

Viscosifier KDF001

1. Introduction

Viscosifiers are generally used in drilling fluids to increase the drill-cutting carrying capacity, maintain the correct pressure and control the fluid loss of the drilling fluids.

KDF001 is a water-soluble polysaccharide to produce a fluid that is highly-shear thinning and thixotropic. Fluids formulated with KDF001 exhibit exceptional resistance to thermal thinning and maintain viscosity at elevated temperature. The fluids with KDF001 resist to contaminations of high concentrations of dissolved electrolytes including potassium chloride, sodium chloride, seawater and other oilfield mix-water.

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KDF001	Cream Powder	1.45-1.65	Soluble	-	Eyes	Dust	6.5 to 7.5

3. Chemical Properties and Application

KDF001 is used to obtain high yield points and gels at low plastic viscosity values. It yields well in freshwater, seawater or saturated brines, and is not susceptible to contamination by dissolved ions. This product is effective over a wide pH range 3 to 12 and also provides some degree of fluid loss control.

Solubility: Readily soluble in fresh water and seawater or saturated brines.
 Temperature: Stable to 130°C (266°F) in laboratory tests and up to 150°C (300°F) in the
 Stability: field.

4. Treatment

KDF001 should be added slowly and evenly through a hopper at a rate of 15 to 20 min per sack. The normal treatment is 0.5 to 1.5 lbm/bbl (1.4 to 4.3 kg/m³).

5. Packaging

KDF001 is supplied in 25 KG paper sacks (5-ply paper with plastic liner).

Keep it away from extreme conditions such as places near flames or direct sunlight. Pay attention to moisture protection.