

PROSTA 170

Clay Control

> PRODUCT DESCRIPTION

ProSta 170 is a clay control additive which is designed to provide long lasting protection (persistency) against formation damage caused by clay swelling and migration. ProSta 170 strongly attaches itself to the clay surface, prevents clay swelling, fines migration, and permeability reduction.

PACKAGING

ProSta 170 is available in 330 gallon totes and bulk transport.

RECOMMENDED APPLICATION

Usage amounts of ProSta 170 are dependent on the clay types present and their percentage within the formation. Best performance is obtained by testing it using job fluids at the particular conditions expected. For fracturing applications, the best results are obtained when ProSta 170 is placed throughout the entire stage volume.

The following rate recommendations may serve as a guideline:

- Any strength HCl or HCl/HF acid:
- 1 to 10 gal/1000 gal
- Add to the acid after acid corrosion inhibitor has been thoroughly mixed in
- Alternatively, may be metered on the fly

• Fracturing Applications:

- -0.25 to 5 gal/1000 gal
- ProSta 170 is designed to be compatible with nonionic and cationic additives. A compatibility test
 is strongly advised before use, especially if anionic and amphoteric materials are present.

| Typical Physical Properties | |
|-----------------------------|---------------------|
| Flash Point | > 200 / > 95 |
| Freeze Point | 16 / -8.9 |
| Charge | Cationic |
| Specific Gravity | 1.0483 - 1.1083 |
| Solubility | Water, Acid, Brines |
| | |

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