

# FLC

## Filtration Control Agent

### Product Description

FLC is a high-quality starch used to provide filtration control and rheology stability in all types of water-base drilling fluids. FLC possess excellent temperature properties for specialty drilling applications and are designed to impart filtration control and enhanced rheology with thermal stability more than 275 °F.

### Typical Physical Properties

|                     |   |
|---------------------|---|
| Physical appearance | Off-white powder                                      |
| Specific gravity    | 1.5   |
| Solubility in water | Soluble   |
| Bulk density        | 19-44 lb/ft <sup>3</sup> (300-700 kg/m <sup>3</sup> ) |

### Application

FLC polymer is designed to reduce fluid loss and increase viscosity in all water-base muds. It is especially applicable and economical in saturated-salt and brine systems where other products are not effective. This includes clear brines used for work over and completion operations.

FLC encapsulates particles with a protective polymer coating to function as a protective colloid. It is effective as a drilling fluid stabilizer as well as a fluid-loss reducer when drilling evaporate formations such as anhydrite or salt and when drilling hydratable shales. FLC contains Dazomet preservative; however, it is recommended that the active system be treated with additional biocide, especially if the drilling fluid system has a low salinity.

### Advantages

- Effective in a wide range of make-up waters, including high-salinity, high-hardness brines
- Thermally stable upto 275° F
- Functions in NaCl, KCl, MgCl<sub>2</sub>, CaCl<sub>2</sub> and complex brines
- Performs satisfactorily over a wide pH range
- Minimizes filtration damage to production zones
- Provides wellbore stability through filtration control and encapsulation

### Limitations

- Less effective in high-pH/high-calcium, saturated brine systems
- Should not be used in zinc brines

### Recommended Treatment

Normal treatments range from 2 to 6 lb/bbl (5.7 to 17.1 kg/m<sup>3</sup>) depending on the make-up-water chemistry and desired fluid loss. Treatments of 2 to 3 lb/bbl (5.7 to 8.6 kg/m<sup>3</sup>) usually reduce API fluid loss values to 6 to 8 ml in freshwater mud systems.

### Packaging and Storage

FLC is packaged in 55-lb (25-kg) and 50-lb (22.7-kg), multi-wall, paper sacks. Store at moderate temperatures in a dry, well-ventilated area.

Important Note: These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and method of use of our product are beyond our control. We recommend that the prospective user determine the suitability of our material and suggestions before adopting them on a commercial scale.