

Mutual Solvent KMA002

1. Introduction

Oil film around formation fines sets a barrier for acids or other stimulation fluids to react with formation rock. Mutual solvent mixed in acids or stimulation fluids will dissolve the oil films and water-wet the formation fines.

KMA002 is a multi-functional solvent which is very effective in water-wet the formations, facilitating fluid flow, breaking emulsions, and preventing water blocks. It can be used for most applicable stimulation fluid systems at various well conditions.

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KMA002	Clear Liquid	0.90-0.95	Soluble	66	Eyes, Skin	Fire	5.5-6.5

3. Chemical Properties and Application

KMA002 is miscible in acids, oils, water and brine. The functional groups attached to KMA002 molecules provide KMA002 with strong surface-active properties. KMA002 reduces 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 films from formation fines leaving surface water-wet for more acids to react.

KMA002 is compatible with most additives in stimulation fluid systems. Lab testing is required when new corrosion inhibitor is considered since KMA002 may have adverse effect on corrosion inhibition.

4. Treatment

5-10% volume is typically enough for most cleanup and acidizing jobs. 10% volume is considered the optimum concentration in most fluid designs.

5. Packaging

KMA002 is supplied in 55 gallons steel drums.

Keep it away from extreme conditions such as places near flames or direct sunlight.