

SPECIFICATION

Product Name: Calcium Stearate USP Grade
Chemical Formula: $\text{Ca}(\text{C}_{18}\text{H}_{35}\text{O}_2)_2$
CAS Number: 1592-23-0
Molecular Weight: 607.02 g/mol
Appearance: White free flowing powder
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Purity (assay)	%	9.80 %	9.0% - 10.5%
L.O.D. (at 105°C)	%	2.40 %	Max. 4.0 %
Identification	-	Complies with USP	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	%	9.5 %	NMT 20%
Heavy Metals as Lead	PPM	Complies to USP	< 10 PPM
Fatty Acid Composition	%	Complies to USP	Stearic acid NLT 40.0 % & Stearic acid and Palmitic acid NLT 90.0 %

Physical Properties

- Solubility: Practically Insoluble in water. Insoluble in ethanol. Insoluble in acetone. Soluble in ether. Slightly soluble in chloroform. Practically insoluble in methanol.

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, contamination, and excessive heat.

Applications

- Use: Widely used as a lubricant, anti-adherent, anti-caking agent, and flow-promoting agent in pharmaceutical, nutraceutical, food, cosmetic, and industrial formulations.
- Dosage: Depends on Formulation type, Manufacturing process, Compression characteristics, Active ingredient properties, Regulatory requirements.

Packaging

- Standard Packing: 25 kg HDPE bags with inner liner or as per customer requirement.
- Labelling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.
- * Specifications are based on the manufacturer's provided specifications.

