

SI-18

Shale Inhibitor



Product Description

SI-18 is a newly developed inhibitor for water based drilling fluids. Its polymeric structure provide long term inhibition for the hydration and expansion of shale particles during drilling operation.

- Used in high performance water based drilling fluid
- Very good shale inhibition

Advantages

- High water solubility
- High MW, long term inhibition
- Low applying dosage (as low as 0.5 %)
- Tested in high performance drilling fluid, Hot Roll Shale Dispersion Recovery % ≥ 95 %
- Cutting Slake Durability Test Recovery ≥ 90 %;
- Cutting Bulk Hardness Test filter cake recovery ≥ 90 %

Applications/Recommended Treatment

- SI-18 is used as an additive in the high performance water drilling fluid. It inhibits the hydration and then expansion of the shale formation. It also inhibits shale particle disintegration in the drilling fluid from being smaller particle and dispersed into the drilling fluid. Based on the lithology of shale, the concentration of inhibitors used 0.5-5 LB/BBL (1.42-14.2 kg/m³)
- For fresh mud making, the shale inhibitor is added before the pH adjustment.
- During the drilling, the shale inhibitor, the sealing agents and the lubricant are added to maintain the drilling fluid properties alternatively.



Typical Properties

- Appearance: Amber Liquid
- Specific Density, 1.223-1.253 g/cm³
- Viscosity, less than 500 cp
- Flash Point, > 210 °F/100 °C
- Pour Point, < 3 °F/-16 °C
- Soluble in water
- pH (5% in water), 6-8

Packaging and Storage

- 265 Gal (900 Kg) totes (IBCs) or 55 Gal (180 Kg) drums
- Keep in the original container if it is not used all. Store the product in the containers with closed lids in a dry, cool and well-ventilated place.