



Safety Data Sheet

1. Substance / Preparation and Company name

2. Composition / Information on Ingredients

<i>Composition</i>	: L-Lysine HCl 99% (L-Lysine base 79%)
<i>Chemical Family</i>	: Amino Acid (Essential)
<i>Molecular Formula</i>	: C ₆ H ₁₄ N ₂ O ₂ ·HCl
<i>Molecular Weight</i>	: 182.65
<i>Structure Formula</i>	: [H ₂ N - CH ₂ - CH ₂ - CH ₂ - CH ₂ - CH - COOH] · HCl

3. Possible Hazard

No extraordinary risks for humans and environment

4. First Aid Measures

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

5. Fire Fighting Measures

<i>Flash point</i>	: None
<i>Auto ignition Temperature</i>	: N/A
<i>Flammable limit in air</i>	: None Flammable
<i>Extinguishing Media</i>	: Water
<i>Special Fire Fighting Procedure</i>	: Should wear protective clothing and respiratory protection to protect from fumes of HCl and NO _x
<i>Unusual Fire and Explosion Hazard</i>	: Not a fire hazard

6. Accidental Release Measures

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

7. Handling and Storage

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

8. Exposure Controls and Personal Protection

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

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

9. Physical and Chemical Properties

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

10. Stability and Reactivity

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

11. Toxicology

<i>Eyes</i>	: Very slightly irritant product
<i>Skin</i>	: Not a skin sensitizer

12. Ecology

<i>Degradability</i>	: High bio-degradable
<i>Bio accumulation</i>	: No
<i>Toxicology</i>	: 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

<i>Proper delivering name</i>	: L-Lysine Monohydrochloride 99%
<i>Proper delivering condition</i>	: Stored in closed and sealed container
<i>Packaging:</i>	: 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.

Issue Date: : 9/1/2013
Revision Date: : 4/9/2015
Revision: : revision 4