

Stabilizer KHF005

1. Introduction

Guar or guar derivative products tend to degrade at elevated temperature. The rheological properties of guar-based fracturing fluids will deteriorate at high temperature. Stabilizer KHF005 is specifically designed to be used to prevent degradation of fracture fluids at temperatures greater than 250°F (121°C).

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KHF005	White Granules	1.75-1.85	Soluble	-	Eyes, Skin	Reducer	8.5-9.5 (200 g/L)

3. Chemical Properties and Application

Fracturing fluids absorb oxygen either at the surface or during downhole pumping. Dissolved oxygen in fracturing fluids degrades polymers presented in fluids and reduces fluid viscosity, especially under high-temperature conditions.

KHF005 acts as an oxygen scavenger and prevents the rapid degradation of gelling agents caused by dissolved oxygen in fracturing fluids and significantly improves fluid rheological properties for high-temperature applications (typically where the bottomhole static temperature exceeds 250°F).

KHF005 is compatible with additives used in guar-based fracturing fluids, but it has to be added in either linear gel or dissolved in water and pumped through liquid additive line. It cannot be added into crosslinker solution.

4. Treatment

5-30 lbs/Mgal KHF005 is generally good enough to stabilize fluid properties at high temperature.

5. Packaging

KHF005 is supplied in plastic-lining bags with net weight of 25 kg/sack.

It should be stored in shaded areas with good ventilation.