



## PRODUCT DATA

### EnerFrac™ FR-1005

Friction Reducer

#### Description:

EnerFrac™ FR-1005 is the next generation, patent pending friction reducer that is an ultra-high molecular weight, salt tolerant polymer engineered to provide premium friction reduction. The unique polymer is more effective pound for pound than competitive products, providing better or equivalent drag reduction. This polymer optimization reduces formation damage potential. EnerFrac™ FR-1005 was designed for higher salt and/or return frac fluid systems, providing a more cost effective performance. EnerFrac™ FR-1005 exhibits enhanced performance when used with micro-emulsion products.

#### Physical Properties:

|   |                    |
|---|--------------------|
| Water-soluble polymer in emulsion form: | Anionic            |
| Brookfield Viscosity @ 25°C:            | 1200 cP            |
| Appearance:                             | Milky white liquid |
| Specific Gravity @ 25°C:                | 1.04               |
| Pour Point:                             | -25°F              |

#### Features and Benefits:

- Ultra-high molecule weight, optimized charge density, linear anionic co-polymer.
- Near instantaneous and complete inversion provides faster maximum friction reduction performance (min. 85% inversion in < 10 seconds).
- Stabilization package maximizes shelf life up to six months and minimizes storage separation and sedimentation. Any sedimentation is readily dispersed and non-agglomerating.
- Freeze protected to have a low pour point -25°F.
- Optimized for reduced formation damage.
- Polymer design affords more complete break using conventional breakers.
- Environmentally friendly solvent and surfactant package.

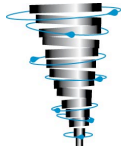
#### Packaging and Handling:

EnerFrac™ FR-1005 is packaged 265 gal per tote in 275-gal tote bins and bulk tank trucks (approx. 45,000 lbs). Other packaging available upon request.

