

Surfactant KMA021A

1. Introduction

Two primary functions for foaming agents in stimulation treatment are (1) energize fluids for well cleanup and unloading and (2) use as carrying and diverting fluids for main treatment.

KMA021A surfactant is a high-performing surface-active agent to provide excellent silt-suspending capacity, foam generating and stability characteristics, and low surface and interfacial tension of treatment fluids containing KMA021A.

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KMA021A	Clear Liquid	0.90-1.00	Soluble	20.6	Eyes, Skin, Inhalation	Fire	6.0-8.0

3. Chemical Properties and Application

KMA021A is a cationic/amphoteric mixture and is compatible with most cationic and nonionic additives in stimulation fluid systems.

KMA021A is a good surface-active agent for low-pH systems. It provides low-surface tension to matrix treatment fluids and water-wets sandstone and limestone formations.

KMA021A is also a good silt-suspending agent, which improves wellbore cleanup significantly.

KMA021A can be used as a surfactant in water, acid, or heavy brine. It is effective in acid, spent acid (CaCl₂ brine) and KCl water.

4. Treatment

Typical concentrations range from 2 to 10 Gal/1000 Gal (2 to 10 L/m³) of acid. Laboratory testing is required to determine the optimum concentration.

5. Packaging

KMA021A is supplied in 55 gallons high density polyethylene (HDPE) or steel drums.

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