

Drilling Fluids - Viscosifiers

Liquid Mud Plus



Product Number
9410012

Applications

- **Viscosity** - Liquid Mud Plus viscosifies rapidly and exhibits excellent hole-cleaning characteristics under low shear rates. It allows for easy solids deposition in settling pits when used in core drilling.
- **Shale Stabilization/Inhibition** - Liquid Mud Plus, alone or in conjunction with KCl or substitutes, is used to stabilize active shales by encapsulating the drilled cuttings and inhibiting formation swelling.
- **Foam Enhancement** - Liquid Mud Plus creates thicker, stronger drill foams improving the fluid's cuttings-carrying capacity and resisting water inflows.
- **Flocculant** - Liquid Mud Plus acts as a flocculant at .01-.05 ppb (.03-0.14 kg/m).

Advantages

- Concentrated polymer content
- Stabilizes clay, shale and mudstone formations
- Compatible with most drilling fluids additives
- Excellent all-round lubricant
- Can be used with foam to help stabilize loose formations and improve cuttings carrying
- Longer shelf life than other liquid polymers
- Improves core recovery

LIQUID MUD PLUS is a 50 % active synthetic polymer developed for use in freshwater and saltwater base drilling fluids. It is a unique dispersion grade liquid PHPA that resists freeze/thaw degradation and phase separation.

Typical Physical Properties

Physical appearance	White liquid dispersion
Odor	Slightly hydrocarbon
Viscosity (typical)	200 – 500 cP
Specific gravity	1.06–1.08
pH (1% Solution)	16.5 –7.5
Flash point	248°F/120°C

Packaging and Storage

Liquid Mud Plus is supplied in 5 gal/18.9 L pails.

Approximate Amounts of Liquid Mud Plus Added to Drilling Fluid Systems

Drilling Application	qt/100 gal	pints/bbl	L/m ³
Fresh water Stabilizes water-sensitive formation	0.60	0.60	1.50
Reduces torque and pump pressure, and increases hole stability	1.00	0.75	2.25
Low-Solids, Non-Dispersed (LSND)	0.30	0.30	0.75
3% KCl drilling system	1.20	1.00	3.00
Injection liquid in air/foam applications	0.30-0.60	0.30-0.60	0.75-1.50

