



MATERIAL SAFETY DATA SHEET (MSDS) — Gilsonite

Product Name: Gilsonite (Natural Asphalt / Natural Bitumen / Asphaltite)

Supplier / Manufacturer: Basekim Kimyasal Ürünler LTD, Turkey

Intended Uses: Drilling fluid additive, foundry binder, asphalt modifier, inks & paints extender, sealing & waterproofing agents, carbon/electrode materials.

1) Identification

- Synonyms: Natural Bitumen, Asphaltite, Uintaite
- CAS Number: **12002-43-6** (approximate)
- Physical Form: Black brittle solid / powder

2) Hazard Identification

- **Hazards:**
 - Dust may cause irritation to eyes, nose, throat, and respiratory tract.
 - Skin contact may lead to mild irritation with prolonged exposure.
 - Thermal processing may generate fumes that are more irritating.
 - Dust-air mixtures can be combustible; risk of dust explosion under certain conditions.
- **Signal Word:** WARNING
- **Precautionary Statements:**
 - Avoid inhaling dust.
 - Use protective gloves, eye protection.
 - Handle in ventilated areas.
 - Keep away from ignition sources and heat when powder form or in fine particles.

3) Composition / Information on Ingredients

Component	Approximate Amount (%)	Notes
Gilsonite (natural hydrocarbon resin)	~100%	Very few additives; natural material



4) First Aid Measures

- **Inhalation:** Move to fresh air. If breathing is difficult, seek medical attention.
- **Skin Contact:** Wash with soap and water. Remove contaminated clothing.
- **Eye Contact:** Rinse immediately with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.
- **Ingestion:** Rinse mouth. In general, Gilsonite is of low toxicity by ingestion; if large amount swallowed, seek medical advice.

5) Firefighting Measures

- **Suitable Extinguishing Media:** Dry chemical, CO₂, foam, or water spray.
- **Unsuitable Media:** None specific, but fine dust clouds should be avoided; water jets may spread dust.
- **Flammability / Combustion Hazards:** Product will burn when heated, generating smoke, soot, CO, CO₂, and potentially other hydrocarbons. Dust may ignite under certain conditions.

6) Accidental Release Measures

- Minimize dust generation.
- Sweep up solid or powder, avoid dry sweeping when possible (use vacuum or wet methods).
- Collect into appropriate containers for disposal.
- Prevent discharge into drains or waterways.

7) Handling and Storage

- Store in a cool, dry, well-ventilated area.
 - Keep containers closed to prevent dust emission.
 - Avoid mechanical kinds of processing that generate fine dust unless proper controls are in place.
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8) Exposure Controls / Personal Protection

- **Occupational Exposure Limits:** Follow local regulatory limits for nuisance dust / respirable dust.
- **Engineering Controls:** Local exhaust ventilation, dust suppression.
- **PPE:** Gloves; eye protection; dust mask or respirator for dust exposure; protective clothing if handling frequently.

9) Physical & Chemical Properties (Typical)

Property	Typical Value / Range
Appearance	Black brittle solid / black powder
Odor	Very mild petroleum / bitumen odor
Softening Point	~ 180-220 °C (depending on grade)
Specific Gravity / Density	~1.04-1.10 g/cm ³
Moisture Content	≤ ~1-3%
Ash Content	≤ ~1-3% (residual mineral content)
Solubility	Insoluble in water; soluble in certain organic solvents
Flash Point	~300-320 °C (grade-dependent)

10) Stability & Reactivity

- Stable under normal handling and storage.
- Avoid exposure to excessive heat or ignition sources.
- Incompatible materials: strong oxidizers.
- Decomposition products when burnt: CO, CO₂, smoke, possibly sulfur oxides if sulfur present.

11) Toxicological Information

- Low acute toxicity in solid form.
- Dust or fume inhalation may irritate respiratory system.
- Prolonged skin contact may cause mild irritation.
- Not classified as carcinogenic under standard Gilsonite grades (unless thermally cracked or treated).



12) Ecological Information

- Not highly soluble; low mobility in water.
- Can persist in environment; may pose risk if large quantities enter aquatic systems.
- Degradability is slow.

13) Disposal Considerations

- Dispose in compliance with local, national regulations.
- Solid waste may go to landfills if non-hazardous.
- Avoid release to environment.

14) Transport Information

- Usually not regulated as hazardous material in solid form.
- Proper shipping name: Gilsonite; solid hydrocarbon resin.

15) Regulatory Information

- Comply with GHS labeling for dust hazards and irritation risk.
- Certifications or grades may have additional regulatory requirements depending on use (e.g. asphalt, drilling, foundry).

16) Other Information

- Revision Date: [Insert]
- Prepared by: Basekim Technical / Safety Team