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AJINOMOTO ANIMAL NUTRITION

Material Safety Data Sheet **05/2007**

AJINOMOTO BIOLATINA - INTERAMERICANA

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L-Lysine HCl 99% - *Ajilys*® 99
L-Lysine Monohydrochloride 99%

Additive Nutritional for Animal Feed
Only for animal consumption. Not intended for human use.

1. Company and Chemical Product Identification

Manufactured by:

AJINOMOTO INTERAMERICANA IND. E COM. LTDA
Rod. Dr. Plácido Rocha, Km 39
16880-000 – Valparaíso – SP - Brazil
Factory Tel: 55 18 3401 9500
Commercial Department Tel: 55 11 5579 6971

AJINOMOTO BIOLATINA IND. E COM. LTDA
Rodovia Manuel Uso Ripolles, km 03
17280-000 - Pederneiras – SP – Brasil
Factory Tel: 55 14 3283 9500
Commercial Department Tel: 55 11 5579 6971

Product name: L-Lysine HCl 99%

2. Product Information

Chemical name: 2,6 Diamino Hexanoic Acid
Chemical formula: $C_6H_{14}N_2O_2HCl$
Chemical family: Organic
CAS number: 657-27-2
EINECS number: 2115199

3. Hazards Identification

The product does not pose any particular hazard to health.

4. First-Aid Measures

Immediately flush eyes with abundant amounts of water if contact with eyes, then seek medical attendance.

5. Fire-fighting measures

Elimination means: Apply water
Fire and explosion hazards: Avoid ignition sources
Protection measures: Wear appropriate garments and respiratory protection

6. Accidental release measures

Environmental measures: Wash with water

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7. Storage and handling (in normal conditions)

Storage:	In dry conditions in sealed or closed containers. Keep away from combustion sources.

8. Exposure controls / personal protection (common use)

Respiratory:	The use of respiratory protection equipment is recommended when handling the product.
Hand:	In case of excessive handling, gloves are recommended.

9. Toxicological Information

Eyes:	Slightly irritant product.
Skin:	Slightly irritant product.

10. Ecological Information

Degradability:	Highly bio-degradable.
Bio-accumulation:	No.
Toxicity:	Non-toxic for animals and plants. LD50: 4 g/Kg (IP in the rat)

11. Physical and chemical properties

Appearance:	White to pale yellow crystals
pH:	Solution 10% = 5 to 6
Specific gravity:	0,6 Kg/l
Solubility:	in water at 20ºC: 642 g/l
Thermal decomposition:	262°C
Minimum ignition energy:	in air: particles inferior to 0,18 mm, E5%=45MJ in O_2: particles inferior to 0,18 mm, E5%=36MJ Lysine HCl is easily inflammable by electrical sparks.
Minimum explosive concentration:	120 g/m^3
Combustion temperature:	by comparison of dust: 510°C by comparison wheat flour: 420°C
Thermal stability of dust layer:	L-Lysine HCl does not present a risk of “auto heating”. However, its decomposition as from 225°C may increase ignition risks.
Maximum explosion pressure:	P_{max} 6,4 to 7,9 bars by compare wheat flour: 6,6 bars (these values are comparable to those obtained with most of inflammable dusts.)
Maximum rate of pressure rise:	225 bars/s (test in 1m^3 vessel) by comparison wheat flour: 95 bars/s
Specific characteristic for dust	kst: 225 bars/m/s^{-1}

12. Transport Information

Packaging:	25 kg bag 500 kg (Big bag) 600 kg (Big bag) 1000 kg (Big bag)