

OCS 100 rheological additive is an easy dispersing, self activating organoclay that exhibits high performance efficiency in diesel, low aromatic mineral oil, various alpha olefins, and vegetable oil containing base fluid formulations. It is highly effective in all-oil and invert muds, fracture and workover fluids.

Application

OCS 100 is a self-activating gellant offering rapid yield development, high gel strengths, and increased efficiency in various oils. The unique properties of **OCS 100** are especially valuable in low-shear mud plant operations and during completion fluid manufacture at the well site. **OCS 100** also possesses good low temperature and low temperature incorporation properties.

OCS 100 imparts high gel strengths to inverts and all-oil muds, and all oil based slurries as indicated by their high low shear Brookfield viscosities (see formulation data). This translates into muds and slurries having improved anti-settling and downhole sag resistance properties.

Attributes

- Requires no external chemical activators in all-oil or invert systems
- Is easy to disperse
- Improves mud plant throughput
- Gives greater batch-to-batch uniformity
- Offers fast well-site mud incorporation and yield
- Generates high Brookfield viscosities
- Is not harmful to the environment

Typical Properties

Composition	organic derivative of a bentonite clay
Color	light cream
Form	finely divided powder
Specific Gravity 1.6	
Moisture	2.5% maximum

Incorporation

Self activating **OCS 100** requires no external chemical activator. We note that a small amount of water (0.1 - 0.2% by weight of total formula) added to all-oil muds further speeds the gelation process and optimizes organoclay use.

Good agitation should be used for mixing OCS 100 additive. Since it is an easy dispersing organo- clay, less work will be required to incorporate it into the drilling fluid, and to build initial viscosity.

Levels of Use

The level of use depends on the rheological properties needed, and the base oil being used. Compared with conventional organoclay gellants, typically 15% - 50% less **OCS 100** is needed to develop a given yield depending on base fluid.

The following loading "rules of thumb" are offered as starting point ranges for screening **OCS 100** in typical all-oil and 80/20 inverts muds. Since other ingredients and incorporation conditions can influence ultimate YP/PV values, the **OCS 100** level should be optimized to the target YP in the full formulation.