

SPECIFICATION

Product Name: Magnesium Stearate BP Grade
Chemical Formula: C ₃₆ H ₇₀ MgO ₄
CAS Number: 557-04-0
Molecular Weight: 591.27 g/mol
Appearance: White or almost white very fine, light powder Greasy to the Touch
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification: (A) Freezing Point (B) Acid Value (C) Passes (D) Passes	°C - - -	58°C 204 Complies Complies	Not Less Than 53° C The Acid Value of the fatty acid is 195 to 210 Passes Passes
Acidity or Alkalinity	-	0.3	NMT 0.05 ml of 0.1 M NaOH req. for the Change of Indicator Color
Acid Value of the Fatty Acid	-	204	195 - 210
Chloride	%	<0.1	Max 0.1
Sulphates	%	<1.0	Max 1.0
Cadmium	PPM	1.08	Max 3.0

Lead	PPM	3.7	Max 10
Nickel	PPM	2.0	Max 5
Loss on Drying	%	3.82	Not More Than 6.0
Microbial Contamination	Cfu/g	Complies With BP	TAMC-NMT 10^3 TYMC-NMT 10^2 Salmonella & Escherichia Coli- Absent
Assay (mg on Dried Basis)	%	4.74	4.0 - 5.0
Fatty Acid Composition 1. Stearic Acid 2. Sum of palmitic Acid +st. Acid	% %	Complies With BP	For 1. NLT 40.0 For 2 NLT 90.0 NLT = Not Less Than
Particle Size – Particle 50 (Laser)	%	Complies With BP	NMT 2.0
Specific Surface Area	M ²	9.90	3M ² /gm - 14M ² gm
Thermogravimetry	-	Complies With BP	Passes

Physical Properties

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

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a well-closed (airtight) container. Keep in a cool, dry place. Protect from moisture and humidity. Keep away from strong oxidizing agents. Avoid excessive heat and direct sunlight.

Applications

- Use: Widely used in tablet and capsule manufacturing to reduce friction during compression and ejection. Prevents powders from sticking to punches and dies. Improves flow properties of powders and granules. Helps tablets come out smoothly from molds. Acts as an inactive ingredient in formulations.
- Dosage: Depends on formulation type, compression method, and other excipients used.

Packaging

- Standard Packing: 25 kg woven PP bags with inner liner, 1 kgs 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.