**Idlube XL**

*Idlube XL* lubricant is formulated to minimize bit balling, torque and drag in all water-based fluids.

It is designed to impart extreme pressure lubricity and reduce the coefficient of friction between the drill string and wall cake. *Idlube XL* will form a persistent lubricating film on the metal surfaces.

**Typical Physical Properties**

- **Physical appearance**: Brown liquid
- **Specific gravity**: 0.87 - 0.90
- **Solubility**: Insoluble in water
- **Flash point**: >100° C (>212° F)

**Applications**

*Idlube XL* has wide application in all water base fluids and can be used in KCl and NaCl brine fluids as an effective lubricant for the reduction of the coefficient of friction. *Idlube XL* is an extreme pressure additive that will impart lubrication to the bearing surfaces, such as the drill string and wall, when subjected to high pressure conditions. *Idlube XL* has temperature stability to 204° C (400° F). *Idlube XL* can be added to all densities, and will not impact the rheological properties.

Recommended concentrations for most application range between 5.7 to 22.8 kg/m³ (2 to 8 lb/bbl), however higher weighted fluids will require higher amounts. Daily additions will be necessary to control torque and drag. *Idlube XL* may be added in batch or slug concentrations where rapid increases in torque or balling require a quick response. Avoid greasing possibilities by preventing the combination of high hardness and oil in the same system.

**Advantages**

- Provides persistent film on tubulars
- Will not affect rheology
- Useful in deviated, extended reach holes
- Effective agent for reducing torque and drag

**Limitations**

- Do not use in the presence of high calcium and oil to prevent greasing of the solids
- Avoid situations of high calcium and elevated pH
Toxicity and Handling
Bioassay information is available upon request.

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

Packaging and Storage
Iduube XL is packaged in 18.9 l (5 gal) cans and 208.2 l (55 gal) drums.

Store in a dry location away from sources of heat or ignition, and minimize dust.