



## MATERIAL SAFETY DATA SHEET (MSDS / SDS)

### BARITE (BARIUM SULFATE)

#### 1. Identification of the Substance and Supplier

**Product Name:** Barite

**Chemical Name:** Barium Sulfate

**Synonyms:** Barytes, BaSO<sub>4</sub>

**CAS Number:** 7727-43-7

**Molecular Formula:** BaSO<sub>4</sub>

**Recommended Use:**

Weighting agent for drilling fluids, industrial filler, radiation shielding, paints, plastics, rubber

**Supplier:** Basekim

**Product Type:** Industrial Mineral

**Form:** Powder / Granular

#### 2. Hazard Identification

**GHS Classification:**

Not classified as hazardous under GHS regulations

**Signal Word:** None

**Hazard Statement:**

Barite is chemically inert and non-toxic. However, **dust inhalation may cause mechanical irritation.**

**Potential Effects:**

- **Inhalation:** Dust may irritate respiratory tract
- **Skin Contact:** No significant hazard
- **Eye Contact:** Dust may cause mechanical irritation
- **Ingestion:** Not expected to be harmful



### 3. Composition / Information on Ingredients

Component	CAS No.	Content
Barium Sulfate (BaSO <sub>4</sub> )	7727-43-7	≥ 90-98%

Impurities depend on grade and application.

### 4. First-Aid Measures

**Inhalation:**

Move person to fresh air. Seek medical attention if irritation persists.

**Skin Contact:**

Wash with soap and water.

**Eye Contact:**

Rinse cautiously with clean water for several minutes.

**Ingestion:**

Rinse mouth. Do not induce vomiting. Seek medical advice if discomfort occurs.

### 5. Fire-Fighting Measures

**Flammability:** Non-flammable

**Suitable Extinguishing Media:** Any standard extinguishing media

**Hazardous Combustion Products:** None

**Protective Equipment:** Standard fire-fighting gear



## 6. Accidental Release Measures

- Avoid generating dust
- Use mechanical sweeping or vacuum systems
- Wear dust mask and protective gloves
- Dispose according to local regulations

## 7. Handling and Storage

### Handling:

- Minimize dust generation
- Use appropriate ventilation
- Wear protective equipment if handling large quantities

### Storage:

- Store in dry, well-ventilated area
- Keep bags tightly closed
- Protect from moisture contamination

## 8. Exposure Controls / Personal Protection

### Exposure Limits:

No specific occupational exposure limits established

### Personal Protective Equipment (PPE):

- Dust mask or respirator (for bulk handling)
- Safety goggles
- Protective gloves
- Work clothing



## 9. Physical and Chemical Properties

Property	Value
Appearance	White to off-white powder
Odor	Odorless
pH	Neutral
Melting Point	> 1,600 °C
Solubility	Insoluble in water
Specific Gravity	4.1 – 4.5
Bulk Density	Application dependent

## 10. Stability and Reactivity

**Stability:** Stable under normal conditions

**Reactivity:** Non-reactive

**Hazardous Reactions:** None known

**Incompatible Materials:** None significant

## 11. Toxicological Information

- Non-toxic
- Not carcinogenic
- Not mutagenic
- No known chronic health effects

Barite is widely used due to its **biological inertness**.

## 12. Ecological Information

- Environmentally stable
- Insoluble and non-bioaccumulative
- No known ecological toxicity



## 13. Disposal Considerations

Dispose according to local environmental regulations.

Barite can typically be disposed of as **non-hazardous mineral waste**.

## 14. Transport Information

**UN Number:** Not regulated

**Hazard Class:** None

**Transport Label:** Not required

**Marine Pollutant:** No

## 15. Regulatory Information

Complies with:

- GHS
- REACH (non-hazardous mineral)
- API / ASTM where applicable by grade

## 16. Other Information

This MSDS is prepared based on current knowledge and industrial practice.

Users should evaluate suitability for their specific application.