High Temperature Viscoelastic Surfactant KMA007B

1. Introduction

Fluid and petro-physical heterogeneities are encountered in most sandstone and carbonate formations. Chemical diverter technology is one of the methodologies to be used in stimulation treatment to divert treatment fluids from high permeability zones to low permeability zones. KMA007B is a non-damaging chemical diverter used in stimulation fluid systems to improve treatment fluid distributions across formation matrix to increase stimulation efficiency. It is suitable to be used in wells that are below 350°F.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KMA007B	Amber-yellow liquid	1.00-1.05	Miscible	Eyes, skin	Fire	7.0-8.0 (1% Alcohol solution)

3. Chemical Properties and Application

KMA007B is a surfactant based chemical diverter which is very effective in distributing treatment fluid homogeneously across treatment zones in stimulation treatment at various well conditions.
KMA007B forms viscous micelle structure when its concentration reaches certain level in water or brines. The viscosity breaks dramatically when it contacts with hydrocarbon or crude oils. The in-situ viscous behavior of KMA007B in aqueous solution will divert treatment fluids from high water-cut to low water-cut, from high permeability to low permeability zones of the rock matrix. The matrix is therefore stimulated homogeneously.
KMA007B is compatible with most additives in stimulation fluid systems. Some additives such as corrosion inhibitor or solvent may have adverse effect on KMA007B rheological properties. Compatibility testing is generally required when KMA007B is used in stimulation treatment.

4. Treatment

5-10% volume is typically enough for most stimulation jobs. 7.5% volume is considered the optimum concentration in most fluid design.

5. Packaging

KMA007B 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.