

PAFR-708Friction Reducer
High Viscosity Friction Reducer – Fresh Water**Product Description**

PAFR-708 functions as an anionic, slurry-based friction reducer with a substantial concentration (55%). Its purpose is to be seamlessly incorporated during hydraulic fracturing operations to mitigate friction pressures. PAFR-708 is a high molecular weight polyacrylamide with significant charge density, tailored for implementation in brines ranging from fresh to high salinity. The recommended optimal dosage varies, ranging from 0.2 gpt (0.2L/m³) in fresh brines to 1.0 gpt (1.0L/m³) in medium to highly saline brines. Beyond its role in reducing pipe friction during fracturing treatments, PAFR-708 facilitates viscosity development within freshwater fracturing fluids. This leads to several benefits, including enhanced proppant transport, operational ease due to reduced water usage and increased proppant concentration, as well as streamlined logistics with fewer chemicals required on-site. For applications necessitating viscosity enhancement in freshwater environments, the recommended optimal dose rate of PAFR-708 ranges from 2.0-4.0 gpt (2.0-4.0 L/m³).

Features

- Unique slurry technology designed to handle fresh to high brine levels
- Effective at low concentrations 0.2-4.0 gpt (0.2-4.0 L/m³) reducing the friction pressures by 75%
- Easily dispersed in water under low shear conditions
- Rapid hydration allows for mixing on-the-fly operations
- Allows increased pump rates at lower treating pressures

Application and Usage

PAFR-708 additive is added directly to the stimulation fluid (on-the-fly application). The typical application range is from 0.2-4.0 gpt (0.2-4.0 L/m³).

Physical Properties

Appearance	Liquid
Color	Tan
Ionic Character	Anionic
Solubility	Soluble in Water
pH	7.24 (0.5% Solution in DI Water)

Limitations and Incompatibilities

Lab testing should be conducted when used with cationic additives.

Safety and Handling

SingleTrack Solutions can provide Safety Data Sheets (SDS), which detail the precautions necessary to handle, apply or store this product.

Availability

PAFR-708 is available in totes, and bulk.

