

Lube-167

LUBE-167* water-dispersible lubricant is designed to decrease the coefficient of friction in all water-base drilling fluids, which lowers torque and drag in the wellbore.

It also has a unique wettability characteristic which lowers the potential for Bottom-Hole Assembly (BHA) balling. Lube-167 lubricant contains no hydrocarbons and is compatible with all water-base fluids.

Typical Physical Properties

Physical appearance	Light brown liquid
Odor	Mild
Solubility in water	Insoluble
Specific gravity	0.96-1.01
pH	8.8-9.2 (1% solution)
Flash point	240°F (116°C) (PMCC)

Applications

LUBE 167 lubricant is completely water dispersible and blends easily into all mud systems. It does not foam and can be added to the mud system through the mixing hopper or directly to the surface system wherever good agitation is available.

LUBE-167 additive should be used at an initial concentration of 1 to 3% by volume (3.5 to 10.5 lb/bbl or 8.6 to 30 kg/m³) for optimum performance. For mud densities above 12 lb/gal, higher concentrations of LUBE-167 additive are normally required.

After the initial treatment, periodic treatments should be made to maintain the desired concentration. Higher concentrations can be necessary for pills and special applications. Treatment levels and product usage depend on the rate of penetration, solids-control equipment and dilution rates.

This document is supplied solely for informational purposes and M-I LLC makes no guarantees or warranties, either expressed or implied, with respect to the accuracy and use of this data. All product warranties and guarantees shall be governed by the Standard Terms of Sale. Nothing in this document is legal advice or is a substitute for competent legal advice.

Eastern Hemisphere	Western Hemisphere
Gamle Forusvei 43	P.O. Box 42842
N-4033 Stavanger,	Houston, Texas 77242-2842
Norway	Phone: 281-561-1300
Phone: +47-51-57-73-00	Fax: 281-561-1441
Fax: +47-51-57-74-51	www.miswaco.slb.com



A Teniz Service M-I SWACO Enterprise



Advantages

- Effective, all-purpose lubricant for water-base mud systems
- Decreases the coefficient of friction which reduces torque and drag
- Does not increase rheology or gel strengths
- Contains unique metal-wetting additives which reduce the tendency of soft, sticky shales (gumbos) to cause bit and BHA balling
- May be used at all bottom-hole temperatures
- Does not cause foaming
- Does not cause a sheen when dispersed in drilling fluids at 4% by volume or less

Limitations

- May “grease” in mud systems with soluble hardness greater than 600 mg/l and high pH levels
- May cause slight foaming in freshly built, ultra-low-solids seawater systems

Toxicity and Handling

Bioassay information is available upon request.

Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the Material Safety Data Sheet (MSDS).

This document is supplied solely for informational purposes and M-I LLC makes no guarantees or warranties, either expressed or implied, with respect to the accuracy and use of this data. All product warranties and guarantees shall be governed by the Standard Terms of Sale. Nothing in this document is legal advice or is a substitute for competent legal advice.

Eastern Hemisphere
Gamle Forusvei 43
N-4033 Stavanger,
Norway
Phone: +47-51-57-73-00
Fax: +47-51-57-74-51

Western Hemisphere
P.O. Box 42842
Houston, Texas 77242-2842
Phone: 281-561-1300
Fax: 281-561-1441
www.miswaco.slb.com



A Teniz Service M-I SWACO Enterprise

Schlumberger