

### **ORGANIC BORATE CROSSLINKER SL-EXP3221**

## **O** Product Description

To improve the rheological properties of fracturing fluids, crosslinker are usually introduced into polymer-based fracturing fluids.

SL-EXP3221 is an organ boric crosslinker, which is suitable for fracturing liquid system of water-based gels. It forms a high viscosity gel by complexing hydroxypropyl guar gum in various bonding states.

## **O** Technical & Engineering Information

SL-EXP3221 is borate crosslinker, using borate and polyol (sodium salt) ligand under the action of chemical additives to form a stable organic complex, it has good stability, soluble in guar gum solution, and priority reaction with polysaccharide to form a viscoelastic three-dimensional mesh gel.

SL-EXP3221 has a wide cross-linking range, cross-linking time can be adjusted, good sand carrying performance, 105-300 °F(40-150°C)shear stability, thorough hydration of the rubber breaking liquid, easy flowback and other excellent

characteristics. It is suitable for underground fracturing construction of medium and high temperature formation. SL-EXP3221 is greatly affected by the PH of the solution, the higher the PH value, the stronger the stability of the complex. When PH value is high, only a small amount of complex is slowly dissociated at the beginning, that is, delayed crosslinking.

### **O** Technical Indicators

#### Technical Indicators of SL-EXP3221

Item	Indicator
Appearance	Transparent Liquid
Colour	Light yellow to Yellow
Odor	Odorless
Specific Gravity	1.1-1.3
Solubility	Soluble in water
Crosslinking time	30-300s
Temperature and shear resistance, mPa·s (0.48%HPG+0.5%,150°C,170s <sup>-1</sup> ,120min)	≥100

### **O** Recommended Treatment

Recommended dosage: 0.2-0.5%. Once hydration is complete and other liquid additives have been added, SL-EXP3221 can be added. The concentration is dependent on the polymer concentration, temperature and mix-water salinity. Applicable pH range: 9-14.

Applicable temperature: 105-300°F(40-150°C)

# **O** Packing and Storage

SL-EXP3221 be packed in 200L HDPE or 1000L IBC. Keep it away from extreme conditions such as places near flames or direct sunlight.

Shelf life is 2 years.

#### http://www.stimulationchem.com/

#### QUALITY, VALUE, RESPONSIBILITY

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