Product Performance

Friction Flow Loop Data – Fresh Water

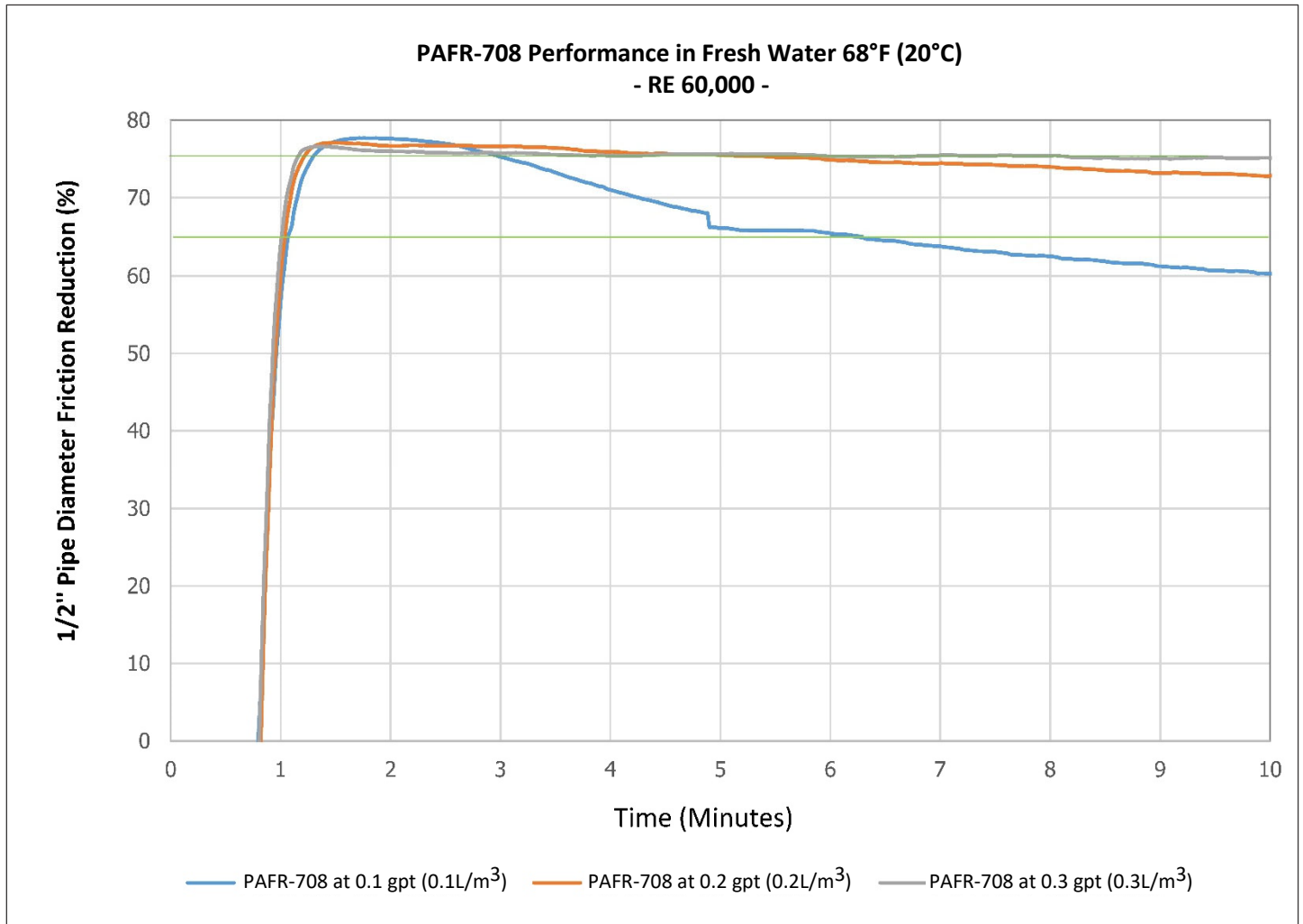


Figure 1. PAFR-708 Percent Friction Reduction in Fresh Water
(Ametek Chandler Friction Flow Loop Model 6500)

Rheology Data – Fresh Water

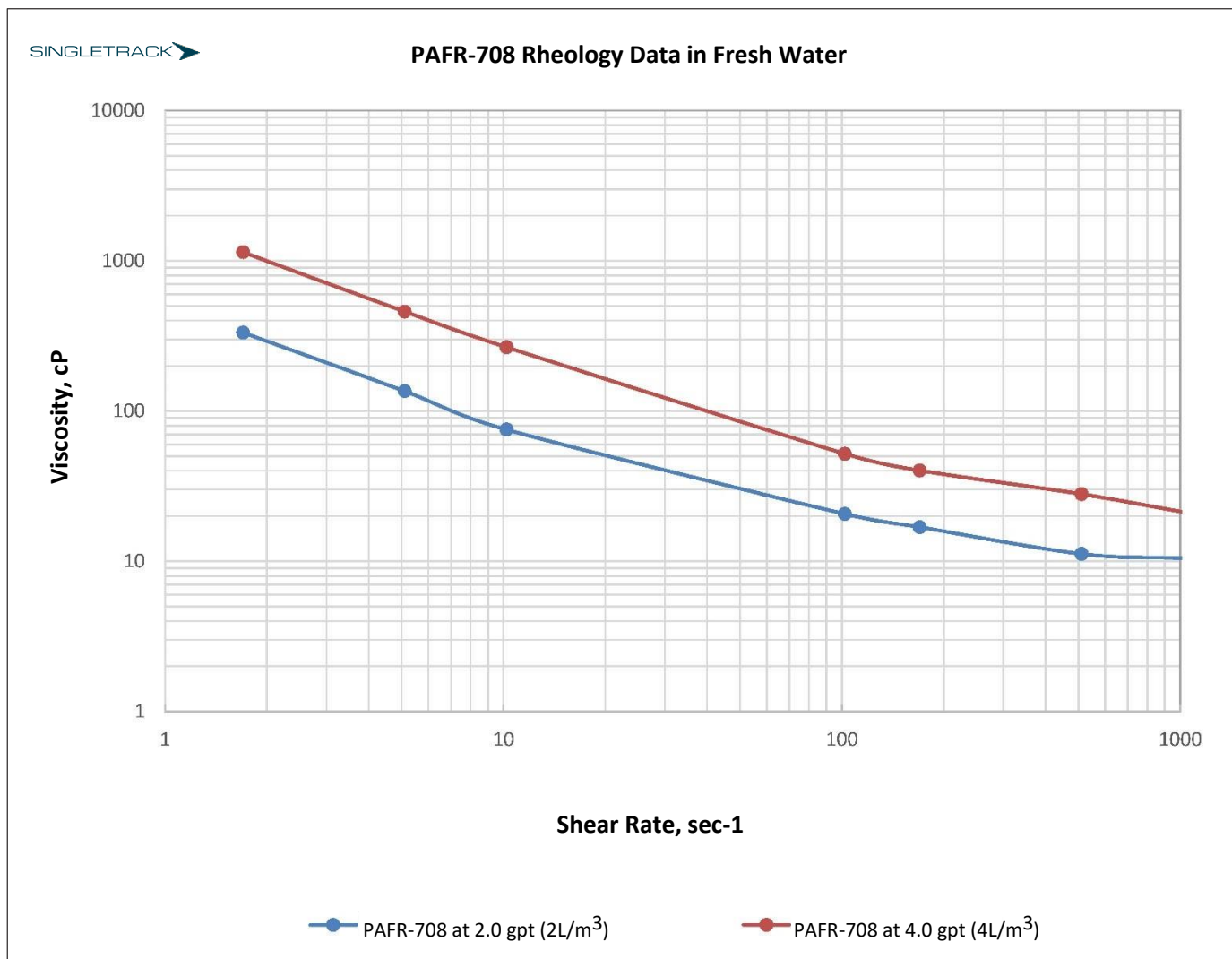


Figure 2. PAFR-708 Rheology Data in Fresh Water
(Ofite 900 Model R1B1 Configuration)

