

Technical Data Sheet

HEMATITE

HEMATITE is a high-quality, ground iron oxide (hematite) with a specific gravity (SG) of 4.7 or above.

Due to this high specific gravity, muds formulated with HEMATITE have lower solids contents and frequently contribute to higher rates of penetration as compared to barite muds. It may be substituted for, or blended with, barite in all mud systems. HEMATITE is ground and processed to remove impurities then classified to achieve the desired particle size distribution.

APPLICATION

HEMATITE is applicable in all types of drilling fluids, including freshwater, seawater and oil – base muds. It can be used to increase the density of all drilling and completion fluids to 25 lbm/gal (3.0 SG). HEMATITE is most frequently used in high – density. Oil – base muds.

Fluids weighted with HEMATITE contain fewer solids by volume than those weighted with barite, making higher mud weights possible.

It is specially useful in high-density kill fluids.

TREATMENT

The quantity of HEMATITE required can be calculated using the following formula:

$$\text{HEMATITE, lb/bbl} = \frac{1.750 (W_2 - W_1)}{41.66 - W_2}$$

where:

W_1 = Initial mud weight in lb/gal

W_2 = Desired mud weight in lb/gal

$$\text{HEMATITE, Kg/m}^3 = \frac{5000(W_2 - W_1)}{5.0 - W_2}$$

where:

W_1 = Initial mud weight in specific gravity.

W_2 = Desired mud weight in specific gravity.

TYPICAL PROPERTIES

Appearance:	Dry – red to brown powder
pH (1% solution):	-
Bulk density:	2291 kg/m ³ [143 lb/ft ³]
Specific Gravity:	5.0
Solubility:	Insoluble in water, Soluble in HCl or H ₂ SO ₄

PACKAGING

variety of bulk bag sizes.