**STICK-LESS 20®**

**Product Description**

STICK-LESS 20® lubricant is a solid bead suitable for use in water based and invert emulsion fluids and functions like tiny ball bearings in drilling fluids to reduce torque and drag. STICK-LESS 20 lubricant beads are made of high-grade annealed glass to resist fracturing, are chemically inert, and stable to 500°F (260°C). STICK-LESS 20 lubricant beads are suitable for all drilling systems and are particularly beneficial in lubricating the BHA, assisting in sliding operations or improving the placement of casing liners.

**Applications / Functions**

- Helps provide lubrication in water-based, oil-based and synthetic-based systems
- Helps reduce torque and drag
- Helps provide lubrication in deviated wellbores
- Helps minimize or prevent differential sticking

**Advantages**

- Chemically inert
- Insoluble in oil and water
- Stable to temperatures in excess of 500°F (260°C)

**Typical Properties**

- Appearance: Colorless beads
- Specific gravity: 2.4 to 2.65
- Micron range: 500 to 800
- Minimum compressive strength: >10000psi
- Free silica: 0

**Recommended Treatment**

Add 4-15 lb/bbl (11.4-42.8 kg/m³) to a slug and spot across the troublesome zone, or add 4-8 lb/bbl (11.4-17.1 kg/m³) of STICK-LESS 20 lubricant to the mud system.

**Packaging**

STICK-LESS 20 lubricant is packaged in 50-lb (22.7-kg) multi-wall sacks.