

# L-Lysine HCL - MSDS

## MATERIAL SAFETY DATA SHEET

### SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:**

Product name: L-Lysine HCL  
 Product Number: FAP-1  
 Brand: Pangoo  
 CAS-No.: 657-27-2

**Name of supplier, address and emergency telephone number:**

Company : Pangoo Biotech Hebei Co., Ltd.  
 Add: Cangzhou, Hebei, China  
 Emergency telephone number: +86-317-8585021

**Product use:** As feed additive for animals

**Date of MSDS preparation:** 11/21/2018

### SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

**Common Name:** L-lysine monohydrochloride

**Molecular Formula:** C 6 H14 N2 O2 - HCl

**Composition:**

Name	CAS #	% by Weight
{L-}Lysine monohydrochloride	657-27-2	100

**Toxicological Data on Ingredients:** Not applicable.

### SECTION 3 HAZARDS IDENTIFICATION

**Emergency Overview**

Warning. May form combustible dust concentrations in air (during processing and handling). Product dust may cause mild, mechanical irritation.

Appearance	Physical State	Odor
Tan	Granules	Slight fermentation odor

**Classification according to 29 CFR 1910, amended to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS):**

Hazards Not Otherwise Classified	Combustible Dust
----------------------------------	------------------

**OSHA / GHS Label Elements**

Signal Word:	Warning
Hazard Statement(s):	May form combustible dust concentrations in air (during processing and handling)

### SECTION 4 FIRST AID MEASURES

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Eye contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get

	medical attention if irritation occurs.
<b>Skin Contact:</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
<b>Ingestion:</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

---

SECTION 5 FIRE FIGHTING MEASURES

---

**Flammability of the Product:** May be combustible at high temperature.

**Auto-Ignition Temperature:** N/A

**Flash Points:** N/A

**Flammable Limits:** N/A

**Products of Combustion:**

These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...).

**Fire Hazards in Presence of Various Substances:**

Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.

**Explosion Hazards in Presence of Various Substances:**

Slightly explosive in presence of open flames and sparks. Non-explosive in presence of shocks.

**Fire Fighting Media and Instructions:**

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards:**

As with most organic solids, fire is possible at elevated temperatures

**Special Remarks on Explosion Hazards:**

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

---

SECTION 6 ACCIDENTAL RELEASE MEASURES

---

**Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

---

SECTION 7 HANDLING AND STORAGE

---

**Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.

**Storage:**

Keep container tightly closed. Keep container in a cool, well-ventilated area.

---

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

---

**Engineering Controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended

exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:**

Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** N/A

---

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

---

<b>Physical state and appearance:</b>	Solid. (Granular solid or Powdered solid.)
<b>Odor:</b>	N/A
<b>Taste:</b>	N/A
<b>Molecular Weight:</b>	182.68 g/mole
<b>Color:</b>	White. Off-white.
<b>pH (1% soln/water):</b>	N/A
<b>Boiling Point:</b>	N/A
<b>Melting Point:</b>	N/A
<b>Critical Temperature:</b>	N/A
<b>Specific Gravity:</b>	N/A
<b>Vapor Pressure:</b>	N/A
<b>Vapor Density:</b>	N/A
<b>Volatility:</b>	N/A
<b>Odor Threshold:</b>	N/A
<b>Water/Oil Dist. Coeff.:</b>	N/A
<b>Ionicity (in Water):</b>	N/A
<b>Dispersion Properties:</b>	See solubility in water.
<b>Solubility:</b>	Soluble in cold water.

---

SECTION 10 STABILITY AND REACTIVITY

---

<b>Stability :</b>	Stable under normal conditions.
<b>Possibility of Hazardous Reactions:</b>	None under normal processing.
<b>Conditions to Avoid:</b>	Heat, flames and sparks. Avoid conditions that generate dust.
<b>Incompatible Materials:</b>	No materials to be especially mentioned.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition may lead to release of, Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Nitrogen oxides (NO <sub>x</sub> ), HCl.

---

SECTION 11 TOXICOLOGICAL INFORMATION

---

<b>Toxicity to Animals:</b>	Acute oral toxicity (LD50): 10000 mg/kg [Rat].
<b>Special Remarks on other Toxic Effects on Humans:</b>	Acute Potential Health Effects: Skin: May cause skin irritation. Expected to be a low hazard. Eyes: May cause eye irritation. Expected to be a low hazard. Inhalation: May cause respiratory tract irritation. Expected to be a low hazard. Ingestion: Expected to be a low hazard. Ingestion of large amounts may cause gastric disturbances. It may affect behavior (ataxia), respiration (dyspnea).

<b>Other Toxic Effects on Humans:</b>	Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
<b>Chronic Effects on Humans:</b>	N/A
<b>Special Remarks on Toxicity to Animals:</b>	N/A
<b>Special Remarks on Chronic Effects on Humans:</b>	N/A

---

 SECTION 12 ECOLOGICAL INFORMATION
 

---

<b>Ecotoxicity:</b>	N/A
<b>BOD5 and COD:</b>	N/A
<b>Products of Biodegradation:</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation:</b>	The product itself and its products of degradation are not toxic.
<b>Special Remarks on the Products of Biodegradation:</b>	N/A

---

 SECTION 13 DISPOSAL CONSIDERATIONS
 

---

**Waste Disposal Methods:**

Can be landfilled or incinerated, when in compliance with local regulations. Dispose of in compliance with the laws and regulations pertaining to this product in your jurisdiction.

**Contaminated Packaging:**

Empty containers should be decontaminated and taken for local recycling, recovery or waste disposal.

---

 SECTION 14 TRANSPORT INFORMATION
 

---

<b>DOT (US)</b>	Not dangerous goods
<b>IMDG</b>	Not dangerous goods
<b>IATA</b>	Not dangerous goods

---

 SECTION 15 REGULATORY INFORMATION
 

---

<b>Federal and State Regulations:</b>	TSCA 8(b) inventory: L-Lysine monohydrochloride
<b>Other Regulations:</b>	EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
<b>Other Classifications:</b>	
<b>WHMIS (Canada):</b>	Not controlled under WHMIS (Canada).
<b>DSCL (EEC):</b>	This product is not classified according to the EU regulations. S24/25- Avoid contact with skin and eyes.
<b>HMIS (U.S.A.):</b>	Health Hazard: 1 Fire Hazard: 1 Reactivity: 0 Personal Protection: E
<b>National Fire Protection Association (U.S.A.):</b>	Health: 1 Flammability: 1 Reactivity: 0 Specific hazard: 0
<b>Protective Equipment:</b>	Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

---

SECTION 16

OTHER INFORMATION

---

"IMO" : not dangerous for sea transport

Disclaimer

*Additional references can be taken from the label or the product description. The information given here is correct to the best of our knowledge at the time of writing this sheet. No responsibility can be taken for improper use or handling of the product.*