



Drilling Fluids, Inc.

**DESCRIPTION**

**USES**

**BENEFITS**

**TREATMENT**

**FUNCTION**

**TYPICAL PHYSICAL PROPERTIES**

**SAFE HANDLING RECOMMENDATIONS**

**PACKAGING**

# NIS

**NIS** is a liquid concentrate containing a long chain fatty acid compound reacted with a surfactant that is used to free stuck pipe.

When mixed with oil and placed opposite the zone of stuck pipe, **NIS** penetrates the wall cake to equalize pressures and provides lubricity to free the pipe. **NIS** is recommended for freeing differentially stuck pipe in waterbase drilling fluids when an unweighted spotting fluid can be safely used. Building a weighted spotting fluid with **NIS** requires additional materials. See GEO Oil Base Mud handbook.

**NIS** provides a means of physically reducing the contact between the wall cake and the drilling tools in areas of significant filtration. These areas are subject to differential sticking, which is related to the difference between hydrostatic pressure and formation pressure. A larger contact area results in greater total pressure differential, which must be overcome to move the pipe.

One to two gallons of **NIS** should be added to each barrel of oil that is required to cover the zone of stuck pipe. Additional volume should be used to allow movement of the "spot" at a very slow rate for several hours.

**NIS** creates an invert emulsion, attracting the water from the wall cake into the spotting fluid. The reduction in volume of the wall cake reduces the area of contact. In addition, **NIS** acts as a lubricant by providing a surfactant coating between the drill pipe and the well bore.

Physical Appearance.....amber liquid  
Specific Gravity.....1.036  
Pour point.....50°F  
Flash point [ASTM D56].....200+°F

Utilize normal precautions for employee protection when handling chemical products. Use of appropriate respirator, gloves, goggles, and apron is recommended for employee comfort and protection. See Material Safety Data Sheet [MSDS] for this product prior to use.

**Caution:** Do not store or use around heat, sparks, or open flames. Do not reuse empty containers.

**NIS** is packaged in 5 gal cans and 55 gal non-returnable drums.

**GEO Drilling Fluids, Inc.**

1431 Union Avenue  
Bakersfield, CA 93305

**1-800-GETSGEO**

(661)325-5919

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For more info visit:

**geodf.com**





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### TYPICAL PHYSICAL PROPERTIES

### SAFE HANDLING RECOMMENDATIONS

### PACKAGING

# SUPER GEL

Appearance.....tan powder  
Hygroscopic.....no pH  
in water.....neutral Bulk  
density......56 pcf Specific  
Gravity.....2.6

Utilize normal precautions for employee protection chemical products. Use of appropriate equipment is recommended for employee comfort and protection. See Material Safety Data Sheet [MSDS] for this product prior to use.

**SUPER GEL** is packaged in 50 pound multiwall bags.

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