

# Clay Stabilizer KHF002L

## 1. Introduction

Clay stabilizers are routinely added to aqueous-based fracturing fluids to help prevent damage to the formation caused by clay migration and swelling. These clay stabilizers are either a temporary or permanent type, and they are often used in combination.

The clay stabilizer KHF002L is a KCl substitute for KHF002 which can be used to prepare the salt water for mixing fracturing fluid. The additive can also stabilize the reactive clays in the formation temporarily during fracturing and flowback operations.

## 2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KHF002L	Colorless liquid	1.08-1.13	Soluble	Moderate- Eyes	None	7.0-8.0

## 3. Chemical Properties and Application

Temporary Clay Stabilizer KHF002L is an organic efficient liquid clay stabilizer. It is NOT liquid KCl, but it can be substituted for KCl in most applications.

KHF002L has been used at temperatures up to 350°F without any adverse effect on fluid rheology.

KHF002L can be batch mixed, or continuously mixed into the fracturing fluid using a liquid-additive system. This eliminates the time-consuming step of batch mixing dry KCl in the base fluid. KHF002L can be used in most aqueous-based fracturing fluids and is compatible with most additives used in the fracturing fluid systems.

## 4. Treatment

The recommended KHF002L concentration is 2 Gal/1,000 Gal (2 L/m<sup>3</sup>). For specific formations such as high reactive clay content, the KHF002L concentration can be further optimized using laboratory core tests.

## 5. Packaging

KHF002L is supplied in 55 gallons high density polyethylene (HDPE) drums or 265 gallons HDPE totes. Keep it away from extreme conditions such as places near flames or direct sunlight.