

WellREADY™ 438 Anionic Friction Reducer

Applications

WellREADY™ 438 is a medium charge, very high molecular weight anionic friction reducer designed to be added “on-the-fly” to fresh water or high brines (“slick water fracs”) with worst water conditions. Typical dosages range from 1/8 to 1/2 gallon per 1000 gallons of fluid with reduction in friction pressures by as much as 80% versus fresh water.

WellREADY™ 438 is a single component emulsion polymer that can be pre-diluted with water prior to use but because it is a rapid yielding product it is usually fed “on the fly”.

WellREADY™ 438 has been developed to give excellent handling properties in colder climates. It does not freeze until -35°F and remains fluid and pump-able until it freezes.

Storage

WellREADY™ 438 should be stored between -10 and 90°F and protected from freezing. If freezing occurs the product should be warmed to 40-90°F and agitated prior to subsequent use. The shelf life of WellREADY™ 438 is at least nine months in unopened containers.

Product rotation is recommended to avoid prolonged storage times. A very slight separation will occur upon standing, as noted by a clear upper layer of oil. Containers should be mixed prior to first use and weekly thereafter. Bulk storage tanks should be mixed either by a mechanical mixer or by recirculation.

Delivery

WellREADY™ 438 is available in different pack sizes. Please contact your Kemira sales representative for more information.

Benefits

- Gives excellent friction reduction in high brines (API and higher)
- Product remains easily flow-able down to -35°F
- No alkyl phenol ethoxylates (APE or NPE) are used in the manufacture of WellREADY™ 438 making this product more environmentally friendly.
- Optimized acrylamide/acrylic acid ratio for friction reduction which reduces cost due to low usage.
- Added “on-the-fly” which reduces waste and disposal costs.
- Compatible with all anionic and nonionic surfactants.

Product Properties

Characteristics	Opaque, off white emulsion
Flash point (PMCC)	>102°C
Freezing point	-35°F
Specific Gravity	1.03 – 1.06 @ 75°F

Product Safety

Prolonged or repeated contact with WellREADY™ 438 may cause skin or eye irritation. Avoid breathing vapors or mists.

Please refer to the Kemira Material Safety Data Sheet before using, handling, or storing WellREADY™ 438

