

# Phase Reversible Agent KCM036

#### 1. Introduction

Mud and its filter cake formed on formation and casing surfaces create barriers for cement to be bonded with formation and casing. KCM036 is normally used to penetrate and disintegrate mud and filter cake to have good bonding strength between casing, cement and formation. KCM036 can be added into chemical washes, spacers, or both to achieve the above objectives.

## 2. Physical Properties and Hazards

Additive	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	рН
KCM036	Colorless liquid	0.85-0.95	Soluble	-75/66	Eyes/Skin	Fire	N/A

## 3. Chemical Properties and Application

KCM036 is a multi-functional surfactant which is very effective in facilitating fluid flow, breaking emulsions, and preventing water blocks. It can be used for most applicable chemical washes and spacers at various well conditions. KCM036 in Power Wash chemical washes and spacers will penetrate mud and filter cakes, reduce surface tension of water and interfacial tension of water oil interfaces, and reverse the wettability of solid surfaces from oil-wet to water-wet. It is especially effective in removing oil-based muds/synthetic-based muds and their filter cakes. KCM036 is compatible with most additives in both chemical washes and spacers. Lab testing is required if it is used in cement slurries.

### 4. Treatment

5-10%vol is typically enough for effective mud and filter cake removal. 10%vol is considered optimum concentration in most fluid designs.

# 5. Packaging

KCM036 is supplied in 5 gallons high density polyethylene (HDPE) drums or 55 gallons steel drums. Keep it away from extreme conditions such as places near flames or direct sunlight.