

## TECHNICAL DATA SHEET

# L-Alanine

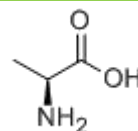
## USP32

### Chemical Properties

CAS: 56-41-7

Chemical Formula: C<sub>3</sub>H<sub>7</sub>NO<sub>2</sub>

Molecular Weight: 89.09



### Description

L-Alanine is a basic unit of proteins, is one of the 21 amino acids that make up the human protein.

### Solubility

L-alanine is soluble in water, ethanol and insoluble in aether and acetone.

### Specification

Item	Specification	Test Method
Appearance	White crystals or crystalline powder	Visual
Identification		
Infrared Absorption	Concordant with the reference spectrum	USP32
Assay	98.5%~101.5%	USP32
Specific rotation [ $\alpha$ ] <sub>D</sub> <sup>25</sup>	+13.7°~+15.1°	USP32
pH	5.5~7.0	USP32
Loss on drying	Max 0.20%	USP32
Residue on ignition	Max 0.15%	USP32
Chromatographic purity		
Individual Impurity	Max 0.5%	USP32
Total Impurities	Max 2.0%	USP32
Chloride	Max 0.05%	USP32
Sulfate	Max 0.03%	USP32
Heavy metals (Pb)	Max 15ppm	USP32
Iron(Fe)	Max 30ppm	USP32
Total Plate Count	Max 1,000cfu/g	USP32
Total Yeast & Mold	Max 100cfu/g	USP32
<i>E. Coli</i>	Negative	USP32
<i>Salmonella</i>	Negative	USP32

### Ingredients

Pure L-Alanine.

## Labeling

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In the United States and the European Union: L-Alanine

## Applications

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L-Alanine is used as a food additive, fodder, pharmaceutical intermediates. Food and beverage can used for preservatives, flavor seasoning materials and amino acids low-alcohol wine. Medicine can used for the synthesis of amino acid infusion.

L-Alanine is used as flavor enhancer. It can increase the effect of chemical seasoning sauce as well as acidity correction agents, improve the sour taste of organic acids.

L-Alanine is used in biochemical research, medicine can be used for amino acids in nutritional medicine.

L-Alanine is used as nutritional supplement. Belonging to the non-essential amino acid, what is the most abundant amino acid in the blood and have important physiological functions.

L-Alanine is used for biochemical research, tissue culture, determination of liver function.

## Safety

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This product is safe for the intended use. Avoid ingestion, inhalation of dust or direct contact by applying suitable protective measures and personal hygiene. See Material Safety Data Sheet for full safety information.

## Handling recommendations

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Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

## Packaging, Storage & Shelf Life

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Package	25kg/drum; or according to customers' requirements.
Storage	Store in a well-closed container away from moisture and direct sunlight.
Shelf Life	2 years if sealed and stored properly.