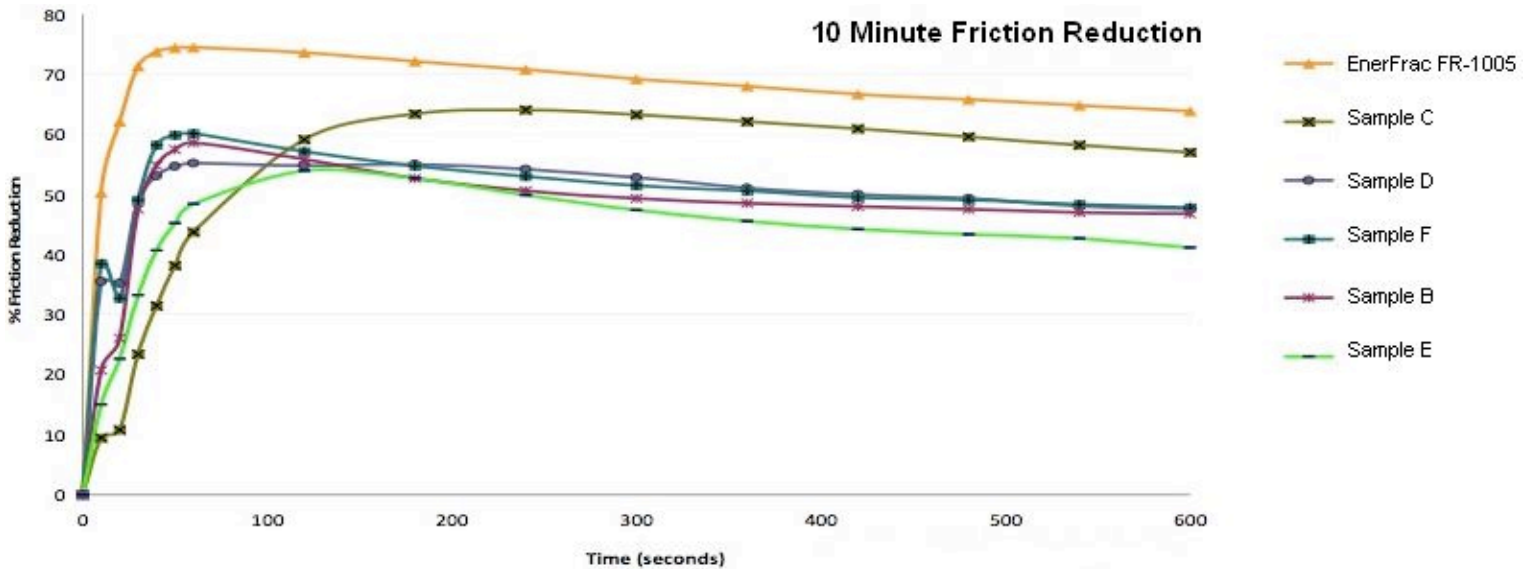
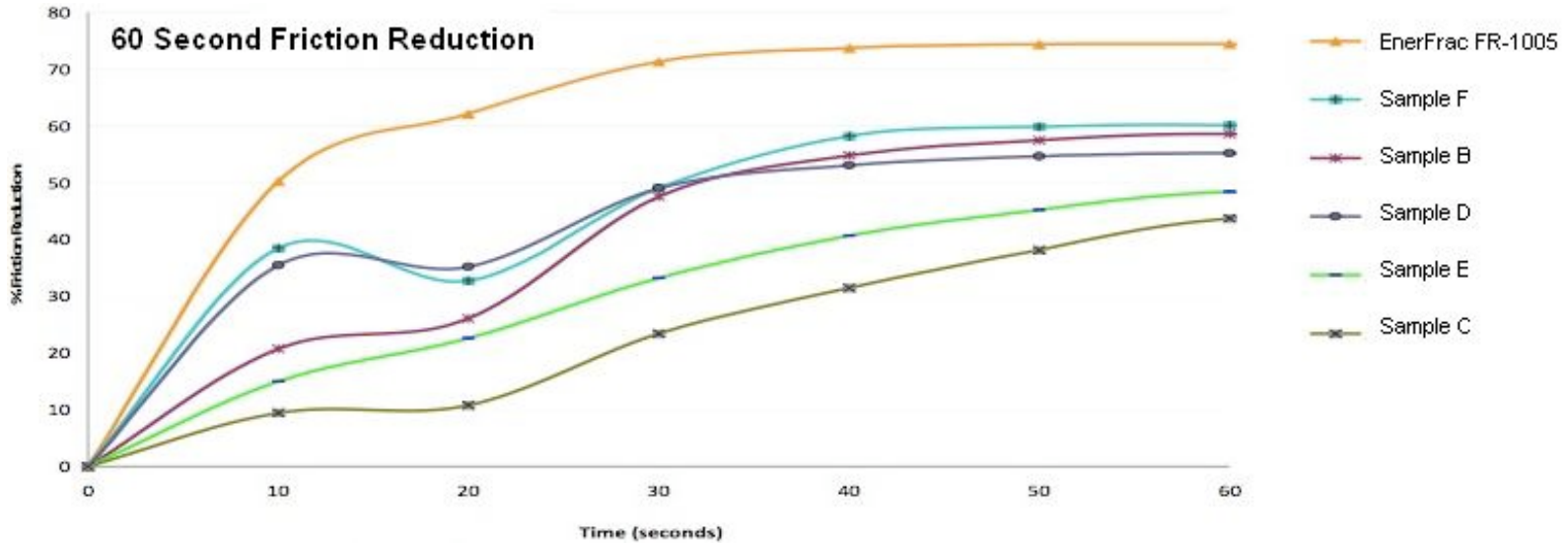
Observe all safety, storage and disposal precautions on the label and in the Material Safety Data Sheet.

