



DRILLING FLUID PRODUCTS

TECHNICAL INFORMATION

IM-SPOT™ SPOTTING FLUID

Stuck Pipe Additive for Oil based Mud Drilling

IM-SPOT is proprietary blend of additives designed to formulate weighted spotting fluids to free stuck drill pipe. IM-SPOT is a blend of surfactants, emulsifiers, lubricants, oil-wetting agents and clays.

Product Specifications:

| Property | Specification |
|----------------------------|-----------------------|
| Specific Gravity (at 25°C) | 0.9 – 0.94 |
| Flash point (°C) | > 60°C |
| Appearance | Viscous opaque liquid |

Functions:

IM-SPOT has the following functions:

- Can be effectively used to make spotting fluids in all types of base oils such as crude, diesel and mineral oils.
- Effectively forms stable water in oil emulsion which allows for filter cake penetration equalizing the differential pressure holding the drill string against the annulus.
- It provides the rheological properties required to ensure suspension of weighting materials
- Is utilized to free stuck pipe where a weighted spotting fluid is required, although it performs effectively in un-weighted applications.

Recommended Treatment:

The recommended formulations per 100 bbls are tabulated below. The oil to water ratio is adjusted upwards with increased fluid density:

| DENSITY (lbs/gallon) | IM-SPOT (Drums) | OIL (bbl) | WATER (bbl) | BARITE (25 kg sack) |
|-------------------------|--------------------|--------------|----------------|------------------------|
| 8.0 | 8 | 64 | 27 | 67 |
| 10.0 | 8 | 58 | 26 | 253 |
| 12.0 | 8 | 54 | 22 | 454 |
| 14.0 | 8 | 49 | 21 | 634 |
| 16.0 | 8 | 51 | 11 | 844 |
| 18.0 | 8 | 44 | 10 | 1034 |

Packaging:

Packaged in 55 US Gallon (208 liter) steel drums.

Legislation and Handling Recommendations:

Regulatory agencies classify IM-SPOT as a combustible liquid (UN 1993). Refer to the Material Safety Data Sheet (MSDS) for the product prior to use.

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