

## TECHNICAL DATA SHEET

# L-Aspartic Acid

## USP/FCC

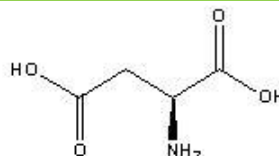
### Chemical Properties

CAS No.: 56-84-8

EINECS No.: 200-291-6

Chemical Formula: C<sub>4</sub>H<sub>7</sub>NO<sub>4</sub>

Molecular Weight: 133.1



### Description

There are two forms or enantiomers of aspartic acid. The name "aspartic acid" can refer to either enantiomer or a mixture of two. Of these two forms, only one, "L-aspartic acid", is directly incorporated into proteins. The biological roles of its counterpart.

### Solubility

L-Aspartic acid is soluble in dilute acid and sodium hydroxide solution, insoluble in ethanol and ether.

### Specification

Item	Specification	Test Method
Appearance	White crystalline powder	Visual
Identification	Positive	IR, USP/FCC
Assay	98.5%~101.5%	USP/FCC
Chromatographic purity		
Individual impurity	Max 0.50%	USP/FCC
Total impurities	Max 2.0%	
Specific rotation [α] <sup>20</sup> <sub>D</sub>	+24.8°~+25.8°	USP/FCC
pH	2.5~3.5	In-house
Transmittance	Min 98.0%	In-house
Loss on drying	Max 0.20%	USP/FCC
Residue on ignition	Max 0.10%	USP/FCC
Chloride (CL)	Max 0.02%	USP
Sulphates (SO <sub>4</sub> )	Max 0.03%	USP
Ammonium (NH <sub>4</sub> )	Max 0.02%	USP
Other amino acids	Negative	USP
Heavy metals (Pb)	Max 10ppm	USP
Lead	Max 5ppm	USP/FCC
Iron (Fe)	Max 10ppm	USP
Arsenic (As <sub>2</sub> O <sub>3</sub> )	Max 1ppm	USP

Residual solvents

Meet the requirements

USP

## Ingredients

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Pure L- Aspartic acid.

## Labeling

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In the United States and the European Union: L- Aspartic acid.

## Applications

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- 1) L- Aspartic acid is used as an electrolyte supplement for amino acid infusion, potassium, calcium and other inorganic ion supplements.
- 2) L- Aspartic acid can be used for ammonia antidote, liver function promoter, fatigue recovery agent and other medicines.
- 3) L- Aspartic acid is used for synthetic sweeteners.
- 4) L- Aspartic acid can be used as a nutritional supplement and seasoning flavouring agent. Add in all kinds of cool drink.
- 5) It can also be used for biochemical studies, fatigue recovery agent, ammonia antidote and clinical medicine.

## 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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Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

## 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.