



Texan Minerals and Chemicals



Product Data Sheet

TEXAN CATIONIC DPAM

Cationic Friction Reducer

Description

TEXAN CATIONIC DPAM is a premium Cationic water-soluble polyacrylamide friction reducer (FR) in dry powder form which is suitable to be used in a Dry Hydration Unit on the fly as well as in a 2% concentrate form where significant multivalents are present. TEXAN CATIONIC DPAM is APE (alkyl phenol ethoxylates) and NPE (nonyl phenol ethoxylates) free, thus making it environmentally friendly. Addition of small amounts, typically 0.65 – 2.60 ppt (pounds of powder per thousand gallons) to water based high brine frac fluids can deliver friction reduction (pressure loss) of over 70% in a short period of time.

Applications

TEXAN CATIONIC DPAM has been specifically optimized for use as a high brine high Multivalent (Ca, Fe, Sr) friction reducer, which can be used directly as fine dry powder form, concentrate form, or dispersed in oil with excellent hydration properties. It is compatible with common non-ionic and cationic stimulation additives such as surfactants, scale inhibitors, biocides, and clay stabilizers.

Properties

Form	White Powder
Smell	Odorless
Mesh Size	100
Molecular Weight	10-13 (million)
Charge	28-32 (Cationic)
Density	$\geq 0.60 \text{ g/cm}^3$
Insoluble Content	$\leq 0.5\%$
See Appendix A for water Salt Conditions	

14090 Southwest Freeway, Suite 310, Sugar Land, TX 77478

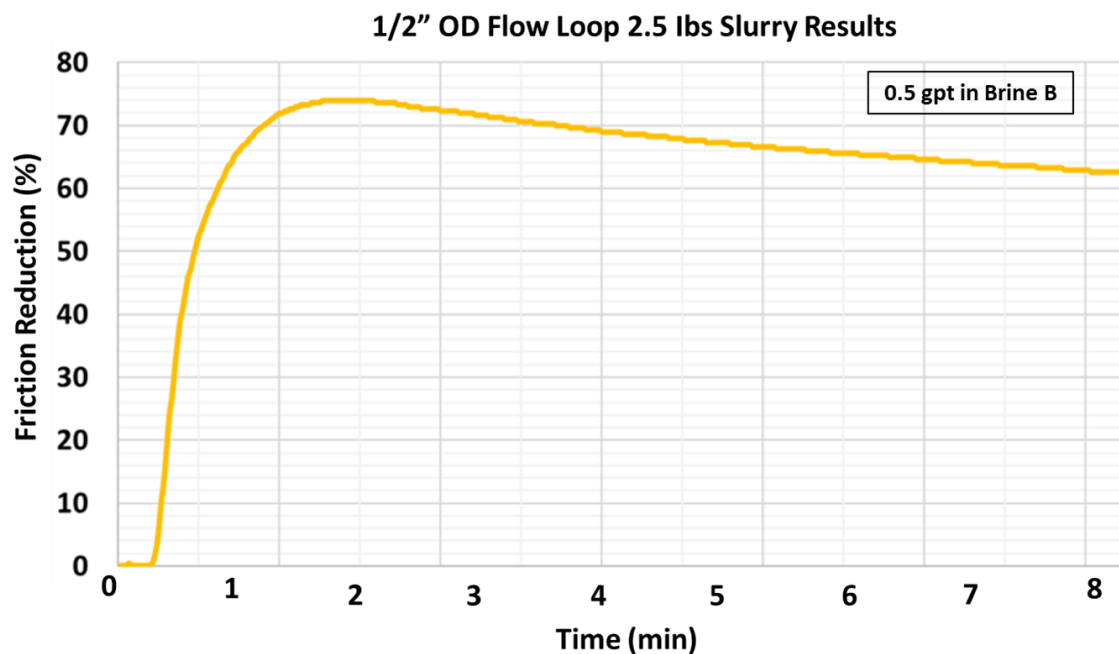
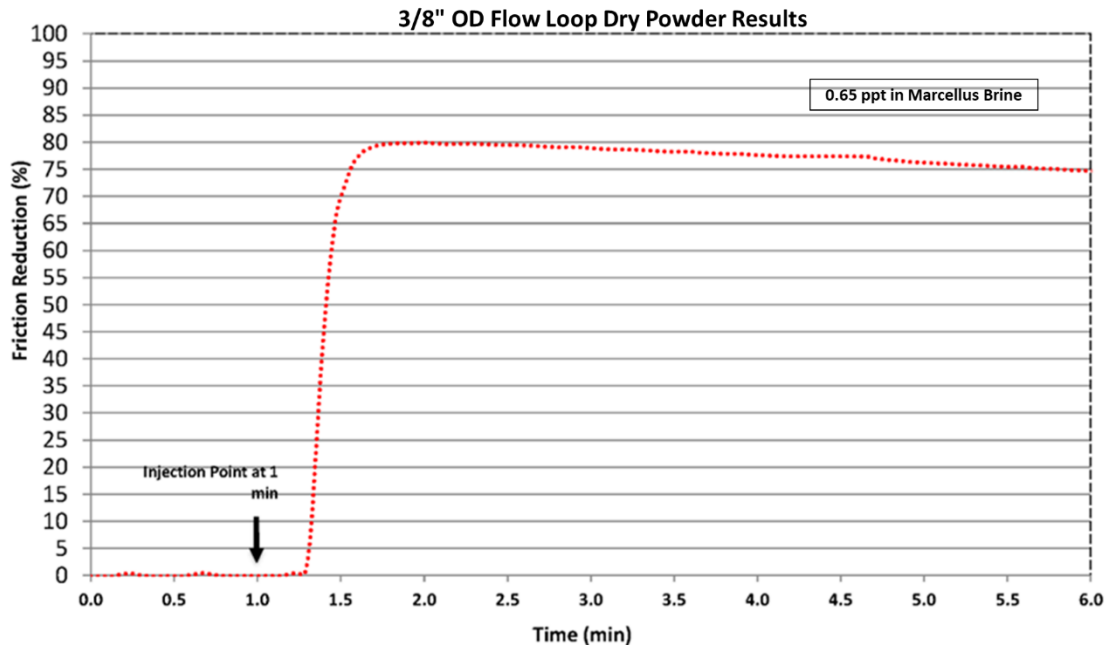
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The above graph shows that Texan Cationic DPAM Slurry 2.5 lb. loading achieves around 73% Friction reduction in less than a minute of injection and exhibits good shear resistance under extremely harsh water conditions with good amounts of Divalent Cations, high specific gravity and low pH level.

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APPENDIX A:

WATER COMPOSITION

	Ca ²⁺ ml/L	Mg ²⁺ ml/L	Na ⁺ ml/L	Cl ⁻ ml/L	Fe ²⁺ ml/L	TDS ml/L
MARCELLUS BRINE	21,442	2,916	37,995	116,363	189	150K
BRINE B	29,900	3,637	78,360	186,619	68	290K