

SPECIFICATION

Product Name: L- Threonine
Chemical Formula: C ₄ H ₉ NO ₃
CAS Number: 72-19-5
Molecular Weight: 119.12 g/mol
Appearance: White Powder
Odor: Odorless.

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Assay (Titration Method USP 29 NF 24 Page No. 2138)	%	98.9%	98.5 – 101.5%
Loss on drying	%	0.55%	Max. 1.0%
Heavy metals	PPM	5 PPM	Max. 15 PPM
Arsenic	PPM	Not Detected	Max. 1.0 PPM
Lead	PPM	Not Detected	Max. 5.0 PPM

Microbiological Analysis

Total Plate Count	cfu/gm	200	Max. 1000
Yeast & Mold	cfu/gm	45	Max. 100
Salmonella	cfu/25 gm	Absent	Negative
E. Coli	cfu/10 gm	Absent	Negative
S. Aureus	cfu/10 gm	Absent	Negative

Physical Properties

- Solubility: Freely soluble in water. Insoluble in ethanol. Insoluble in acetone. Insoluble in ether. Insoluble in chloroform.

Shelf Life & Storage

- Shelf Life: 3 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a tightly closed container in a cool, dry, and well-ventilated place, protected from moisture, humidity, heat, and direct sunlight. Keep the container tightly sealed when not in use to maintain product quality.

Applications

- Use: Widely used in pharmaceutical, nutraceutical, food, beverage, and animal nutrition applications. It plays an important role in protein synthesis, growth, tissue repair, immune function, and overall nutritional support.
- Dosage: Depends on Intended application, Age and nutritional status, Dietary protein intake, Product formulation, Regulatory requirements.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner and 100 Grams or as per customer requirement.
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.