



FRICTION REDUCER



ALPHA-26D

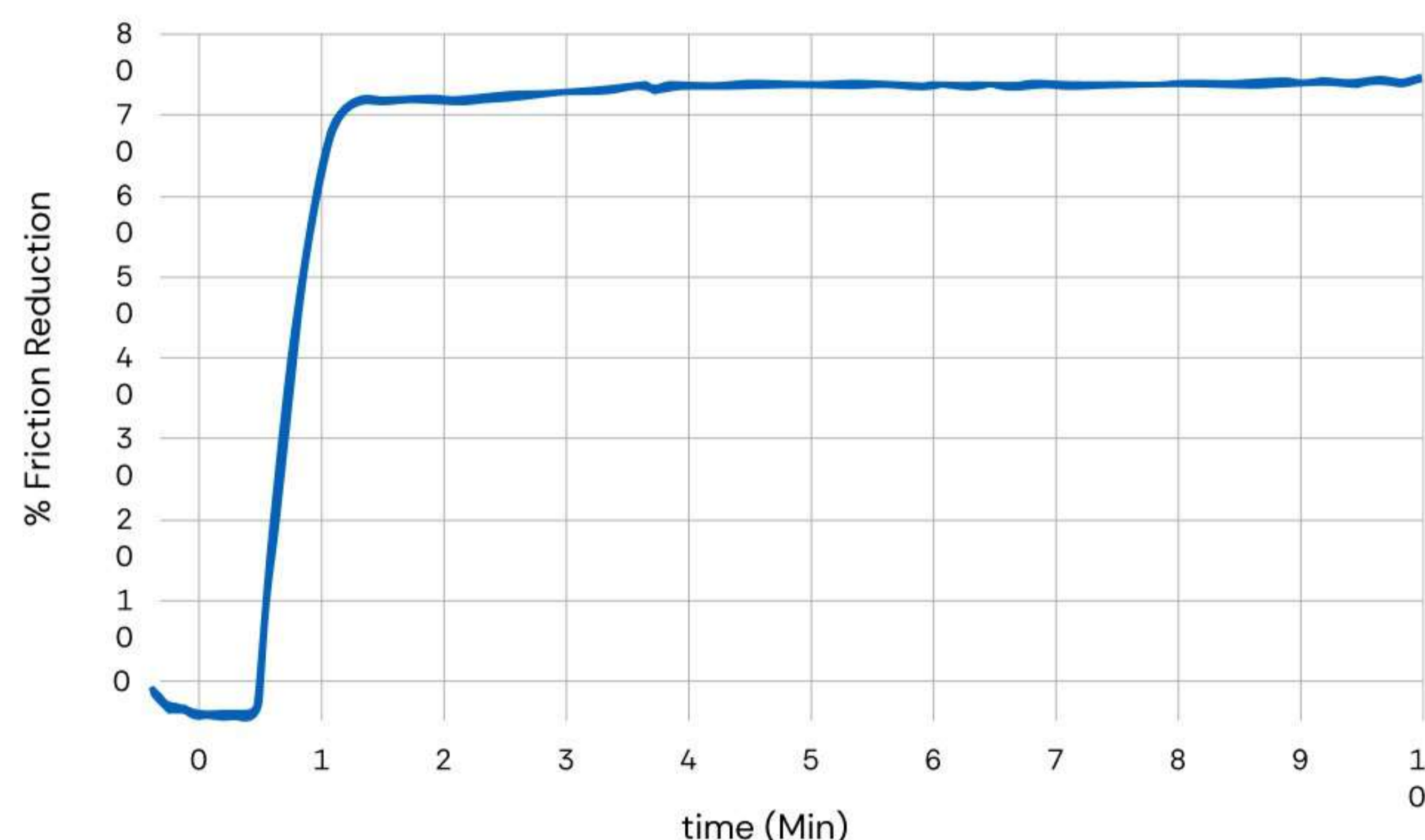
Description

Alpha Friction Reducer 26D is a fast-drying, low- to high-brine-tolerant anionic dry friction reducer designed for use in hydraulic fracturing. Alpha Friction Reducer generates high viscosity in all water sources, with improved viscosity relative to most commercially available sources. This allows hydraulic fracturing operations to place sand with much more aggressive increases in proppant loading and complete stages faster. Alpha Friction Reducer 26D reaches 90% of hydration capacity within 30 seconds in waters up to 150,000 TDS.

Application

Spikes in pressure during hydraulic fracturing is a costly issue. Problems include:

1. Screenouts and necessary flushing out proppant from the well to continue
2. Failure to place proppant according to design, reducing designed reservoir stimulation
3. Safety retesting on surface and downhole equipment for pressure resilience
4. Increased wear on surface pumping equipment



Friction reduction results for Alpha Friction Reducer™ 26D in 132,500 ppm TDS water, including 5,000 ppm of calcium, at 2 PPT loading.

