HEMATITE
WEIGHTING AGENT

HEMATITE (Iron Oxide) is a high-density weighting material used in the oil and gas industry. This high density ore has a mica-type crystal structure, which is then ground to a particle size suitable for use in drilling fluids.

FEATURES AND BENEFITS:

- At 5.24, HEMATITE has a specific gravity 19% greater than Barite at 4.1.
- Occupies less space than an equal mass of Barite, reducing the fluid's solids interaction.
- A mud system weighted with HEMATITE will contain much fewer solids by volume.
- Lower solids concentration in a drilling fluid will contribute to improved rheological properties, increased penetration rates and an overall decrease in mud costs.

RECOMMENDED TREATMENT:

$$\text{Hematite required (kg/m}^3\text{)} = \frac{5240\ (\text{initial density (kg/m}^3\text{)} - \text{desired density (kg/m}^3\text{)}}{5240 - \text{desired density (kg/m}^3\text{)}}$$

Note: If the use of HEMATITE is anticipated, Barite should NOT be utilized from the beginning in order to minimize the solids content of the fluid.

PHYSICAL PROPERTIES:

Appearance:	Red-black powder
Specific Gravity:	5.24 @ 20°C
Solubility:	Insoluble
pH:	Neutral

MIXING/HANDLING:

Mix as rapidly as a jet mixer can handle, although small density increases are usually achieved with Hematite additions over a circulation. Refer to the SDS for specific precautions and handling requirements.

MICROTOX® THRESHOLD: TBD

PACKAGING: 45.4 kg bag / 40 bags/pallet