

Crosslinker KHF048

1. Introduction

Crosslinkers are generally introduced to polymer-based fracturing to improve rheological properties of the fracturing fluids. Crosslinker KHF048 is a zirconium chelate crosslinker used for crosslinking guar-based fluids for high temperature applications. Crosslinking of zirconium fluids are temperature dependent.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KHF048	Yellow liquid	1.15-1.20	Soluble	Moderate- Eyes	Moderate-Fire	5.5-6.5

3. Chemical Properties and Application

Crosslinker KHF048 is a zirconium crosslinker used for crosslinking PAM based fracturing fluids. KHF048 is a temperature-responsive crosslinker. When the temperature rises to the cross-linking temperature, the cross-linking agent cross-links with the polymer, so as to avoid the viscosity reduction caused by high-speed shearing of the fracturing fluid in the string, and effectively reduce the friction pressure.

KHF048 can be used to crosslink most PAM based fracturing fluids. It is compatible with most additives used in fracturing fluid systems which are engineered for use up to 300°F.

4. Treatment

Batch mixing KHF048 into the fluid is NOT recommended. If the KHF048 must be batch mixed, it is added only after the polymer is fully hydrated. 2.0 to 3.0 Gal/1,000 Gal of KHF048 is generally sufficient to obtain good crosslink property and fluid stability at any temperature.

5. Packaging

KHF048 is supplied in 55 gallons high density polyethylene (HDPE) drums. Keep it away from extreme conditions such as places wet and humid or direct sunlight.