

BENTONE® 903

Economical rheological additive for diesel based invert drilling fluids

GENERAL INFORMATION

BENTONE 903 rheological additive is our most cost-effective organobentonite viscosifier and suspending agent for oil-based invert emulsion drilling fluids,

BENTONE 903 is suitable for drilling fluids with a continuous phase of diesel or crude oil. It imparts to the formulation the temperature stable rheology characteristic of organoclays. Ideal for well site application.

CHEMICAL AND PHYSICAL DATA

Composition	organic modified bentonite clay
Color	light tan
Form	finely divided powder
Specific gravity	1.8
Moisture	7.0% maximum

These are typical properties not to be used for specification purposes.

APPLICATIONS

Viscosifying Invert emulsion drilling fluids based on:

- Diesel oil
- Crude oil

ATTRIBUTES

BENTONE 903 gellant:

- Cost-effectively builds viscosity and yield point
- Suspends weighting materials and other solids
- Improves cuttings carrying capacity and hole cleaning
- Increases emulsion stability
- Aids control of fluid loss to the formation
- Confers temperature stability to the fluid
- Is not harmful to the environment

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INCORPORATION

Good agitation should be used when incorporating **BENTONE 903** into the drilling system. The amount of stirring needed will depend on the temperature of the oil, the O:W ratio, mud weight and emulsifier package. The rate of viscosity build from this organoclay increases with increasing temperature and shear. Circulation downhole after the initial mixing will aid in achieving the full viscosity and yield.

LEVELS OF USE

The level of use depends on the rheological properties needed, and on the type of base oil being used. Pilot trials are recommended to optimize performance before field use.

Typical loadings are:

Base System	Pounds per Barrel	Kg/m ³
Invert Emulsions	6 - 12	17 - 34

Health and Safety Data

Before using this product please consult our Material Safety Data Sheet for information on safe handling.