



TECHNICAL DATA SHEET

Product Name:L-Theanine

Synonyms: N-ethyl-L-glutamine, L-Glutamic acid gamma-(ethylamide)

Chemical Formula: $C_7H_{14}N_2O_3$

CAS No.: 3081-61-6

EINECS No.: 221-379-0

Molecular Weight: 174.20 g/mol

Product Description

L-Theanine is a unique natural amino acid originally found in tea leaves. It is a white crystalline powder with a mild, characteristic taste and slight sweetness. L-Theanine can help support calm relaxation without causing drowsiness. It is widely applied in functional foods, nutritional supplements, functional beverages and health care products

Specification

Parameter	Specification
Appearance	White crystalline powder, distinctive odor and slightly sweet, with no visible foreign impurities
Assay (L-Theanine Content)	98.5% – 101.0%
pH (1% aqueous solution)	5.0 – 6.0
Transmittance	≥98.0%
Loss on Drying	≤0.2%

Residue on Ignition	≤0.1%
Chloride	≤0.02%
Other Amino Acids	≤0.5%
Total Plate Count	≤1000 CFU/g
Yeast & Mold	≤50 CFU/g

Applications

- Functional drinks, tea beverages, energy drinks
- Dietary supplements, capsule / tablet raw material
- Functional food and health food
- Food additive for stress-relief, relaxation and sleep-support formulations

Packaging and Storage

- **Packaging:**
 - 25 kg kraft paper bags with PE liner
 - OEM packaging available
- **Storage:**
 - Store in cool, dry, well-ventilated warehouse. Keep away from high temperature, humidity, strong acid and oxidizing substances. Sealed storage to prevent moisture absorption.
- **Shelf Life:**
 - 24 months from production date under proper storage