



TECHNICAL DATA SHEET (TDS)

Product: Gilsonite (Natural Asphalt)

Supplier: Basekim

1. Product Description

Gilsonite is a naturally occurring solid hydrocarbon used in drilling fluids, cementing, asphalt modification, waterproofing, foundry, inks, and industrial applications. Basekim provides multiple mesh sizes suitable for drilling (30–40 mesh, 70–100 mesh, 200 mesh, 325 mesh, and more).

2. Key Benefits

- Improves rheology and stability of drilling muds
- Provides excellent fluid-loss control
- Strong shale-stabilizing performance
- Acts as an efficient Lost Circulation Material
- Enhances high-temperature resistance
- Compatible with both OBM and WBM
- In asphalt, increases softening point, reduces rutting, improves adhesion

3. Applications

- Drilling fluids (LCM, filtration control, shale stabilizer)
- Cementing (flexible lightweight additive)
- Asphalt and bitumen modification
- Foundry and metallurgy
- Inks, paints, coatings
- Waterproofing and pipe coating
- Polymer and industrial formulations



4. Typical Technical Properties

General Properties

Property	Typical Value
Appearance	Black, brittle solid
Softening Point	140–220 °C
Specific Gravity	~1.06
Ash Content	~1%
Moisture	~1%
Volatile Matter	~63%
CS ₂ Solubility	~99%
Heptane Insolubles	~79%
Sulphur Content	~1%
Penetration	0 dmm (very hard solid)

Particle Size (Example – 200 Mesh Drilling Grade)

Sieve Size Max Retained

+35 mesh 0.1%

+65 mesh 2%

+100 mesh 8%

+200 mesh 25%

–200 mesh Remainder

Other mesh sizes available on request.

5. Performance in Drilling

- Reduces fluid loss and generates thin, impermeable filter



cake

- Bridges microfractures during lost circulation
- Stabilizes shale by forming hydrophobic film
- Improves emulsion stability in OBM
- Reduces torque and drag
- High softening point supports HPHT drilling

6. Recommended Dosage

- Filtration control / shale stabilizing: 2–6 lb/bbl
- Lost circulation: 5–25 lb/bbl
- Cementing: 2–15% BWOC

Exact dosage must be verified by lab tests.

7. Compatibility

- Works with most drilling systems and cement blends
- Compatible with penetration/oxidized bitumen grades for asphalt modification
- Mixes well with polymers and other LCM materials

8. Packaging

- 25 kg or 50 lb multi-paper or PP bags
- 500 kg and 1,000 kg jumbo bags (FIBC)
- Palletized loading available
- Custom packaging upon request

9. Storage

- Keep in dry, shaded, cool warehouse
- Protect from moisture
- Store bags sealed



- Long-term stability exceeds 10 years when stored properly

10. Quality Assurance

Basekim performs quality control using ASTM and API methods:

- Softening point
- Particle size
- Ash and moisture content
- Solubility tests
- Volatile matter

COA available for each shipment.

11. Disclaimer

Values are typical; not guaranteed specifications unless agreed in contract.

User must determine suitability for their process and comply with safety regulations.