



# Material Safety Data Sheet (MSDS)

**Gilsonite (Natural Asphalt / Natural Bitumen / Asphaltite)**  
Prepared in accordance with ISO 11014-1 and GHS Standards

## Section 1 – Identification of Substance and Supplier

**Product Name:** Gilsonite (also known as Natural Asphalt, Natural Bitumen, Asphaltite)  
**Chemical Family:** Naturally occurring solid hydrocarbon (asphaltic resin)  
**Intended Applications:** Drilling fluid additive, foundry sand binder, ink and paint extender, asphalt modifier, carbon additive  
**Common Grades:** Drilling Grade, Foundry Grade, Paint/Ink Grade, Carbon & Electrode Grade

**Manufacturer / Supplier:**

Basekim Kimyasal Ürünler LTD  
Turan Gunes Blv., Ilkbahar Mah., Sinpas Altinoran Tower 2, Floor 1, Unit 146  
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**Contact Numbers:**

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## Section 2 – Composition / Ingredient Data

**Component:** Gilsonite (Natural Hydrocarbon Resin)  
**CAS Number:** 12002-43-6  
**Concentration Range:** 100% (natural mineral asphalt)

Contains trace amounts of sulfur, nitrogen compounds, and polycyclic aromatic hydrocarbons (PAHs).



## Section 3 – Hazard Summary

**Physical Appearance:** Black, brittle, shiny solid (resin-like) with asphalt odor

**Major Hazards:**

- Dust may cause mechanical irritation to eyes and respiratory tract
- Prolonged inhalation of dust may affect lungs
- Combustible solid – may emit irritating smoke when burning
- May cause skin dryness upon prolonged contact

**GHS Classification:**

- Combustible Dust – Category 2
- Skin Irritation – Category 2
- Specific Target Organ Toxicity (Prolonged Exposure) – Category 3 (respiratory tract)

**Signal Word:** Warning

**Hazard Statements:**

- H315: Causes skin irritation
- H335: May cause respiratory irritation
- H373: May cause damage to lungs through prolonged or repeated inhalation of dust

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## Section 4 – First Aid Measures

**Exposure Route | Immediate Action**

- **Inhalation:** Move to fresh air. If coughing or breathing difficulty persists, seek medical attention.
- **Skin Contact:** Wash with soap and water. Apply skin cream if dryness occurs.
- **Eye Contact:** Flush gently with clean water for 15 minutes. Seek medical help if irritation persists.
- **Ingestion:** Rinse mouth with water. Do not induce vomiting. Seek medical advice if



large quantity ingested.

**Note to Physician:** Treat symptomatically; no specific antidote.

## Section 5 – Firefighting Measures

**Flash Point:** > 315°C

**Autoignition Temperature:** ~500°C

**Extinguishing Media:** Foam, dry chemical, CO<sub>2</sub>, water spray

**Do Not Use:** Direct water jet – may scatter burning material

**Special Hazards:** Produces smoke, CO, CO<sub>2</sub>, and hydrocarbons when burning

**Firefighter Protection:** Use self-contained breathing apparatus (SCBA) and full PPE

## Section 6 – Accidental Release Response

- Avoid generating dust – use water mist to suppress dust clouds
- Sweep or vacuum using explosion-proof equipment
- Prevent release into drains or waterways
- Dispose in compliance with local environmental regulations

## Section 7 – Handling and Storage Recommendations

### Safe Handling:

- Use in well-ventilated areas
- Avoid dust formation and inhalation
- Ground/bond equipment to avoid static discharge during handling

### Storage Requirements:

- Store in cool, dry, well-ventilated location
- Keep away from open flames and strong oxidizing agents
- Avoid moisture exposure to prevent clumping



## Section 8 – Exposure Controls and Personal Protection

### Occupational Exposure Limits:

- Gilsonite (as inert dust): 10 mg/m<sup>3</sup> TWA (OSHA, total dust)
- Respirable fraction: 3 mg/m<sup>3</sup> TWA (ACGIH)

### Engineering Controls:

- Provide dust extraction and local ventilation at handling points

### PPE:

- Eyes: Safety glasses with side shields
- Skin: Protective gloves and long sleeves
- Respiratory: Dust mask (P2 or N95) if dust levels exceed OEL

## Section 9 – Physical & Chemical Properties

Property	Value / Range
State	Solid, brittle resin
Color	Black, shiny
Odor	Mild asphaltic
Flash Point	> 315°C
Softening Point	140–250°C (grade specific)
Density @ 25°C	1.05–1.10 g/cm <sup>3</sup>
Solubility in Water	Insoluble





Solubility in CS<sub>2</sub> 99%+

Vapor Pressure Negligible

## Section 10 – Stability & Reactivity

- **Stability:** Stable under normal conditions
- **Hazardous Reactions:** None under recommended handling
- **Incompatible Materials:** Strong oxidizing agents
- **Decomposition Products:** CO, CO<sub>2</sub>, sulfur oxides, and hydrocarbon smoke

## Section 11 – Toxicological Information

- **Inhalation:** Dust may cause throat and lung irritation
- **Skin Contact:** Repeated contact may cause dryness
- **Eye Contact:** Dust particles may cause irritation
- **Ingestion:** Low toxicity, but may cause gastrointestinal upset
- **Chronic Effects:** Long-term exposure to dust may cause chronic respiratory issues

## Section 12 – Environmental Information

- Not readily biodegradable; persistent in environment
- Insoluble in water; floats and may cause physical contamination
- Low acute toxicity to aquatic organisms, but may cause long-term accumulation

## Section 13 – Disposal Considerations

- Dispose via licensed waste handler



- Incineration under controlled conditions recommended
- Do not release into drains, surface waters, or soil

## Section 14 – Transport Information

**UN Number:** Not classified as dangerous for transport

**Proper Shipping Name:** Gilsonite (Natural Asphalt)

**Hazard Class:** Not regulated (combustible solid under some jurisdictions)

**Packing Group:** Not applicable

## Section 15 – Regulatory Information

- Listed in major chemical inventories (TSCA, EINECS, DSL)
- Not classified as hazardous under many transport regulations, but combustible dust precautions apply

## Section 16 – Additional Information

**Revision Date:** August 15, 2025

**Prepared by:** Basekim Kimyasal Ürünler LTD – Technical Department

**Disclaimer:**

Information provided is accurate to the best of our knowledge at the date of publication and is intended to guide safe handling, storage, transport, and disposal of Gilsonite. No warranty is expressed or implied.