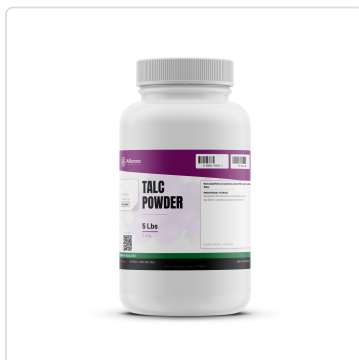


PRODUCT IDENTIFICATION



Product Name: Talc Powder ACS
CAS Number: 14807-96-6
Molecular Formula: $\text{H}_2\text{Mg}_3\text{O}_{12}\text{Si}_4$
Molecular Weight: 379.27 g/mol
Grade: ACS Grade
Purity / Concentration: Not Available
Synonyms: Talcum Powder, Magnesium Silicate

PRODUCT OVERVIEW

Talc Powder ACS (CAS 14807-96-6) is a high-purity magnesium silicate presented as a fine, soft white powder. This ACS Grade material is characterized by strict purity standards, including low heavy metal content such as 3 ppm Lead and 1 ppm Arsenic, making it ideal for high-precision industrial and laboratory applications.

Grade Significance: ACS Grade signifies that the product meets the rigorous analytical reagent standards set by the American Chemical Society, ensuring the highest level of purity and consistency for sensitive applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Arsenic As	ppm	1	0	3	ICP-MS
Calcium Oxide Cao	%	1	0	2	ICP
Iron	ppm	0.8	0	1.5	ICP
Lead Pb	ppm	3	0	10	ICP-MS
Acid Soluble Substances	%	1	0	2	Gravimetric
Loss On Ignition	%	10.82	0	12	Gravimetric (1000°C)
Particle Size	µm	≤ 44 µm	—	—	Sieve Analysis

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Fine, soft powder	Odor	Odorless
Form	Powder	Boiling Point	1800°C (3272°F)
Melting / Freezing Point	1700 to 1800 °F (NTP, 1992)	Flash Point	Not applicable
Specific Gravity	2.75	Solubility	Insoluble in water
Molecular Formula	$\text{H}_2\text{Mg}_3\text{O}_{12}\text{Si}_4$	Molecular Weight	379.27 g/mol
Density (25°C)	2.58 g/mL		

APPLICATIONS

1. **Plastics Manufacturing** — Talc acts as a functional filler to significantly enhance the mechanical properties and structural rigidity of plastic components.
2. **Cosmetics** — Utilized for its excellent absorbent properties, this powder is a standard ingredient in various personal care and cosmetic formulations.
3. **Industrial Lubricants** — The fine particle size of this talc serves as an effective dry lubricant to reduce friction in delicate manufacturing machinery.
4. **Agrochemicals** — It functions as a stable carrier for active ingredients in pesticide formulations, ensuring consistent distribution and efficacy.

STORAGE & HANDLING

Talc powder should be stored in a cool, dry, and well-ventilated area to prevent moisture absorption and clumping. Maintaining container integrity is essential to prevent airborne dust formation, which ensures a safe working environment for all personnel.

- Store in a cool, dry place away from moisture.
- Use appropriate PPE, including gloves and dust masks, when handling.
- Avoid contact with incompatible materials such as strong acids.
- Keep containers tightly closed when not in use to prevent contamination.

AVAILABLE PACKAGING

- 2 lbs.
- 5 Lbs.
- 50 Lbs.

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: Warning

No GHS pictograms assigned.

Hazard Statements:

- Not Classified
- Reported as not meeting GHS hazard criteria by 4523 of 4758 companies (only 4.9% companies provided GHS information). For more detailed information, please visit ECHA C&L website.

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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