Barite Specification

Description:

High-purity micronized Barite (Barium Sulfate) derived from natural baryte ore. It is chemically inert, non-toxic, and characterized by high density, brightness, and low oil absorption. Barite is widely used in oil & gas drilling, paints & coatings, plastics, rubber, paper, and medical industries for its unique combination of weight, whiteness, and stability.

Applications:

- **Oil & Gas:** Used as a weighting agent in drilling fluids to control formation pressure and prevent blowouts.
- **Paint & Coating:** Functions as a filler and pigment extender to enhance gloss, acid resistance, and surface smoothness.
- **Medical:** High-purity grades are used in X-ray contrast media and medical imaging formulations.
- **Chemical & Rubber:** Serves as a barium source and reinforcing filler to improve product durability and chemical resistance.
- **Plastics & Paper**:Used to increase density, opacity, and brightness in plastic compounds and specialty paper coatings.

Packing:

- Palletized bag in container
- 1 m^3 jumbo bags in container

Health and Safety:

- Barite ($BaSO_4$) is chemically inert, non-flammable, and non-toxic under normal handling conditions.
- Avoid generating airborne dust; use local ventilation.
- Prolonged inhalation of fine particles may cause mechanical irritation to the respiratory tract.
- Use appropriate personal protective equipment (PPE) — dust mask, gloves, goggles.
- Collect spilled material by sweeping or vacuuming (avoid high-pressure air).
- Dispose of according to local environmental regulations.

Barite Analysis

Oxide	Unit	Content
BaO	%	61.8
SO_3	%	33.44
SiO_2	%	2.43
SrO	%	2.02
CaO	%	0.43

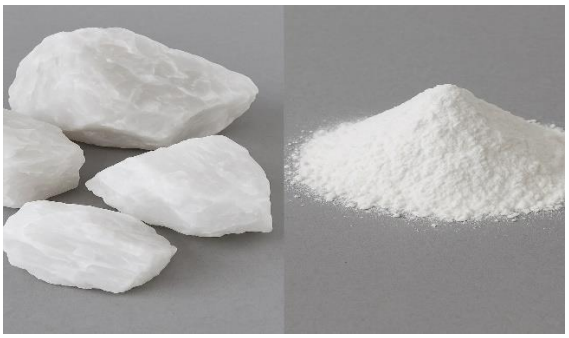
Tel: +98 21 72065436 Web: www.bhpbitumen.com Email: Info@bhpbitumen.com
Add: No.11,Golkhane St, Nelson Mandella Blvd, Tehran, Iran

Oxide	Unit	Content
Fe_2O_3	%	0.08
MgO (max.)	%	0.01
TiO_2	%	0.01
Al_2O_3	%	0.001
Equivalent $BaSO_4$	%	≈ 95.8
Loss on Ignition (LOI)	%	0.37

Physical Properties

Property	Unit	Specification
Appearance	—	White, free-flowing powder
Whiteness	%	82 ± 1
Brightness (ISO 2470)	%	71 ± 1
Moisture Content	%	≤ 0.3
pH (10 % slurry)	—	8.1 ± 0.2
Hardness (Mohs)	—	4.5 – 4.6
Specific Gravity	g/cm³	4.30 – 4.35
Bulk Density	g/cm³	4.41
Oil Absorption (ASTM D281)	g/100 g	10 – 15
Refractive Index	—	1.64 – 1.65

Barite Raw& Powder



Applications