

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 therefore normally used in most acidizing fluid systems to penetrate sandstone matrix and water-wet formation grains in order to improve acidizing efficiency.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KMA002	Colorless liquid	0.90-0.95	Soluble	Eyes, skin	Fire	5.5-6.5

3. Chemical Properties and Application

KMA002 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 stimulation fluid systems at various well conditions.

KMA002 is miscible in acids, oils, water and brines. The functional groups attached to KMA002 molecules provides 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.