

Dispersant KMA046

1. Introduction

Wax or asphaltene deposits introduce various well production problems in daily operational activities. Problems include composite scales (organic and inorganic) in wellbore, matrix or gravel packs and organic deposits around downhole tools, tubulars or other well equipment.

S³ acid is an engineered multi-phase fluid formulated around dispersant KMA046, which acts as an emulsion and dispersion stabilizer as well as a surface wetting agent. Formulated with organic solvents as the external phase and water or acids as the internal phase, this fluid can efficiently remove the above-mentioned inorganic scales and organic deposits in a single-stage treatment.

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KMA046	Clear-yellow Liquid	1.00-1.10	Soluble	60	Eyes, Skin, Inhalation	Flammable	-

3. Chemical Properties and Application

KMA046 introduces the stabilization mechanism to prepare S³ fluid systems on the surface. It functions as surfactant at downhole conditions to reduce the interfacial tension between the acid, oil and formation in order to maximize the scale removal and matrix stimulation efficiency of S³ treatment at temperature up to 275°F.

KMA046 is compatible with other additives used in S³ fluid systems such as KMA041R and KMA054. However, additives including non-emulsifiers and corrosion inhibitors must undergo laboratory compatibility tests before mixed with KMA046.

4. Treatment

Recommended KMA046 concentration range from 10 to 30 Gal/1,000 Gal of S³ acid depend on acid type, acid strength, other additives in acids, solvent phase and application temperature.

5. Packaging

KMA046 is supplied in 55 gallons high density polyethylene (HDPE) drums.

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