DriFlow™ 12 Product Data Sheet

Application

DriFlow™ 12 is an advanced dry state polyacrylamide designed to provide enhanced rheological properties and fluid friction reduction in high brine applications. For stimulation operations, DriFlow™ 12 should be continuously added to fluid under dynamic conditions with low shear. Product loading varies depending on water quality, proppant concentration and reservoir characteristics. Contact info@stimchems.com for additional application guidance and usage optimization.

Product Specifications

Form @ 70°F:	Granular Solid
Color:	White
Charge:	Anionic
Freeze Point:	N/A
Hardness Range:	>12,000 mg/L
pH (5 g/L solution):	6.0 – 8.0
Bulk Density (kg/m^3):	600 – 900
Solubility:	Water Soluble Brine Soluble Oil Insoluble

Dry to Liquid Conversion

GPT	PPT, HVFR	PPT, Slickwater
0.25	0.68	0.43
0.50	1.35	0.85
1.00	2.70	1.70
1.50	4.05	2.55
2.00	5.40	3.40

The PPT to GPT ratio is calculated using normal concentrations of active polymer (FR) in both HVFR and Slickwater emulsion friction reducers.

HVFRs typically contain 2.7 pounds of FR per gallon of emulsion and Slickwater FRs typically contain 1.7 pounds of FR per gallon of emulsion.

Fann 35 Readings @ 300 RPM

Produced Water		Viscosity Range (cP)		
Hardness (ppm)	TDS (ppm)	FR Loading		
		1.0 GPT	2.0 GPT	3.0 GPT
18,450	154k	2.5 – 3.0	3.0 – 3.5	4.0 – 4.5
9,225	77k	2.0	2.5 – 3.0	3.5
4,613	38.5k	1.5 – 2.0	2.5 – 3.0	4.0

Friction Reduction Capability

DriFlow™ 12 exhibits a maximum friction reduction at a loading that is dependent on water quality, reservoir characteristics and completions design. The friction flow loop below serves as a baseline for expected friction reduction in a high brine application. Under wellbore conditions, a higher loading may be needed to achieve maximum friction reduction capability.

Note: *If maximum friction reduction is reached, increasing loading beyond this point may lead to unintended viscosifying that results in pressure build up, counteracting the expected pressure relief from friction reduction.*