



PRODUCT BULLETIN

ENVIROSPEC ES

Environmentally Safe Spotting Fluid / Lubricant

General Description

ENVIROSPEC ES™ is a biodegradable, synthetic hydrocarbon blend formulated into a liquid concentrate. It is designed to perform as a spotting fluid pill to free stuck pipe. The product is easily field blended into an invert emulsion with several key components (water, salt, lime, barite) and pumped down hole over the interval of stuck pipe. **ENVIROSPEC ES™** combines unique emulsifiers with special mud cake cracking and penetrating agents. These characteristics make **ENVIROSPEC ES™** very effective in coating native and commercial clays, reducing further water hydration, and creating a partial dehydration of the wall cake. As the wall cake dehydrates and cracks, it lowers the cohesive bond on the drill pipe. The lubricating properties of the **ENVIROSPEC ES™** work to provide a low resistance zone around the pipe, greatly reducing the force needed to pull the pipe free.

Advantages

- Concentrate form, small rig space required for on-site storage of product.
- Quick and easy to blend on rig.
- Biodegradable blend components.
- 9 ppg to 18 ppg blends in a single package.
- Incorporates easily into water-based mud systems.

Physical Properties

Appearance	Amber Liquid
Specific Gravity	0.85 to 0.87 g/cm ³
Density	7.2 lb/gal (typical)
Pour Point	~ 0/ F
Flash Point	> 300/F

Application Guide

ENVIROSPEC ES™ is functional across a wide range of drilling mud systems and is capable of freeing stuck pipe in very difficult hole conditions where the pipe is differentially stuck. The product will not function if there is a mechanical reason for stuck pipe. Each application should be addressed individually and consideration given to the specific well bore conditions that may have been present at the time the drill pipe became stuck. **ENVIROSPEC ES™** is specially formulated to free stuck pipe in situations where differential sticking has created a zone of high torque and drag, resulting in the drill pipe becoming stuck and can no longer rotate or move up or down in the well bore. To blend a weighted spotting fluid pill please refer to the **ENVIROSPEC ES™** Blend Guide for detailed instructions. Spot pills of 8 ppg to 18 ppg are listed along with a simple step-by-step blend procedure.

Handling

Observe warning label on containers. Normal precautions for industrial chemicals apply.