

TRUSLICK A



PRODUCT DESCRIPTION

TruSlick A is a synthetic high molecular weight anionic polyacrylamide copolymer supplied in an easy-to-handle, liquid emulsion form. **TruSlick A** employs the latest advances in emulsion technology to deliver market leading friction reduction and sand placement performance in slickwater fracturing fluids. **TruSlick A** has better proppant placement than any other Anionic emulsion FR on the market. It has been run in the field in as heavy as 6# per gallon sand.

APPLICATION

TruSlick A is a high viscosity anionic synthetic polymer that is effective as a friction reducer in fresh water and various brines and in KCL, and has been widely used.

- As a friction reducer for fresh water & brine applications
 - Product is used in fresh water to 150K TDS
- As a thickener for fresh water or brines in completions or work over operations
 - · Superior, long term suspension stability
 - Rapid polymer hydration
 - Suspension flows readily, even in severe winter conditions
 - Compatible with anionic FR and nonionic additives

TYPICAL DOSAGE

Dosage requirements for TruSlick A range from 0.25 to 2.0 gallons per 1,000 gallons of frac fluid.

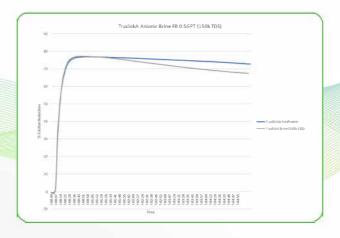
COMPATIBILITY

TruSlick A is compatible with all anionic and nonionic additives that may be present in the frac fluid.



TYPICAL PROPERTIES

Appearance	Opaque Liquid
Ionic Character	Anionic
Density	8.8 lb./gal.
Storage Temperature	32 - 95 °F
Pour Point	-33°C (-27.4 °F)



PRODUCT PERFORMANCE

TRUSLICK C VS INDUSTRY LEADING EMULSION FR A

Sand bed growth rate:

TruSlickC: 0.273 mm/s; FR A: 0.466 mm/s

Sand settling rate:

TruSlickC: 3.97 mm/s; FR A: 6.78 mm/s (TruSlick C is 60% of FR A)

Sand settling predictor: average reciprocal viscosity

1 gpt TruSlickC: 0.14 1 gpt FR A: 0.21

Based on rheology, settling velocity in TruSlickC is predicted to be 67% of that in FR A

TruSlickC Fluid Break Testing

TruSlickC	Water	Test Time	Water Bath Temp	Initial Baseline Viscosity	Post- Batch Viscosity	Post- Bath w/0.5# raw APS
1 gpt	Тар	2 hrs	160 F	3.6 cP	1.1 cP	1.0 cP
2 gpt	Тар	2 hrs	160 F	7.6 cP	0.9 cP	0.9 cP
3 gpt	Тар	2 hrs	160 F	11.1 cP	0.9 cP	0.9 cP
4 gpt	Тар	2 hrs	160 F	14.2 cP	0.9 cP	0.9 cP