

TECHNICAL DATA SHEET

L--Theanine

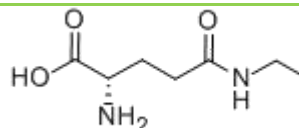
FCC8

Chemical Properties

Chemical Formula: C₇H₁₄N₂O₃

Molecular Weight: 174.20

CAS: 3081-61-6



Description

L-Theanine (gamma-glutamylethylamide) is an analog of Glutamate and Glutamine that is capable of crossing the blood-brain barrier.. It is a form of L-Glutamic acid which is able to help increase and modulate alpha brain waves. These brain waves help to produce a feeling of calm, relaxed alertness.

Solubility

It is soluble in water.

Specification

Item	Specification	Test Method
Appearance	White crystalline powder	Visual
Assay	98.00%-102.00%	HPLC
Specific rotation[α] _D ²⁰ (C=1 ,H ₂ O)	+7.7° to +8.5°	FCC8
Solubility (1.0g/20ml H ₂ O)	Clear Colorless	Visual
Chloride(Cl)	Max 0.02%	FCC8
Loss on drying	Max 1%	FCC8
Residue on ignition	Max 0.2%	FCC8
pH	5.0-6.0	FCC8
Heavy metals	Max 10ppm	GB/T 5009.74
Arsenic	Max 1ppm	FCC8
Mercury	Max 0.1ppm	GB/T 5009.17
Cadmium	Max 1ppm	GB/T 5009.15
Lead	Max 1ppm	FCC8
Total Plate Count	Max 1000cfu/g	GB4789.2
Mold & Yeast	Max 100cfu/g	GB4789.15
<i>E. Coli</i>	Negative	GB4789.3
<i>Salmonella</i>	Negative	GB4789.4

Ingredients

Pure L-Theanine.

Applications

L-Theanine is used as pharmaceutical raw material or for food supplements.

Safety

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

This product under acid condition is relatively stable, encounter alkali decomposition, no reaction with water, high temperature decomposition, should avoid to contact with strong oxidizing medium.

No combustion, explosion and poisoning and other data, show acidity of reaction solution, should avoid direct contact to the eyes, skin, no danger level data report.

Packaging, Storage & Shelf Life

Package	25kg/drum;or according to customers' requirements.
Storage	Store in well-closed, light-resistant containers at room temperature.
Shelf life	2 years if sealed and stored properly.