

SPECIFICATION

Product Name: Talc Powder BP/USP Grade
Chemical Formula: $Mg_3Si_4O_{10}(OH)_2$
CAS Number: 14807-96-6
Molecular Weight: 379.27 g/mol
Appearance: Light, homogeneous, white or almost white powder, greasy to the touch (nonabrasive).
Odor: Odorless

Chemical Composition

Parameter	Unit	Typical Value	Specification (Min/Max)
Identification: A	-	Complies	The IR spectrum of a potassium bromide dispersion of it exhibits maxima at $3677 \pm 2 \text{ cm}^{-1}$, at $1018 \pm 2 \text{ cm}^{-1}$, and at $669 \pm 2 \text{ cm}^{-1}$. A white, crystalline precipitate is formed. Gives the reaction of silicates.
Identification: B	-	Complies	
Identification: C	-	Complies	
Acidity and alkalinity	-	Complies	NMT 0.3 ml of 0.01 M sodium hydroxide is required to change the color of the indicator to pink.
Water soluble substances	%	Complies	Max. 0.2%
Lead	PPM	<10	Max. 10 PPM
Aluminum	%	<2.0	Max. 2.0 %
Iron	%	<0.25	Max. 0.25%

Magnesium	%	18.52%	17.0 - 19.5%
Calcium	%	<0.9	Max. 0.9%
Loss on ignition (1050-1100 °C)	%	5.53	Max 7.0%
Whiteness	%	79.80%	Max. 80%
Bulk Density	g/ml	0.41 g/ml	0.40 - 0.45
pH	-	7.26	7 - 8
Mesh	%	99.51%	Passing through 400#
Asbestos	-	Absent.	Talc should be free from tremolite and chrysotile form of asbestos. Investigation by X-Ray diffraction for amphiboles and serpentines.
Microbiological Analysis			
Total Aerobic Plate Count	cfu/g	Complies	100 cfu/g
Total yeast & Mould Count	cfu/g	Complies	50 cfu/g

Physical Properties

- Solubility: Practically insoluble in water, in ethanol 96% and in the dilute solutions of acids and alkali hydroxides.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry place. Keep in a well-closed, airtight container. Protect from moisture and humidity. Avoid contamination with other substances. Keep away from strong odors (to maintain purity).

Applications

- Use: Improves flow properties of powders during tablet manufacturing. Reduces friction in tablet compression. Used for skin protection and moisture absorption.

- Dosage: Depends on formulation type and functional requirement.

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.