Viscoelastic Data (Storage G' and Loss G'' Modulus) – Fresh Water

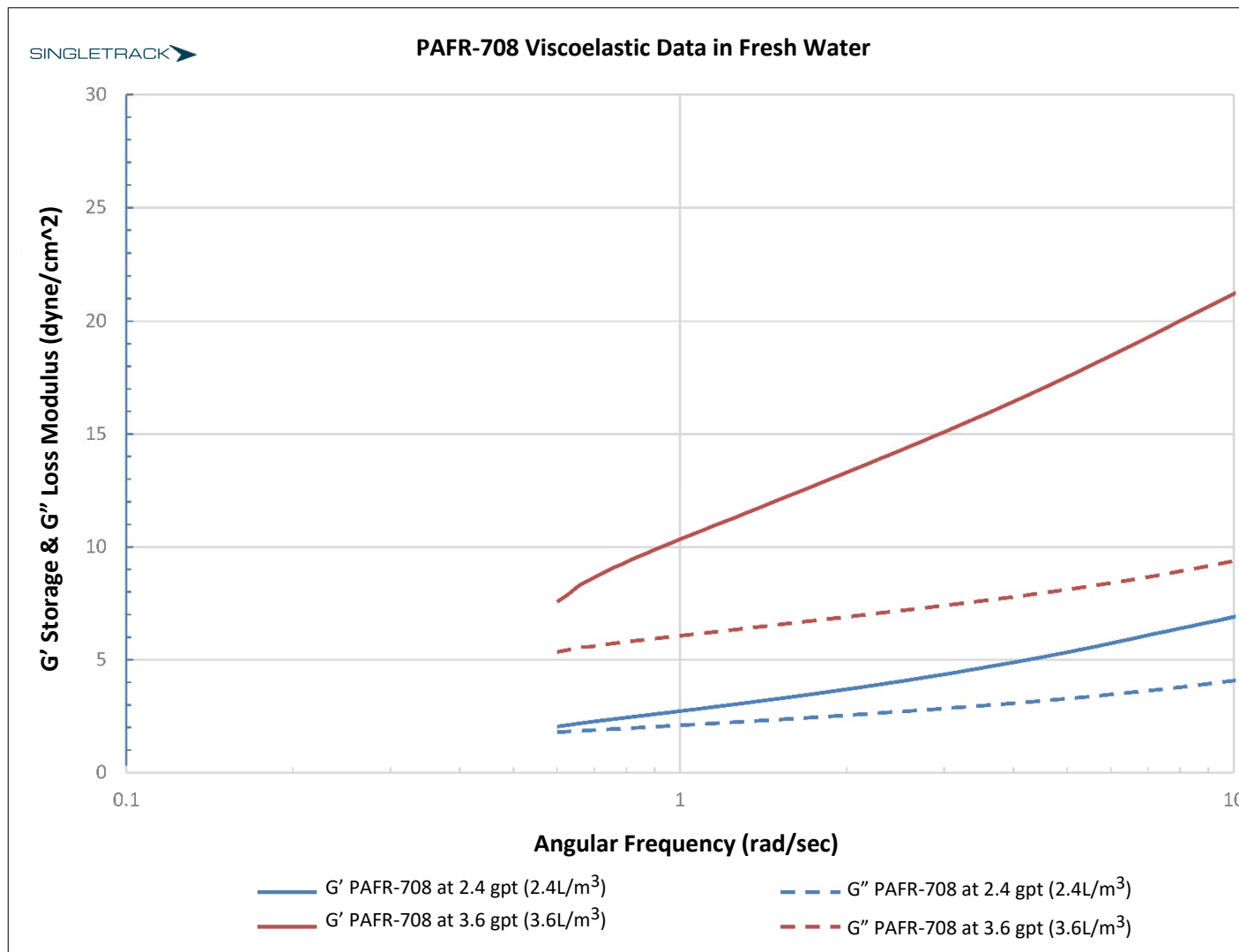


Figure 3. PAFR-708 Viscoelastic Data in Fresh Water
(Oscillatory Rheometer Model Discovery HR-2 Hybrid)