



#### Series 10-AG Synthetic Arctic Grade

# **Biodegradable Wireline Lubricant/Sealant Resistant to CO2 and H2S**

Series 10-AG (arctic grade) is formulated for use in the most extreme cold climates and is the most technologically advanced wireline lubricant/sealant available.

Series 10-AG is the ONLY cost effective, fully synthetic, biodegradable, non-toxic, arctic grade, CO2/H2S resistant, condensate and down hole chemical insoluble wireline lubricant/sealant on the market. Because Series 10-AG is insoluble in condensate and other down hole chemicals, its lower viscosity will still provide for reduced friction, wireline protective barrier, excellent sealing properties while at the same time allowing the operator to reduce head pressure and reduce amount of lubricant/sealant required on the job.

#### **Benefits**

- Biodegradable/non-toxic
- Extreme low temperature
- Insoluble in condensate, brine water, and down hole chemicals
- Low viscosity reduces pump head pressures
- Pour point -55oC (-67F)
- Resistant to CO2 in concentrations up to 40%
- Contains no silicone -Silicone oil is soluble in condensate and has very poor lubricating properties
- Excellent lubricity
- Reduces splattering and dripping at well location
- Prolongs wireline life expectancy
- Excellent thermal and oxidation stability
- Has no hazardous transportation limit and is not considered hazardous waste

### **Application**

Series 10-AG is recommended in extreme cold environments for braided wireline, cables, and wire rope where harsh CO2 and H2S corrosive conditions exist. Recommended for applications where ambient temperatures reach 50 C (-58F).



## Solubility

Toluene	Insoluble @ 77°F Slight Solubility @ 212°F
Cyclohexane	Insoluble @ 77°F Insoluble @ 167°F
Water	Insoluble @ 77°F Insoluble @ 210°F

## **Viscosity**

Viscosity Table		
ASTM D-446		
Given Temperature	cSt	
-40°F	25,894	
-30°F	9,722	
-20°F	6,740	
-10°F	3,385	
32°F	328	

# **Packaging Sizes**

55 Gallon drum 325 Gallon tote ISO Tank