



山 東 魯 岳 化 工 有 限 公 司

Shandong Luyue Chemical Co., Ltd

An zhan Industry Park, Feicheng City, Shandong(271603), China

Tel/Fax:+86-531-82973066 Website: www.luyuechemical.com

E-mail: sales@luyuechemical.com Export Manager: Richard Lee

Cationic additive in acid and fracturing fluid

Product introduction:

This product is the polymer of cationic quaternary ammonium surfactant, and the appearance is colorless to pale yellow viscose liquid. It's Water-soluble, non-toxic, good hydrolytic stability, keep stable in the wide pH. Freezing point:-2.8°C, specific weight:1.04g/cm³, resolve temperature:280-300°C. Clay mineral in rock stratum will hydrate and particles will expand and migrate during the process of fracturing and acidification, which results in stratum plugging and degradation of oil recovery. This product inhibits clay' expansion and particles' migration, raising the effect of fracturing and acidification and prolonging fracturing and acid treating period. This Cationic additive in acid and fracturing cooperate with other agent well, be prepared conveniently and it's non-toxic and tasteless.

Specification:

Item	Code	LYPO-333
Appearance		colorless to pale yellow viscose liquid
Solid content,%		40±1
pH		4.0-7.0
Viscosity(25°C),cps		20000-50000

Use:

In the process of oil production, fracturing fluid is squeezed into the stratum, causing cracks and promoting seepage capacity. But Clay mineral in rock stratum will hydrate and expand and the particles will migrate during the process of fracturing and acidification, this additive can inhibit these phenomena occur above and keep clay and minerals stable which have expanded to prolong fracturing and acid treating period. It can be used as expansion-prof agent in waterflood. The polymer can also be used as "cationic plugging agent" to react with "actionic" in oil displacement process to lower permeability.

Make experiments before use to determine dosage and application.

Reference dosage: it's applied in water sensitive sandstone geology ,in which the clay content is above 5%, concentration suggested is 0.05-0.5% , this product should be added when Fracturing thickening agent expanded, then it takes effect after circulation.

Package& Storage:

125kg PE Drum, 200kg PE Drum, 1000kg IBC Tank.

Pack and preserve the product in a sealed, cool and dry condition, and avoid contacting strong oxidants.

The term of validity: Two years. **Transportation:** Non-dangerous goods.

Attention:

- (1)Your wise advice about our products will be necessary to improve our qualities and services.
- (2)There is no fixed pattern for application technology, therefore, the customer should base on your own technology and the equipment conditions to execute the program and utilize the product.

Our Promise: Sincere Business, First-Grade Quality, First-Class Service and Double Win.