

## HiRate™ MAXX 3250 Liquid Friction Reducer



Delivering lower pumping pressures, higher pump rates with shorter pump times with far less product in bad water.

Innospec Oilfield Services (OFS) offers a variety of solutions to Slickwater fracturing systems. Slickwater stimulation depends largely on the ability to reduce pipe and perforation friction, increase pump rates and transport proppant. Slickwater treatments have evolved to include high portions of high salinity, produced water in the treating water, rendering most friction reducers much less effective or even ineffective, especially in the presence of higher levels of iron. To resolve the existing water incompatibility limitation, OFS offers an affordable, high efficiency FR that defines new possibilities in slickwater fracturing.

**HiRate MAXX 3250, is our newest brine tolerant FR that incorporate proprietary chemistry to extend friction reduction efficiency**

OFS' HiRate MAXX 1250 is a suspension of high efficiency friction reducer particles disbursed in a carrier solvent carrier. The product is specifically designed to improved friction reduction efficiency with ultra-fast inversion in poor quality mix water. Even in these high TDS waters, the product is easy to mix and meter, and the HiRate MAXX 3250 - unlike conventional emulsion-based FRs—is based on a higher polymer activity, allowing less product per stage; thereby saving operators time, money, and crucial well-site space. HiRate MAXX 3250 has a better pressure to rate ratio than the conventional FR's, especially in high TDS waters, allowing higher treating rates, with more aggressive sand ramps, to save both time and water.

### Product Application

HiRate MAXX 1250 is an anionic, high molecular weight polyacrylamide performing in high TDS water but at times, can be used in moderate TDS waters having higher than normal levels of iron to provide cost efficient friction reduction. The typical loadings range from 0.25 to 1.0 gpt, creating less chemical pump rate dependency in these higher TDS water environments.

### Features

- Exhibits excellent high TDS water tolerance, offering less pressure at lower loadings compared to conventional emulsion-based
- Exhibits excellent tolerance to higher iron levels in the frac water, enabling lower loadings compared to conventional emulsion-based products
- Operationally simplistic using existing chemical additive pumps and not requiring any extra equipment on location

### Technical Properties

<b>Appearance</b>	Opaque, tan liquid
<b>Density (lb/gal)</b>	8.22
<b>pH</b>	N/A
<b>Flash Point (Close Cup)</b>	>200°F
<b>Specific Gravity</b>	1.072

### Storage and Handling

Store in a dry, cool and well-ventilated area, away from incompatible materials. Available in 275 gal totes or in bulk. Always wear appropriate protective equipment. Do not get in eyes or on skin or clothing.

## **About Innospec Oilfield Services (IOFS)**

An integral part of Innospec (NASDAQ: IOSP), Innospec Oilfield Services (OFS) is headquartered in Englewood, Colorado. The company's presence in North America is a highly focused one: Delivering the best possible chemical technologies and superior efficiencies along with the superior level of service vital to support drilling, completions, and production projects in all major U.S. oil and gas basins.

Founded in 1938, Innospec Inc. has evolved into a leading international specialty chemicals company with approximately 2000 employees operating in 23 countries. Innospec has major regional centers in the U.S., UK and Singapore, with production plants located in countries including the U.S., UK, France, Germany, Italy, Spain and the Philippines.

Innospec manufactures and supplies a wide range of specialty chemicals to markets in the Americas, Europe, the Middle East, Africa, and Asia-Pacific. In addition to designing, formulating, and producing oilfield chemicals for drilling, completions, and production applications, the company's other business segments are Fuel Specialties, Performance Chemicals and Octane Additives.

## **Contact Innospec Oilfield Services**

For more information on how the Innospec Oilfield Services team can work for you, please contact your regional OFS sales office, or visit us online at [www.innospecinc.com](http://www.innospecinc.com).