

Stabilizer KHF005

1. Introduction

Guar or 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

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KHF005	White granules	1.75-1.95	Soluble	Eyes, skin	None	7.5-8.5 (1%)

3. Chemical Properties and Application

Fracturing fluids will pick up oxygen either at surface or pumping down hole. The oxygen dissolved in fracturing fluids will degrade polymers presented in fluids and reduce fluid viscosity, especially at elevated temperature. KHF005 acts as an oxygen scavenger and prevent the rapid degradation of gelling agents caused by dissolved oxygen in fracturing fluids and improve fluid rheological properties significantly at high temperature applications (typically when bottom hole static temperature is greater than 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.