## **MICROWATE 4.8**

#### **Product Description**

MICROWATE® 4.8 high performance weighting material is Manganese Tetra-oxide (Mn3O4) based material used to increase the density of aqueous and non-aqueous drilling and completion fluids. It is not milled. MICROWATE® 4.8 maintains a consistency in both PSD & almost perfect sphericity. It is both the size and shape which contribute to its unique properties. MICROWATE® 4.8 is 15% denser and over 60% harder than Barite. However due to its sphericity and particle size, the abrasiveness and friction are significantly lower than Barite.

### **Applications/Functions**

- Used alone or in combination with other weighting materials to increase the density of drilling fluids
- Used in restricted ECD applications but not limited to: depleted wells, deep water, narrow margin, high temperature wells, etc.
- Sag control issues
- Extend the density window of brines.

## Advantages

- Much less damaging to formations due to its particle size, roundness and acid solubility with high return permeability ratio
- MICROWATE® 4.8's settling velocity is about 8 times slower than Barite in water
- Ideal choice to use in fluids required to drill narrow margin well and enable greater control of rheology to manage hydraulics for hole-cleaning, horsepower usage
- Compatible with other material and contains no hazard compound

# **Typical Properties**

- Appearance: Black Powder; Specific gravity: 4.5 -4.7
- D50: 5µm; D90 0.8; Magnetite:

#### **Recommended Treatment**

• Specific drilling conditions will dictate a suitable concentration.

# **Package**

1 MT BIG BAG or available in bulk