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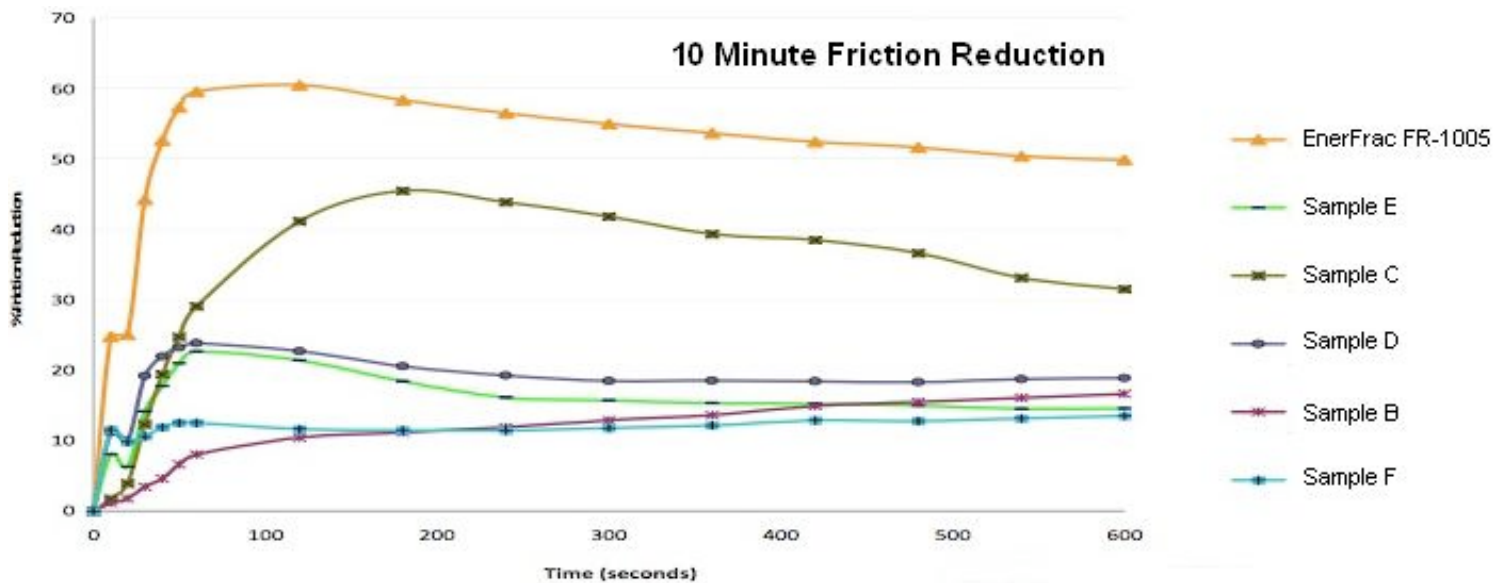
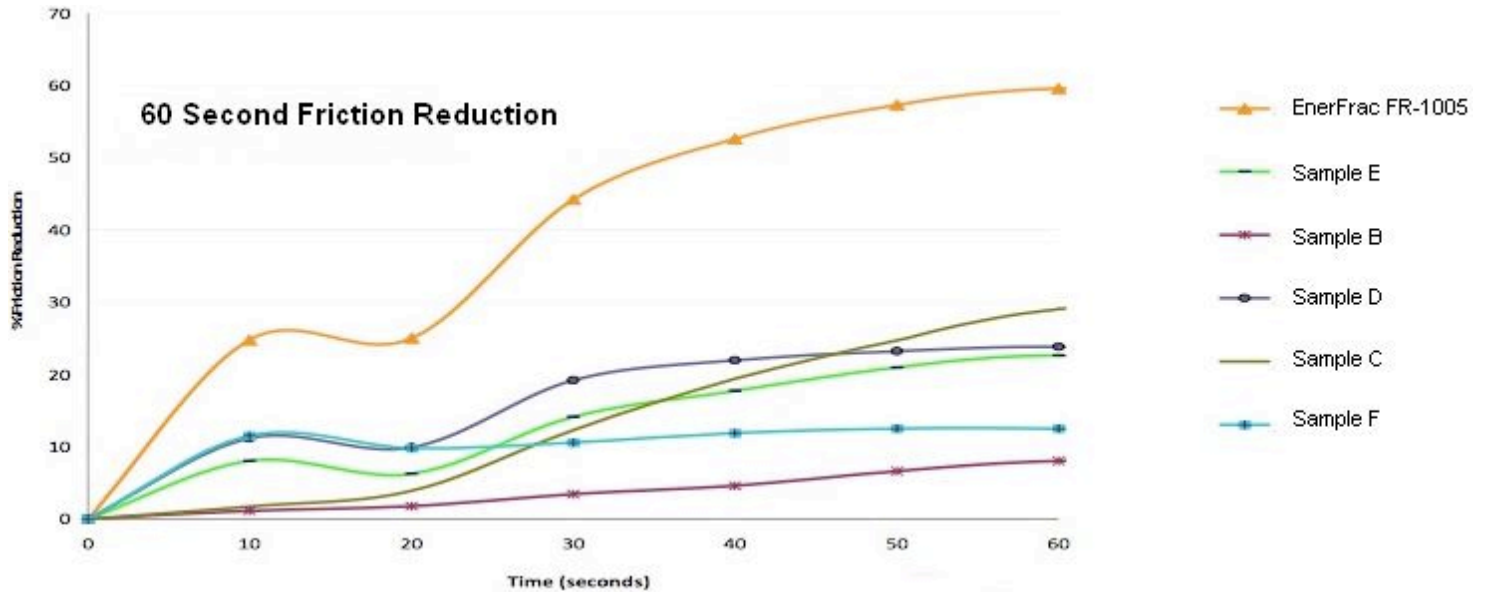
## Comparative Study of Commercially Available Friction Reducers in 2% KCl Fluid Systems



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### Comparative Study of Commercially Available Friction Reducers in 7% KCl Fluid Systems



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