

GENERAL INFORMATION

Barite is a mineral composed of barium sulfate, BaSO₄. It is chemically inert and insoluble. Barite (Barium Sulfate) with the chemical formula of BaSO₄ is cost - effective weighting agent, used in all types of drilling fluids.

TYPICAL PROPERTIES

Appearance :	Fine, beige-coloured powder
Solubility :	Insoluble in oil and water
pH in water :	Neutral
Specific gravity :	4.2 - 4.35 g/cm ³

CHEMICAL COMPOSITION

Chemical Formula	BaSO ₄
Molecular Weight	233.39 gm

Composition:

Barium	58.84 % Ba	65.70 % BaO
Sulfur	13.74 % S	34.30 % SO ₃
Oxygen	27.42 % O	

APPLICATION

- Increase mud density up to 2.5 g/cm³
- Control formation pressure
- Stabilize the borehole

RECOMMENDED TREATMENT

The quantity of barite needed to increase mud density is given in the formula below:

$$\text{Barite required (kg)} = \frac{4200 (W2 - W1)}{4.2 - W2} V1$$

Where:

W1: Initial mud weight (g/cm³);

W2: Desired mud weight (g/cm³);

V1: Initial volume of the mud (m³)

PACKAGING

Barite is packaged in 1500kg big bags.