)
Skin contact	Rabbit: No skin irritation.	(OECD Test Guideline 404)
Ingestion	Harmful if swallowed.	

11.2. Skin Corrosion/Irritation

Rabbit: No skin irritation.

11.3. Serious Eye Damage/Irritation

Rabbit: No eye irritation.

11.4. Respiratory or Skin Sensitization

Did not cause sensitization on laboratory animals.

11.5. Germ Cell Mutagenicity

Result: Negative on mammals.

11.6. Carcinogenicity

CAS# 657-27-2: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

11.7. Reproductive Toxicity/Teratogenicity

No data available.

11.8. Single Target Organ Toxicity – Single Exposure

No data available.

11.9. Single Target Organ Toxicity – Repeated Exposure

No data available.

11.10. Aspiration Hazard

No data available.

RTECS#: OL5650000

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.

12) ECOLOGICAL INFORMATION

12.1. Ecotoxicity

No data available. Product is a form of the natural amino acid L-Lysine and can therefore be degraded microbiologically.

12.2. Persistence and Degradability

No data available.

12.3. Bio-accumulative Potential

No data available.

12.4. Results of PBT and vPvB assessment

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

12.5. Other Adverse Effects

No data available.

13)DISPOSAL CONSIDERATIONS

13.1. Waste Disposal

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

14)TRANSPORT INFORMATION

14.1. Department of Transportation

Not regulated by D.O.T.

14.2. International Transportation

No information available.

15)REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations/ Legislation Specific for the Substance or Mixture

United States

SARA 313:

No chemicals are reportable under Section 313.

SARA 311/312 Hazard Categories:

No SARA Hazards.

Section 302 (TPQ):

None of the chemicals in this product have a TPQ.

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.

US State Right-to-Know Regulations:

L-Lysine HCL; CAS-No. 657-27-2.

16)OTHER INFORMATION

16.1. Hazardous Materials Information System (USA)

Hazardous Material Information System (HMIS):	Health	1
	Flammability	1
	Physical Hazard	0

16.2. National Fire Protection



16.3. Further Information

The information conveyed in this Safety Data Sheet is only a representation of what SAM HPRP Chemicals, Inc. and doing business as SAM Nutrition has found to be accurate based on the current information that is available, in regards to this compound. SAM Nutrition. 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 SAM Nutrition 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 SAM Nutrition. has been advised of the possibility of such damages.