

TRUSLICK C



PRODUCT DESCRIPTION

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

APPLICATION

TruSlick C is a broad spectrum, high performance cationic friction reducer recommended for use where compatibility with other cationic fluid additives is required. **TruSlick C** has been specially formulated to deliver superior performance in all hydraulic fracturing operations. This includes high TDS brines containing significant levels of divalent ions (Ca^{2+} , Mg^{2+} , etc.), in addition to high levels of chlorides, which may arise when using produced water.

TYPICAL DOSAGE

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

COMPATIBILITY

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

TYPICAL PROPERTIES

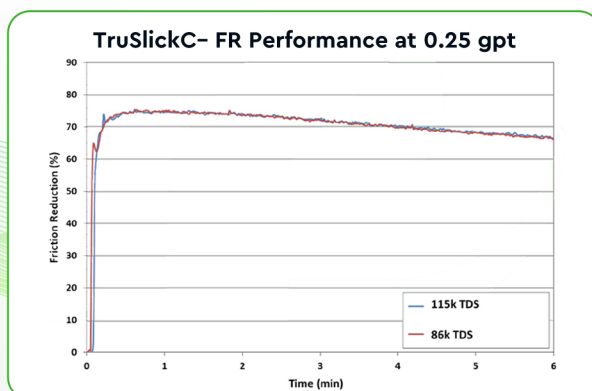
Appearance	Opaque Liquid
Ionic Character	Cationic
Density	8.8 lb./gal.
Storage Temperature	32 - 95 °F
Pour Point	-33°C (-27.4 °F)

HEALTH AND SAFETY

TRUSLICK C exhibits a low order of toxicity. However, precautions should be taken to avoid inhalation, ingestion, or contact with skin or eyes.

SPILLS: Polymer spills are extremely slippery, and therefore hazardous, and should be addressed immediately. An absorbent material should be applied to the spill, swept up, and disposed of according to local, state, or federal regulations. The area should then be washed down with a bleach solution.

DO NOT ADD WATER TO THE SPILL.



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	Tap	2 hrs	160 F	3.6 cP	1.1 cP	1.0 cP
2 gpt	Tap	2 hrs	160 F	7.6 cP	0.9 cP	0.9 cP
3 gpt	Tap	2 hrs	160 F	11.1 cP	0.9 cP	0.9 cP
4 gpt	Tap	2 hrs	160 F	14.2 cP	0.9 cP	0.9 cP