

L-Lysine HCl Feed Grade

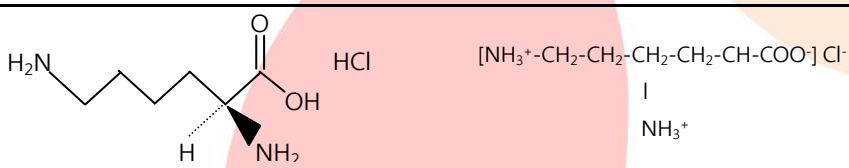
Description

Lysine is a key nutrient related to the production performance and considered as the first- or second-limiting amino acid in a typical corn-soybean based diet for most species. CJ L-Lysine HCl Feed Grade is produced by microbial fermentation (*Corynebacterium Glutamicum*) with natural raw materials (raw sugar, beet molasses, cane molasses, or SOD) which helps to improve performance of animals and to lower users' production costs. This product is used only for animals.

Appearance

A pale brownish free flowing crystalline powder

Chemical description

Chemical structure	
Chemical formula	$H_2N(CH_2)_4CH(NH_2)CO_2H \cdot HCl$
Molecular weight	182.65
Isomer	L (Laevo-rotatory)

Regulatory affairs

L-Lysine monohydrochloride is registered at the Ministry of Agriculture, Indonesia. Livestock and Supply under number KEMENTAN RI No. D. 1107611 BOH.1.

Guarantee

Lysine, %	79	Minimum	HPLC analysis AOAC 999.13
Moisture, %	1.0	Maximum	105°C for 4 hours
Purity, %	99	Minimum	L-Lysine HCl on dry matter

Nutritional Specifications

Dry matter, %	99.0	Minimum	105°C for 4 hours
Lysine content, %	79.0	Minimum	HPLC analysis, AOAC 999.13
Digestibility coefficient, %	100		INRA - 2002
Crude Protein, %	94.62	Minimum	Dumas Method (N % x 6.25). AOAC 968.06
GE, kcal/Kg	4,860	Average	Bomb Calorimeter

Packaging

25 kg 3 Ply Kraft Paper Bag with 1 Ply P.E inner
 500kg, 800 and 825 kg P.P Woven Bag with PE laminated
 18,000 ~ 20,000 kg, Bulk container – PE Bulk liner

Storage

Store in dry conditions and fresh place in a sealed or closed container that is to be protected from water, sunlight and heat. Avoid direct contact with floor and any source of combustion.

Stability

Product is stable for at least 2 years if stored under recommended conditions.
 Kraft Paper bag unopened: product is stable for at least 2 years if stored under recommended conditions.
 PP Woven bag unopened: product is stable for at least 2 years if stored under recommended conditions.
 The batch number and the production date are printed on the bags.

Additional information

Complementary Information
Do not constitute any commercial guarantee

General specifications

pH	5.0 to 6.5	solution at 10%
Bulk density, g/ml	0.55 to 0.75	
Melting point / Decomposition temperature	260 ~ 263°C	
Solubility in water	642g/L	at 30°C

Granulometry

More than 1.70 mm	0 to 3%
Less than 0.150 mm	0 to 20%

Chemical characteristics (average values based on 2012 analyses)

Nutrient Information	Average	Minimum	Maximum	STD
Dry matter, %	99.71	99.52	99.87	0.16
Crude Ash, %	0.27	0.20	0.34	0.05
Gross Energy, cal/g	4,908	4,874	5,018	49.66
Hazardous substance				
Melamin, ppm	ND			
Salmonella	ND			
BSE	ND			
Heavy metal, %				
Pb, ppm	0.53	0.51	0.55	0.02
Hg, ppm	ND			
Cd, ppm	0.53	0.52	0.55	0.02
As, ppm			1.00	Maximum
Residue on ignition,%			0.3	Maximum
Specific rotation, °		19.0 to 21.5		at 20°C, C2%, HCl 6N