

SPECIFICATION

Product Name: DL Methionine
Chemical Formula: C ₅ H ₁₁ NO ₂ S
CAS Number: 59-51-8
Molecular Weight: 204.23 g/mol
Appearance: Almost white Powder
Odor: Odor.

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Assay (Titration Method USP 31 NF 26 Page No. 2659)	%	99.45%	98.5 – 101.5%
Loss on drying	%	0.54%	Max. 1.0%
Heavy Metals	PPM	4.0	Max. 15.0
Lead	PPM	Not detected	Max. 5.0
Arsenic	PPM	Not Detected	Max. 1.0

Microbiological Analysis

Total Plate Count	cfu/gm	250	Max. 1000
Yeast & Mold	cfu/gm	40	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: Slightly soluble in water. Slightly soluble in ethanol. Slightly soluble in methanol. Practically insoluble in acetone. Insoluble in ether. Insoluble in chloroform.

Shelf Life & Storage

- Shelf Life: 5 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 animal nutrition, pharmaceutical, nutraceutical, and food applications. It plays a vital role in protein synthesis, growth, metabolism, and amino acid balance.
- Dosage: Depends on Intended application, Age and nutritional status, Dietary protein composition, 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.