

### **Description**

KAR-LUBE is modified vegetable oil used as a lubricant in all water-base drilling fluids.

### **Typical Properties**

Appearance : Yellow color liquid  
pH (1% solution) : 6.0  
Specific Gravity : 0.91 - 0.93  
Flash Point : >392 °F (200 °C)  
Pour Point : 14 °F (-10 °C)

### **Features and Benefits**

KAR-LUBE reduces torque and drag problems and prevents differential sticking by promoting the anti-friction characteristics of a drilling fluid in high angle, horizontal drilling situations

KAR-LUBE reduces the potential for bit and BHA balling.

KAR-LUBE contributes significantly to HTHP fluid loss control.

KAR-LUBE has no or minimal effect on rheological properties of drilling fluids.

KAR-LUBE is not sensitive to calcium, cement and carbonate contamination and compatible with common water-base fluid additives.

KAR-LUBE is thermally stable at temperatures in excess of 250 °F.

KAR-LUBE works over a wide range of pH levels and poses low foaming potential.

KAR-LUBE is biodegradable, non-toxic and non-polluting.

### **Application**

KAR-LUBE can be used as lubricant for highly deviated or horizontal wells to minimize torque, drag, differential sticking and bit and BHA balling problems.

### **Limitations**

KAR-LUBE may cause excess viscosity when added to drilling fluids of high MBT and solids content..

### **Treatment**

Normal treatment levels range from 0.5 to 2.0% by volume depending on the severity of torque and drag anticipated.

### **Packaging**

KAR-LUBE is supplied in 55 gal (208 liters) steel drums.