



**TOP-SIDEWINDER®** is a premium friction reducing and lubricating agent, designed for all drilling fluids. **TOP-SIDEWINDER®** does not promote foaming or aeration, like many other liquid lubricants.

**TOP-SIDEWINDER®** is compatible with any diesel or synthetic oils that may be present in the well working fluids, and provides enhanced lubricity in high solids and elevated temperatures.

**TOP-SIDEWINDER®** is highly effective in drilling fluid applications for improving lubricity and sliding operations which effectively alleviates torque and drag problems.

**BENEFITS:**

- Enhances sliding efficiency
- Reduces torque & drag, while motor drilling
- Coats the BHA and helps prevent bit & BHA balling
- ROP enhancer
- Effective in water or mud
- Non-Hydrocarbon
- Non-Aromatic & Non-Toxic
- Non-Flammable
- Reduces friction up to 80%

**APPLICATION:**

For lubricity improvement & torque & drag reduction:  
Add 2 to 3% by volume, to the active mud system.

Maintain system concentration, on a tourly basis for routine system maintenance and as new hole is drilled.

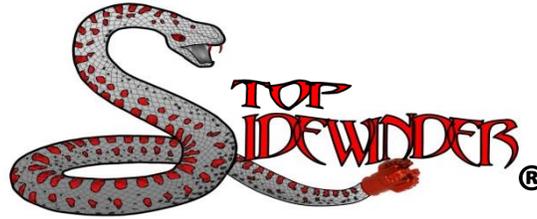
**BATCH MIXES:**

May be batch mixed in water or mud for specific lubricating applications then swept or spotted thru the well bore.

Batch mixes should include 3.0% to 8.0% **TOP-SIDEWINDER®** and swept thru the wellbore and/or spotted at problem zones for maximum effects.

**PACKAGING:**

**TOP-SIDEWINDER®** is packaged in 55 gallon drums. There are 4 drums per pallet. Each pallet unit is banded and shrink wrapped for better transportation handling. Also available in 275 gallon "one way" poly totes.



## GENERAL RECOMMENDATIONS:

### System Concentration:

Mix 2% - 3% by volume **TOP-SIDEWINDER**® in the active mud in the suction pit.

(ex. 8 ¾" hole to 12,000' = 893 bbls hole volume + 500 bbls active surface volume = total 1393 bbls. 2% addition = 21.5 drums **TOP-SIDEWINDER**®)

### Sweep Additions:

Mix 5% - 8% by volume **TOP-SIDEWINDER**® in the slugging tank with active mud. Pump 15 - 30 bbl sweeps every stand or as needed to total 2% by volume in the active system at TD.

### Prior to Running Casing:

1. Mix 80 - 100 bbls of 5% - 8% by volume **TOP-SIDEWINDER**®.
2. Spot full volume **TOP-SIDEWINDER**® pill half way into the lateral for horizontal wells, or open hole for vertical wells.

Call for a "real time" recommendation @ 1-888-783-0036.