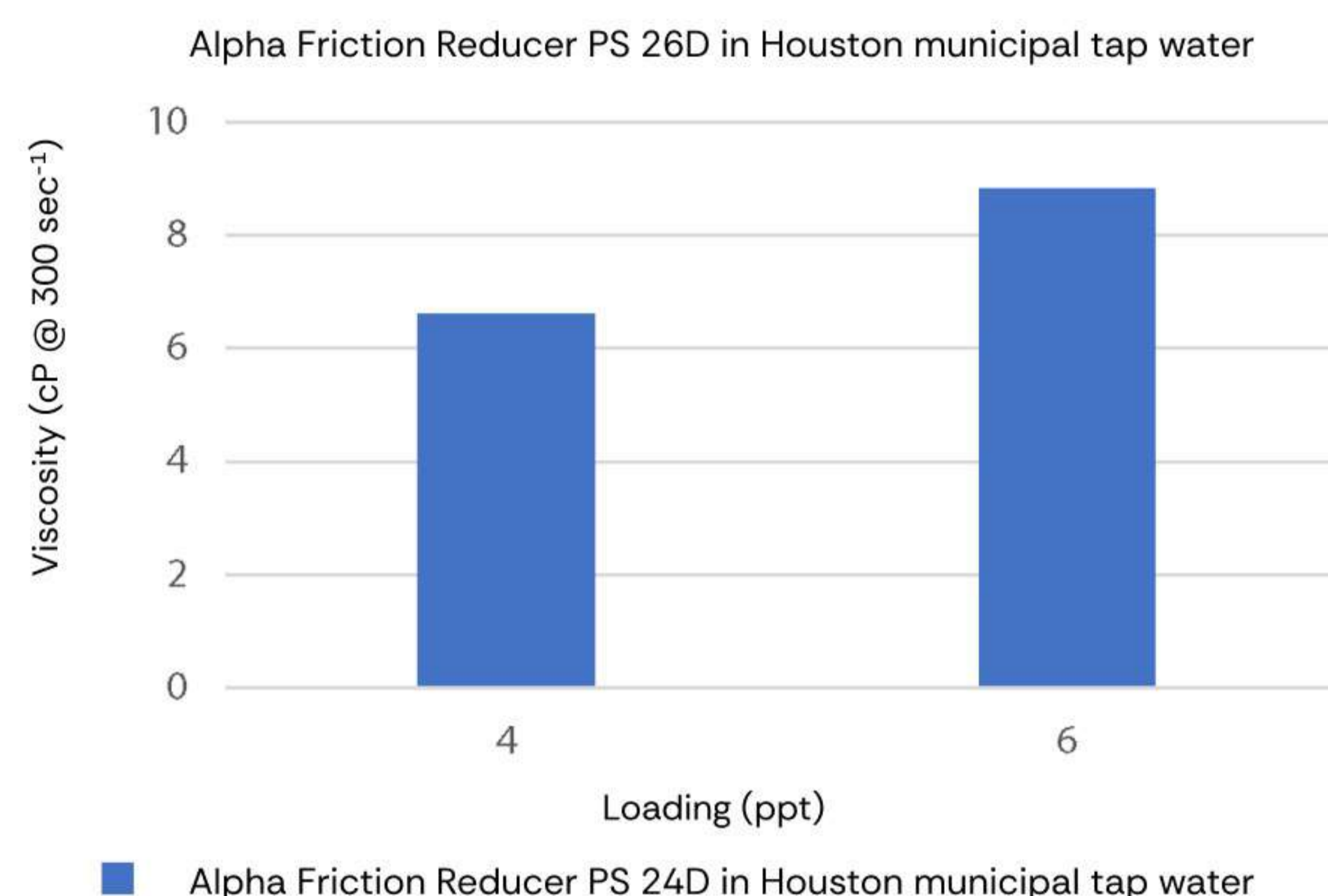
Properties

Color	White to Light Tan
Form	Opaque Solid
Bulk Density	40-45 lbs/ 3
Flash Point	>200°F
Freezing Point	NA-solid
Ionic Charge	Anionic
Water Range	Fresh – 180K TDS1
Solubility	Water soluble
Angle of Repose	45.5°

132K ppm TDS of complex brine water compatibility has been tested for Alpha 26D, and 180K ppm TDS in NaCl. A flow loop test using source waters and normally used additives is recommended prior to operations to ensure performance.

Additional Information

Alpha Friction Reducer 26D is not DOT regulated, is suitable for on-the-fly frac applications and frac applications requiring rapid hydration times. It is compatible with all non-ionic, anionic, and low-dosage cationic additives (such as those used for biocide applications).



Alpha Friction Reducer 26D viscosity in fresh water (500 TDS) in blue. Measurements taken on a Chandler 5550 with an R1B1 configuration after 5 minutes of hydration.

Alpha Friction Reducer 26D has been tested in and provides higher viscosity profiles in water sources up to 132,000 ppm TDS, including high levels of calcium and divalent loadings up to 5,000 ppm. It provides reduction of friction in waters up to 200,000 ppm. High concentrations of calcium and other di- and trivalent cations will reduce any anionic friction reducer's performance, however, and specific water source testing is recommended.

Alpha Friction Reducer 26D is a dry powder friction reducer, which requires certain precautions before executing a frac job on location. Normal operations involving dry friction reducers use pre-hydration through a dry-addition, calibrated powder blender for fracturing applications for dry add units. Care must be taken to not expose Alpha 26D to excess water before being pumped before use. Alpha 26D can be delivered to location via bulk containers, or super sacks. Please contact Alpha Energy Technologies for other container size options and samples.

Reach out to your AET account manager today for more information, samples, and other high-performance products.

