

LIQUI-BEADS®

**TWO COMPONENTS FOR A TWO-WAY SOLUTION
FOR COIL TUBING OR DRILLING APPLICATIONS!**

LIQUI-BEADS® provides the combination of a liquid lubricant and the premium performance of Sun's own **LUBRA-GLIDE "CE" CO-POLYMER BEADS®** in a single product application. This combination gives you the tools to solve drag, friction, and torque issues immediately in a single drum application package.

Advantages or Benefits

- ◆ Reduces torque and drag associated with coil tubing drilling, logging, workover, or completion applications
- ◆ Suspended fine **LUBRA-GLIDE "CE" CO-POLYMER BEADS®** offer excellent mechanical lubrication. Fine grade beads average 247 microns or 65 mesh
- ◆ The premium liquid lubricant component has a high affinity for metal and bonds with these surfaces, reducing the coefficient of friction between the work string and well bore
- ◆ Non-aromatic components will not harm mud motors, MWD, or LWD tools
- ◆ $LC_{50} > 750,000$ at 2% concentration
- ◆ Bio-degradability index ~60% (28 days)

Physical Properties

- ◆ Form: Liquid with suspended Fine grade **LUBRA-GLIDE BEADS®**
- ◆ Color: Light Brown
- ◆ Density: 7.3 pounds per gallon
- ◆ Thermally stable: 400°F (204°C)
- ◆ Pour Point: < -20°F (<-28°C)
- ◆ Boiling Point: > 450°F (>232°C)
- ◆ Freezing Point: < -20°F (<-28°C)

Packaging

- ◆ 5-gallon (18.9 L) square pails ~ Excellent for Coil Tubing location work!
- ◆ 55-gallon drums and 275-gallon poly one way totes

Product Applications and Mixing Procedures

LIQUIBEADS® can be mixed directly into most mud systems via injection pump, pill form, or gravity feeding, directly over the mud pump suction.

Total system treatment:

- ◆ Mix slowly through metered additions while circulating.
- ◆ Mix up to 1% **LIQUI-BEADS®** evenly throughout the circulating volume to reduce torque and drag

Pills and Sweeps:

Spot pills, approximately 2% Liqui-Beads™ with sufficient volume to cover the BHA or problem area and/or build sections. After spotting a pill stop circulation, rotate and reciprocate the string for up to 10 minutes, allowing the product to saturate the zone before continuing operations.



SUN...The HOLE Solution Company!

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