CJ BIO AMERICA

Safety Data Sheet

1. Substance / Preparation and Company name

Product	:	L-Lysine Monohydrochloride 99% Feed Grade
Manufacturer	:	CJ Bio America, Inc.
Address	:	1946 Harvest Avenue Fort Dodge, IA 50501 USA
Phone	:	Tel 515-302-8028 Fax 515-574-3190

2. Composition / Information on Ingredients

Composition	:	L-Lysine HCl 99% (L-Lysine base 79%)
Chemical Family	:	Amino Acid (Essential)
Molecular Formula	:	$C_6H_{14}N_2O_2 \cdot HCl$
Molecular Weight	:	182.65
Structure Formula	:	$[H_2N - CH_2 - CH_2 - CH_2 - CH_2 - CH(NH_2) - COOH] \cdot HCl$

3. Possible Hazard

No extraordinary risks for humans and environment

4. First Aid Measures

General Recommendation	:	Avoid contact
After inhalation	:	Remove individual to fresh air
After skin contact	:	Wash area thoroughly with soap and water
After eye contact	:	Wash eye with water for 15 minutes
After swallowing	:	Drink large amount of water

5. Fire Fighting Measures

Flash point	:	None
Auto ignition Temperature	:	N/A
Flammable limit in air	:	None Flammable
Extinguishing Media	:	Water
Special Fire Fighting Procedure	:	Should wear protective clothing and respiratory protection to protect from fumes of HCl and NOx
Unusual Fire and Explosion Hazard	:	Not a fire hazard

6. Accidental Release Measures

Method of cleaning up	:	Wash area with water. Avoid high pressure rinsing.

7. Handling and Storage

Handling	:	Recommended to wear glove and face mask if excessive handling is necessary
Storage	:	Recommended to be stored in clean and dry condition, under ambient temperature, sheltered from sunlight and avoid from harmful substance.
Work Place	:	Keep to be clean.

8. Exposure Controls and Personal Protection

Precautionary measures	:	Give adequate ventilation to the premises where the product is stored and/or handled.
Respiratory Protection	:	Not needed for normal use
Protection on hands	:	Not needed for normal use
Eye Protection	:	Not needed for normal use

Protection for skin : No special precaution must be adopted for normal use.

9. Physical and Chemical Properties

Bulk Density : 0.55 - 0.75 g/mL
pH (10% solution) : 5.0 ~ 6.0
Appearance and Odor : White or pale brownish powder, odorless, characteristic taste
Solubility in Water : 642 g/L at 30°C
Percent Volatile : N/A
Evaporation rate : N/A
Melting point : 260°C

10. Stability and Reactivity

Stability : Stable if stored in dry condition in sealed or closed containers
Conditions to Avoid : Heating to decomposition
Substances to avoid : Strong oxidizers
Hazardous Reaction : None

11. Toxicology

Eyes : Very slightly irritant product
Skin : Not a skin sensitizer

12. Ecology

Degradability : High bio-degradable
Bio accumulation : No
Toxicology : Not Toxic for wild animals and plants
LD 50: 4g/kg (IP in Rat)

13. Eliminations and Considerations

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. Transport Information

Proper delivering name : L– Lysine Monohydrochloride 99%
Proper delivering condition : Stored in closed and sealed container
Packaging: : 25 kg net with 2 ply high performance paper bag and 1 ply PE
800 kg Bulk bag with PE laminated (For Export)
1000 kg Bulk bag with PE laminated

15. Regulatory Information

88/379/EEC (Classification and Labelling):
The preparation should not be considered as dangerous accordingly to dir. 88/379/EEC.
Where applicable, refer to the following regulatory provisions:
Directive 82/501/EEC (Activities linked to risks of serious accidents) and subsequent amendments

16. Other Information

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended. This MSDS cancels and replaces any preceding release.

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