

Material Safety Data Sheet (MSDS)

Talc (Hydrated Magnesium Silicate)

Chemical Name: Hydrated Magnesium Silicate | CAS No. 14807-96-6

1. Identification of the Substance and Supplier

Product Name	Talc (Hydrated Magnesium Silicate)
Chemical Formula	$Mg_3Si_4O_{10}(OH)_2$ (3MgO·4SiO ₂ ·H ₂ O)
CAS No.	14807-96-6
Synonyms	Talc, talcum, hydrated magnesium silicate, soapstone, steatite
Product Use	Ceramics, paint, plastics, pharmaceutical & cosmetic formulations
Supplier	Ochnology Solution Pvt. Ltd., B-153, Sector-4 Defence Colony, Dehradun, Uttarakhand, India – 248001
Contact	projects@ochnology.com bd@ochnology.com

2. Hazards Identification

GHS Classification: Talc (asbestos-free) is generally not classified as hazardous. Dust may cause irritation. **Note:** talc containing asbestiform fibres is a recognised carcinogen – this product is supplied asbestos-free. **Signal word:** **WARNING (dust).**

- Asbestos-free talc is generally not classified as a hazardous substance under GHS
- Dust may cause mechanical irritation to eyes and the respiratory tract
- Prolonged inhalation of talc dust may cause talcosis (a pneumoconiosis)
- Talc containing asbestiform fibres is carcinogenic; this product is supplied asbestos-free
- Cosmetic / pharma grade is produced to controlled asbestos-free, low-microbial standards

3. Composition / Information on Ingredients

Component	CAS No.	Concentration
Talc / Hydrated Magnesium Silicate	14807-96-6	>90%
Associated minerals (chlorite, carbonate)	Various	Balance
Asbestos	—	None detected (asbestos-

free)

4. First-Aid Measures

Inhalation: Move to fresh air. Seek medical attention if respiratory irritation or breathing difficulty persists.

Skin Contact: Wash with soap and water. Generally non-irritating.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses if present. Seek medical attention if irritation persists.

Ingestion: Rinse mouth with water. Talc is inert; seek medical attention if discomfort occurs.

5. Fire-Fighting Measures

- Non-combustible material; does not present a fire or explosion hazard
- Use extinguishing media appropriate to the surrounding fire
- No special protective equipment required for the material itself
- Firefighters should wear standard protective gear for the surrounding fire

6. Accidental Release Measures

- Avoid generating airborne dust during clean-up
- Collect using wet methods or vacuum with HEPA filtration where possible
- Wear appropriate PPE (respirator, goggles, gloves) during clean-up
- Place collected material in suitable labelled containers for reuse or disposal

7. Handling and Storage

- Minimise dust generation; use local exhaust ventilation
- Avoid inhalation of dust; use appropriate respiratory protection
- Store in a dry, covered area; keep bags sealed to maintain quality
- Keep cosmetic / pharma grades segregated and protected from contamination

8. Exposure Controls / Personal Protection

- Talc (respirable dust, asbestos-free): 2 mg/m³ (8-hr TWA) – typical reference value
- Provide local exhaust ventilation where dust is generated
- Respiratory protection (N95/P2) where dust limits may be exceeded
- Eye protection: safety goggles; hand protection: gloves; wear suitable work clothing

9. Physical and Chemical Properties

Property	Value
Appearance	White to off-white / cream fine powder
Odour	Odourless
pH (10% suspension)	Approx. 8.5 – 9.5
Melting Point	Decomposes ~900–1000°C (loses structural water)
Solubility in Water	Insoluble
Bulk Density	Approx. 0.2 – 0.8 g/cm ³ (form dependent)

10. Stability and Reactivity

- Stable under normal conditions of storage and use
- Chemically inert; hydrophobic and not wetted easily by water
- Loses structural water at high temperature (forms enstatite)
- Incompatible with strong acids and fluorine compounds

11. Toxicological Information

- Low acute toxicity; talc is inert and not significantly absorbed
- Prolonged inhalation of talc dust may cause talcosis (a pneumoconiosis)
- Asbestos-free talc: not classified as carcinogenic by inhalation under normal use
- Asbestiform-fibre-containing talc is carcinogenic; this product is supplied asbestos-free

12. Ecological Information

- Not classified as hazardous to the aquatic environment
- Naturally occurring inert mineral; no significant bioaccumulation
- No significant ecological effects expected under normal use
- Avoid release of large quantities of dust into the environment

13. Disposal Considerations

- Dispose of in accordance with local, state, and national regulations
- Inert material; may be disposed of as non-hazardous solid waste where permitted
- Preferably reuse or recycle; avoid dust release during disposal

14. Transport Information

UN Number	Not regulated
Proper Shipping Name	Not classified as dangerous goods
Hazard Class	Not applicable
Packing Group	Not applicable
Remarks	Not regulated for transport by road, rail, sea, or air

15. Regulatory Information

- Asbestos-free talc not classified as hazardous under GHS
- Subject to occupational exposure regulations for respirable talc dust
- Listed on major chemical inventories as talc (CAS 14807-96-6)

16. Other Information

This MSDS has been prepared in accordance with the GHS 16-section format. This product is supplied asbestos-free; the carcinogenicity concern applies only to talc containing asbestiform fibres. Appropriate dust controls and respiratory protection should be used. Information relates to the specific material designated.

Disclaimer: The information in this MSDS is provided in good faith and is based on current knowledge. It is intended as a guide for safe handling, use, storage, and disposal, and is not a warranty of quality. Ochnology Solution Pvt. Ltd. accepts no liability for loss or damage arising from its use. Users are responsible for ensuring suitability and safety for their own conditions of use.