Gelling Agent KHF071

1. Introduction

Gelling Agent KHF071 is a high-yielding PAM slurry for continuous or batch mixing of fracturing fluids. Its hydration rate is faster compared to PAM powder, and is easier to meter, disperse and hydrate in water.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KHF071	Amber liquid	1.03-1.08	Soluble	Eyes, nose, throat	Fire, water Slick	N/A

3. Chemical Properties and Application

For fracturing applications, specially-treated free-flowing dry PAM powder is liked by the operating companies due to the absence of diesel and similar oils. However, its metering and use at the well site are difficult. When mixed with water, these PAM powder can form fish eyes, and thus many times cannot achieve the desired maximum viscosity on hydration. For this reason, PAM powder is dispersed in diesel or mineral oils, and provides much better cross-linking properties (viscosity) allowing much lower gel loading and leads to better fracture conductivity.
In addition to proppant carrying in hydraulic fracturing, this slurry can also be used as a pad for both hydraulic and acid fracturing. Together with crosslinker, the gelling agent KHF071 provides wide range of delay time and rheological property at temperature and shear. The fluid is stable up to 300°F.

4. Treatment

For slick water fluids, the loading of PAM slurry is 0.5-3.0 Gal/Mgal. For sand-carrying fluids, the loading of PAM slurry is 3-10 Gal/Mgal. The gel loading is dependent on the formation bottom hole temperature, pumping time, and cool down. Typically, higher the temperature, higher is the gel loading required to achieve the required viscosity.

5. Packaging

KHF071 is packed in 55 gallons HDPE drum or 265 gallons HDPE IBC tank. Keep it away from extreme conditions such as places near flames or direct sunlight. Store at temperatures lower than 30°C.