

MIL-CARB Series

Bridge formations and reduce seepage losses

Applications

- Unconsolidated or highly permeable formations
- Natural fractures or fissures
- Induced fractures
- Cavernous or vugular formations

Features and benefits

- Sized metamorphic particles
 - Provides better bridging and wellbore strengthening
- Plugs wide range of pore throat sizes
 - Can be used with water-based and invert emulsion drilling fluids to control lost circulation
- Alternative weighting agent to barite for low-density fluids
- Can be used to improve filter cake quality in drilling fluids
- 94% acid solubility

The MIL-CARB™ series of calcium carbonates from Baker Hughes consists of sized metamorphic calcium carbonate blends that can be used as weighting agents, bridging agents, and loss circulation materials in water-based drilling fluids, invert emulsion drilling fluids, and coring fluids. The number after MIL-CARB indicates the approximate d50 of the particles size distribution of the product. The sizes currently available for MILCARB are 5, 10, 20, 25, 30, 40, 50, 80, 150, 250, 450, 600, and 1000.

Recommended treatment

Generally, sized calcium carbonate is added to a drill-in fluid at a treatment level of 30.0 to 50.0 lb/bbl (85.7 to 143.0 kg/m³). Using less than 30.0 lb/bbl (85.7 kg/m³) in certain reservoir applications may compromise the rate of deposition while promoting invasion. MIL-CARB concentrations of 5.0 to 10.0 lb/bbl (14.3 to 28.6 kg/m³) can be added to improve the bridging in the sands and provide tighter fluid loss. Treatment concentrations of 20.0 to 50.0 lb/bbl (57.0 to 143.0 kg/m³) are used in the preparation of pills to minimize seepage losses in permeable formations while drilling.

Environmental information

For information concerning environmental regulations applicable to this product, contact the Health, Safety, and Environmental department of Baker Hughes.

Shipping

Transportation of the MIL-CARB is not restricted by international or USA regulatory agencies.

Safe handling

recommendations

Use normal precautions for employee protection when handling chemical products. See Safety Data Sheet (SDS) prior to use.

Packaging

MIL-CARB additive is available in bulk and is packaged in 25- and 50-kg (55- and 110-lb, respectively) and 50-lb (22.7-kg) multiwalled bags.

Typical properties	
Appearance	White powder
Specific gravity	2.6 to 2.8
Solubility in water	Insoluble
Hardness (Mohs scale)	3.0 to 3.5