

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifiers Product Name	L-Lysine
Use of Substance/Preparation	Animal feed
Synonyms/Alternate Names	L-Lysine HCl; L-Lysine HCl 99%
Details of the supplier of the safety data sheet	
Supplier	Pestell Nutrition
Address	141 Hamilton Rd New Hamburg, Ontario Canada, N3A 2H1
Phone	519-662-2877
Email	qa@pestell.com
Emergency telephone number (24 hr)	Canada: CANUTEC 1 613-996-6666 US: CHEMTREC 1 703-527-3887

2. HAZARD IDENTIFICATION

Emergency Overview	May be irritating to eyes, skin and respiratory system; Fine dust dispersed in air may ignite.
Appearance	Tan
Physical State	Solid; Granular
Odor	Slight odor
Potential Health Effects	
Routes of Exposure	Eye contact, skin contact, inhalation
Acute Effects	
Eyes	May cause irritation
Skin	May cause irritation
Inhalation	May cause irritation
Ingestion	Health injuries not known or expected under normal use; Not for human consumption.
Chronic Effects	None known.
OSHA Defined Hazards	Not classified
GHS Label Elements	N/A - Not a hazardous substance or mixture
GHS Signal Word	N/A - Not a hazardous substance or mixture
GHS Precautionary Statements	N/A - Not a hazardous substance or mixture

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name L-Lysine monohydrochloride
Formula C₆H₄N₂O₂ HCl

Non-Hazardous Components

Chemical Name	CAS No.	Weight %
L-Lysine monohydrochloride	657-27-2	100

4. FIRST AID MEASURES

Eye Contact Skin Contact Rinse thoroughly with copious amounts of water
Rinse immediately with copious amounts of water; Soap may be helpful.
Move to fresh air

Inhalation Rinse mouth with water; Drink water to dilute; Consult a physician if necessary.

Ingestion Treat symptomatically

Notes to Physician

Protection of First Aid Providers Use personal protective equipment.

5. FIRE-FIGHTING MEASURES

Flammable Properties Product is capable of burning but is not readily ignited; Risks of ignition followed by flame propagation or secondary explosions should be prevented by avoiding accumulation of dust.

Suitable Extinguishing Media Water; Carbon dioxide (CO₂); Dry chemical.

Unsuitable Extinguishing Media None

Hazardous Combustion Products Carbon monoxide (CO); Carbon dioxide (CO₂); Nitrogen oxides (NO_x); HCl.

Explosion Data

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge Yes (dust)

Specific Hazards Arising from the Chemical No known hazards.

NFPA

Health 0

Flammability Stability & Reactivity 1

Physical Hazard 0



6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation
Environmental Precautions	Prevent further chemical release if safe to do so.
Methods for Clean-up	Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice; Ensure adequate ventilation; Avoid dust formation in confined areas; Fine dust dispersed in air may ignite; Refer to NFPA 64, "Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities."
Storage	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep away from sources of ignition.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Chemical Name	ACGIH TLV	OSHA PEL	MEXICO	NIOSH IDLH	OSHA
Particulates not otherwise regulated	TWA: 10 mg/m ³	TWA: 15 mg/m ³ (total), 5 mg/m ³ (respirable)			TWA: 10 mg/m ³ (total), 3 mg/m ³ (respirable)

Engineering Measures	Ensure adequate ventilation, especially in confined areas; Apply technical measures to comply with the occupational exposure limits.
Personal Protective Equipment	
Eye/Face Protection	Safety glasses
Skin & Body Protection	Long sleeved clothing; Protective gloves.
Respiratory Protection	In case of insufficient ventilation, wear suitable respiratory protection.
General Hygiene Consideration	Handle in accordance with good industrial hygiene and safety practices.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Tan
Physical State	Solid; Granular
Odor	Slight odor
Odor Threshold	No information available
Flash Point	Not applicable
Autoignition Temperature	No data available
Boiling Point	Not applicable
Melting/Freezing Point	Approx. 260°C/500°F
Flammability Limits in Air	No information available
Exposure Limits	No information available

Minimum Ignition Temperature	460°C/860°F
pH	Neutral
Vapor Pressure	Not applicable
Solubility	Insoluble in alcohol and ether
Water Solubility	Soluble (642 g/Lat 30°C)
Evaporation Rate	Not applicable
Bulk Density	0.55-0.75 g/mL
Specific Gravity	No information available
Oxidizing Properties	No information available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Heat, flames and sparks; Other sources of ignition.
Incompatible Materials	None known
Hazardous Decomposition Products	None known
Possibility of Hazardous Reactions	None under normal processing

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	
LD50 Oral	10000 mg/kg (Rat)
LD50 Dermal	No information available
LC50 Inhalation	No information available
Chronic Effects	
Carcinogenicity	No known carcinogenic chemicals in product
OSHA	Not listed
ACGIH	Not listed
NTP	Not listed
Mexico	Not listed
IARC	Not listed
Subchronic Toxicity	No information available
Irritation	No information available
Corrosivity	No information available
Sensitization	No information available
Neurological Effects	No information available
Mutagenic Effects	No information available
Reproductive Effects	No information available
Developmental Effects	No information available
Teratogenicity	No information available
Target Organ Effects	Respiratory system; Eyes; Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Contains no substances known to be hazardous to the environment; Contains no substances known to be non-degradable in waste water treatment plants.
Persistence/Degradability	Readily biodegradable
Bioaccumulation/Accumulation	Not applicable
Mobility	Soluble in water

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods	May 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 may be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

Domestic Transport Regulations (USA)	DOT - Not regulated
Domestic Transport Regulations (CAN)	TDG - Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

15. REGULATORY INFORMATION

International Inventories The components of this product are reported in the following inventories:

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	AICS	ENCS	CHINA	PICCS	KECL	NZLoC
L-Lysine monohydrochloride	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes

Legend DSL - Domestic Substance List (Canada); EINECS - European Inventory of Existing Commercial Chemical Substances (EU); AICS - Australian Inventory of Chemical Substances (Australia); ENCS - Existing and New Chemical Substances (Japan); PICCS - Inventory of Chemicals and Chemical Substances (Philippines); KECL - Korean Existing and Evaluated Chemical Substances (Korea); NZLoC - New Zealand Inventory of Chemicals (New Zealand); TSCA - Toxic Substances Control Act, Section 8(b) Inventory (USA).

USA - Federal Regulations

Ozone Depleting Substances No Class I or Class II material is known to be used in the manufacture of, or contained, in this product.

SARA 313 Not known to contain reportable chemicals.

SARA311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No

Reactive Hazard	No
Clean Air Act, Section 112 Hazardous Air Pollutants (HAPS) - 40 CFR 61	Not known to contain any HAPS.
State Regulations California Proposition 65	Not known to contain Proposition 65 chemicals above those naturally present in their agricultural source.
State Right-to-Know	No known components subject to "Right-To-Know" legislation of any U.S. state.
Canada WHMIS Product Classification WHMIS Ingredient Disclosure List IDL	Not a WHMIS controlled product. No known component is listed on the WHMIS Ingredients disclosure list.
Canadian National Pollutant Release Inventory (NPRI)	No known component is listed on NPRI.

16. OTHER INFORMATION

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Pestell Nutrition and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

Version: 3
Revision date: June 24, 2021