

# Intra LUBE

# **Encapsulated lubricant**

#### **APPLICATIONS**

 Horizontal drilling in water-based fluids, produced water, and brine

#### **ADVANTAGES**

- Reduces friction, torque, and drag and increases ROP
- Minimizes environmental impact
- Is compatible with produced water
- Remains stable in brines with cation concentrations up to 20,000 mg/L
- Exhibits excellent tolerance for high pH and lime environments
- Resists cold environments up to -4 degF [-20 degC]

#### **LIMITATIONS**

 Suspended dust may present a dust explosion hazard Intra LUBE\* encapsulated lubricant provides lubrication to reduce torque and drag and increase ROP in water-based fluids, produced water, and brine horizontal drilling applications. This lubricant is composed of microsized capsules containing oil that remains held until sufficient operational pressure, friction, or shear break the encapsulation to release the oil on demand. Intra LUBE lubricant can help reduce downtime associated with stuck pipe and excessive torque in horizontal wells.

It is recommended to add this lubricant at 12 lb/bbl [5.4 kg/bbl], but drilling conditions will dictate the suitable concentration. Intra LUBE lubricant can be incorporated into the fluid system through the mud hopper without requiring special or additional mixing equipment.

The lubricant will not react with other fluid additives or cuttings and will not affect fluid rheology. Intra LUBE lubricant disperses and remains intact within the drilling fluid until needed. It remains stable within the drilling fluid for weeks with the use of biocide, enabling recycling and use in other wells.

## **Toxicity and handling**

Bioassay information is available on request. Handle as an industrial chemical, wearing protective equipment and observing the precautions as described in the SDS.

### Packaging and storage

Intra LUBE lubricant is packaged in 40-lb [18.1-kg] multiwall paper sacks or 1,100-lb [499-kg] big bags. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping, or stacking. Keep containers closed in a dry, cool, and well-ventilated place. Store in the original container. Avoid heat, flames, and other sources of ignition.

Typical Physical Properties		
Physical appearance	Yellow-brown powder	
Specific gravity	1.09	
Solubility in water	Slightly soluble	