

SPECIFICATION

Product Name: Calcium Stearate IP Grade
Chemical Formula: C ₃₆ H ₇₀ CaA ₄
CAS Number: 1592-23-0
Molecular Weight: 607.04 g/mol
Appearance: White free flowing powder.
Odor: Odorless.

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Purity (Assay)	%	9.70%	9.0% - 10.5%
L.O.D (at 105°C)	%	2.50%	Max. 4.0%
Identification	-	Complies	Test A- The H ₂ O layer gives the test for calcium. Test B- Passes, Fatty acid obtained not congeal below 54°C.
Ash Content	%	11.80%	NMT 20%
Heavy Metals as Lead	PPM	Complies	<10 PPM
Fatty acid composition	-	Complies	Stearic acid NLT 40.0% & Stearic acid and palmitic acid NLT 90.0%

Physical Properties

- Solubility: Practically insoluble in water. Practically insoluble in ethanol. Insoluble in ether. Slightly soluble to insoluble in chloroform.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a well-closed container in a cool, dry, and well-ventilated place, protected from moisture, excessive heat, and direct sunlight. Keep the material tightly sealed when not in use to prevent contamination and maintain product quality. Recommended storage temperature is ambient room temperature under dry conditions.

Applications

- Use: Widely used as a lubricant, anti-adherent, and flow agent in pharmaceutical tablet and capsule manufacturing. It helps improve powder flow, prevents ingredients from sticking to processing equipment, and facilitates smooth tablet compression. It is also used as an anti-caking agent in powders and as a stabilizer in various pharmaceutical and nutraceutical formulations.
- Dosage: Depends on the formulation and manufacturing process. In pharmaceutical tablets and capsules, it is typically used as a lubricant at concentrations of 0.25% to 2.0% w/w of the total formulation.

Packaging

- Standard Packing: 25 kg HDPE bags with inner liner 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.