

16 BARITE



PRODUCT 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 m³ jumbo bags in container

HEALTH AND SAFETY

- Barite (BaSO₄) 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.

CHEMICAL COMPOSITION (XRF ANALYSIS)

Oxide	Content (%)
BaO	61.80
SO ₃	33.44
SiO ₂	2.43
SrO	2.02
CaO	0.43
Fe ₂ O ₃	0.08
MgO (max.)	0.01
TiO ₂	0.01
Al ₂ O 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/cm ³	4.30 – 4.35
Bulk Density	g/cm ³	4.41
Oil Absorption (ASTM D281)	g/100 g	10 – 15
Refractive Index	—	1.64 – 1.65

BARITE RAW & POWDER



APPLICATIONS



AVAILABLE FORMS



LUMP BARITE
10 – 60 mm



GRANULAR BARITE
3 – 10 mm



MICRONIZED POWDER
0 – 3 mm

PACKAGING

- Palletized Bags (in container)
- 1 m³ Jumbo Bags (in container)



USED IN KEY INDUSTRIES

