

## S-Lysine 70 Feed Grade

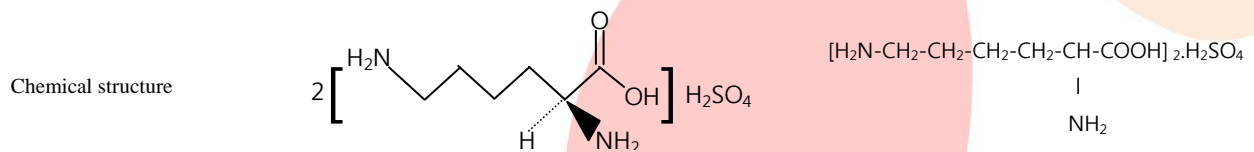
### Description

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 S-Lysine 70 Feed Grade is produced by microbial fermentation (*Corynebacterium Glutamicum*) from natural raw materials of agricultural origin (such as beet molasses or SOD). CJ S-Lysine 70 Feed Grade, the sulphate salt of lysine along with fermentation by-products, is 55% L-Lysine (as Free-Lysine). It does not only contain lysine but also by-products, such as essential amino acid and carbohydrate. CJ S-Lysine 70 Feed Grade can be used instead of traditional L-Lysine HCl as a livestock feed additive. It has almost the same feed effects as Lysine- HCl, such as feed efficiency, true digestibility coefficient, bioavailability and RBV (relative biological value). This product is used only for animals.

### Appearance

Granular of pale brownish.

### Chemical description



Chemical formula	$[H_2N(CH_2)_4CH(NH_2)CO_2H]_2 \cdot H_2SO_4$
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Molecular weight	390.46
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Isomer	L (Laevo-rotatory)
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### Regulatory affairs

L-Lysine monohydrochloride is registered at the Ministry of Agriculture, China Livestock and Supply under number (2007)2204

### Guarantee

Lysine, %	55.0	Minimum	HPLC analysis AOAC 999.13
Moisture, %	4.0	Maximum	105°C for 4 hours
Purity, %	70.0	Minimum	L-Lysine HCl on dry matter

### Nutritional Specifications

Dry matter, %	96.0	Minimum	105°C for 4 hours
Lysine content, %	55	Minimum	HPLC analysis
Digestibility coefficient, %	100		
Crude Protein, %	65.61	Minimum	Dumas Method (N % x 6.25). AOAC 968.06
GE, kcal/Kg	4,099	Average	Bomb Calorimeter

### Packaging

25kg 3 ply Kraft paper bag with 1 ply P.E inner  
850kg P.P Woven bag PE laminated

### 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	3.0 to 6.0	solution at 5%
Bulk density, g/ml	0.65 to 0.75	
Solubility in water	360g/L	Minimum

#### Granulometry

More than 1.50 mm	0 to 5%
Less than 0.50 mm	0 to 10%

#### Chemical characteristics (average values based on 2012 analyses)

Nutrient Information	Average	Minimum	Maximum	STD
Dry matter, %	96.22	96.02	96.55	0.18
Crude Protein, %	65.61	63.18	71.73	3.11
Crude Ash, %	2.28	1.33	3.42	0.47
Crude Fat, %	0.54	0.25	0.79	0.18
Gross Energy, cal/g	4,099	3,951	4,145	66.29
<b>Amino Acid, %</b>				
Aspartic acid	0.42	0.20	0.51	0.13
Threonine	0.11	0.00	0.19	0.10
Serine	0.08	0.00	0.15	0.07
Glutamic acid	1.32	1.19	1.41	0.11
Glycine	0.29	0.27	0.31	0.02
Alanine	0.43	0.41	0.44	0.01
Cystine	0.05	0.00	0.30	0.10
Valine	0.55	0.53	0.57	0.01
Methionine	0.10	0.09	0.13	0.02
Isoleucine	0.22	0.15	0.27	0.06
Leucine	0.49	0.46	0.51	0.02
Tyrosine	0.39	0.39	0.40	0.00
Phenylalanine	0.30	0.29	0.32	0.01
Histidine	0.12	0.11	0.13	0.01
Arginine	0.26	0.19	0.29	0.04
Proline	ND			
<b>Minerals, %</b>				
Ca, %	ND			
P, %	0.08	0.07	0.08	0.01
Ammonium, %			1.00	Maximum
Sulfate, %	20.0 to 22.0			
Chloride, %			0.40	Maximum
<b>Hazardous substance</b>				
Melamin, ppm	ND			
Salmonella	ND			
Residue on ignition, %			4.0	Maximum
Specific rotation, °	18.0 to 21.5			at 20°C, C2%, HCl 6N

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