



## Safety Data Sheet

# L-Lysine Monohydrochloride 98.5% Granular

**SAM Nutrition**  
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Bloomington, MN 55435-5850  
United States of America  
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Revised: 12/02/2021  
SDS Expiry Date: 12/01/2024

### 1) IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product Identifier

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

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

**Product uses** Chemical manufacturing, animal feed additive

#### 1.3. Supplier Information of the Safety Data Sheet

<b>Company</b>	<b>SAM Nutrition</b> 7760 France Ave S, Suite 1330 Bloomington, MN 55435-5850 United States of America	<b>Telephone #</b>	+1 (952) 974-9174
		<b>Fax #</b>	+1 (952) 974-8183
<b>Manufacturer</b>	<b>Heilongjiang Wanlirunda Biotechnology Co., Ltd.</b> Inside of Baoqing Wanlirunda Grain Reserve Co., Ltd., Baoqing Town, Baoqing County, Shuangyashan City, Province Heilongjiang, P.R. China	<b>Email</b>	<a href="mailto:info@samhprp.com">info@samhprp.com</a>

#### 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 a hazardous substance or mixture.

#### 2.3. Unclassified Hazards/Hazards Not Otherwise Classified

None.

### 3) COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1. Substance

<b>Molecular formula</b>	C <sub>6</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub> ·HCl	<b>Molecular weight</b>	182.65 g/mol
<b>CAS Registry #</b>	657-27-2	<b>GHS-US classification</b>	N/A

<b>Concentration</b>	98.5% min	<b>Synonyms</b>	(S)-2,6-Diaminohexanoic acid monohydrochloride / L-Lysine HCL / L-Lysine Hydrochloride
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3.2. Mixtures

**None** Not a mixture. Mono-constituent.

**4) FIRST-AID MEASURES**

4.1. Description of First-Aid Measures

- If inhaled** Remove from exposure and move to fresh air immediately.
- In case of skin contact** Flush skin with plenty of 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 eyelids.
- If swallowed** Get medical aid. Wash mouth out with water.
- Notes to Physician** Treat symptomatically and supportively.

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<sub>x</sub>), HCl gas.

5.3. Advice for Firefighters

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

5.4. Further information

None.

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## 6) ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

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

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

### 6.4. Reference to Other Sections

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

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## 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 and skin. 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.

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## 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 chemical goggles.

<b>Hand Protection</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Skin and Body Protection</b>	Wear a chemical apron.
<b>Respiratory Protection</b>	A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

**Personal protective equipment symbol(s)**



## **9) PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on Basic Physical and Chemical Properties**

<b>Physical state</b>	Solid / granular
<b>Appearance</b>	White or hazel granules
<b>Color</b>	White or hazel
<b>Odor</b>	Practically odorless
<b>Odor threshold</b>	No data available
<b>pH</b>	5.0~6.0 (of aqueous solution, 1+10)
<b>Melting point</b>	263~264°C (505.4~507.2°F)
<b>Flash point</b>	No data available
<b>Evaporation Rate</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Explosion limits</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available
<b>Vapor pressure</b>	No data available
<b>Relative density</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific gravity / density</b>	No data available
<b>Solubility</b>	91.3 g/L at 20 °C
<b>Log Pow</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	> 240°C (> 464°F)
<b>Viscosity</b>	No data available

## 9.2. Other Information

No data available.

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## 10) STABILITY AND REACTIVITY

### 10.1. Chemical Stability

Stable under normal temperatures and pressures.

### 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.

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## 11) TOXICOLOGICAL INFORMATION

### 11.1. Acute Toxicity

<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Eye contact</b>	May cause eye irritation.
<b>Skin contact</b>	May cause skin irritation.
<b>Ingestion</b>	Harmful if swallowed.

### 11.2. Skin Corrosion/Irritation

May cause skin irritation.

### 11.3. Serious Eye Damage/Irritation

May cause eye irritation.

### 11.4. Respiratory or Skin Sensitization

May cause respiratory tract irritation.

### 11.5. Germ Cell Mutagenicity

No data available.

### 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.

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## **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.

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## **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.

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## **14)TRANSPORT INFORMATION**

14.1. Department of Transportation

No information available.

#### 14.2. International Transportation

No information available.

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### **15) REGULATORY INFORMATION**

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

##### *United States*

##### **TSCA**

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

##### **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

##### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

##### **Section 12b**

None of the chemicals are listed under TSCA Section 12b.

##### **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

##### **CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

##### **SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

##### **Section 313**

No chemicals are reportable under Section 313.

##### **Clean Air Act**

This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.

##### **Clean Water Act**

None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

##### **OSHA**

None of the chemicals in this product are considered highly hazardous by OSHA.

##### **STATE**

CAS# 657-27-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ. California - No Significant Risk Level

None of the chemicals in this product are listed.

***European/International Regulations***

**European Labeling**

In accordance with EC Directives.

**Hazard Symbols**

Not available.

**Risk Phrases**

Not available.

**Safety Phrases**

Not available.

**WGK (Water Danger/Protection)**

CAS# 657-27-2: 0.

***Canada***

**DSL/NDSL**

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

**Canada - WHMIS**

This product has a WHMIS classification of 'Not controlled'.

**Canadian Ingredient Disclosure List**

Not listed.

**Exposure Limits**

Not available.

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**16) OTHER INFORMATION**

16.1. Hazardous Materials Information System (USA)

<b>Hazardous Material Information System (HMIS):</b>	<b>Health</b>	<b>1</b>
	<b>Flammability</b>	<b>1</b>
	<b>Physical Hazard</b>	<b>0</b>

## 16.2. National Fire Protection Association Rating (USA)



## 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.*

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