

## L-Valine Feed Grade

### Description

Valine is an essential amino acid and belongs, together with Isoleucine and Leucine, to the group of branched-chain amino acids.

Valine is the next limiting amino acid after Lysine, Threonine, Methionine and Tryptophan in pig nutrition, especially in protein-reduced diets. Addition of Valine to the diets of growing pigs will open up the full growth potential of the modern high-performance pig genetics with their high requirements in protein quality, and contributes to reducing nitrogen emissions.

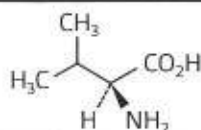
BestAmino™ L-Valine is a highly purified amino acid produced by fermentation with a content of L-Valine of at least 98 % on dry matter basis.

### Appearance

Light yellow crystalline powder

### Chemical Description

Chemical structure



Molecular formula	C <sub>5</sub> H <sub>11</sub> NO <sub>2</sub>
Molecular weight	117.15
Isomer	L (Laevo-rotatory)
CAS Number	72-18-4

### Commercial Guarantee

L-Valine, %	96.5	Minimum	HPLC, AOAC 999.13
Moisture, %	1.5	Maximum	105°C for 4 hours
Purity, %	98	Minimum	L-Valine on dry matter

### Nutritional Values

Dry matter, %	98.5	Minimum	105°C for 4 hours
Digestibility, %	100		
Crude Protein, %	74.4	Minimum	Reg. (EC) No. 152/2009 (N x 6.25)
ME poultry, MJ/kg	22.0		
DE pigs, MJ/kg	24.4		
ME pigs, MJ/kg	22.9		
NE pigs, MJ/kg	17.7		

### Packaging

15 kg net, 3-ply Kraft paper bag with 1-ply PE inner tube  
500 kg net, PP woven bag with PE lamination

### 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.  
The batch number and the production date are printed on the bags.

### 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.

### Regulatory Status

L-Valine comes under Regulation (EC) 1831/2003 referring to additives intended for animal feed (Official Journal of the EU n° L 268 of 18/10/2003), category "nutritional additives", additive group: "amino acids, their salts and analogues" and can be used for all animal species.

### Additional Information | Does not constitute any commercial guarantee

#### General Specifications

pH	5 to 6	solution at 10 %
Bulk density, g/ml	0.40 to 0.60	
Melting point / Decomposition temperature	298°C	
Solubility in water	5.30 to 5.70g/100g water	at 20°C