Starglide

Starglide* lubricant reduces torque, drag and the potential for differential sticking by reducing the coefficient of friction of water-base mud. Typical friction coefficient reductions of 25-35% have been observed.

Typical Physical Properties

Physical appearance	Golden liquid
Specific gravity	0.93-0.97
Freezing point	<10C
Flash point	>100C

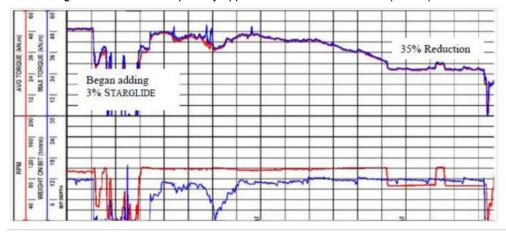
Applications

Starglide lubricant is designed to be used for those situations where torque, drag and/or the potential for differential sticking are likely, such as when drilling highly deviated or high-differential-pressure wells. Starglide additive is an effective lubricant in water-base drilling and reservoir drill-in fluids. In field applications, friction coefficient reductions of 25-35% have been observed in water-base drilling fluid.

Normal concentrations of Starglide lubricant range from 1 to 3% by volume, or 10 to 30 kg/m³ (3.5 to 10.5 lb/bbl), depending on the fluid density, desired reduction in coefficient of friction, and the mud system.

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

Pilot testing is recommended especially applications in excess of 93° C (200° F)



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



Product Data Bulletin

Advantages

- Highly effective downhole lubricant for reducing torque and drag
- Reduces the potential for, and the severity of, differential sticking
- Compatible with most water-base fluids
- Effective brine lubricant, non-foaming tendency

Limitations

May grease or emulsify in the presence of calcium – pilot test before use

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).

Packaging and Storage

Starglide lubricant is packaged in standard pack unit: 200 I (52.8 gal) drums or in bulk; other pack units on request Store in a dry, well-ventilated area. Keep container closed. Keep away from heat, sparks and flames. Store away from incompatibles.

Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

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: 281·561·1441 Fax: +47·51·57·74·51

Western Hemisphere P.O. Box 42842

Houston, Texas 77242-2842

Phone: 281-561-1300 www.miswaco.slb.com



A Teniz Service M-I SWACO Enterprise

