Surfactant KMA013

1. Introduction

Surfactants are also used in stimulation fluids to reduce interfacial tension that restricts the flow in formation matrix. Compared to other surface-active agents, KMA013 lowers both surface tension and interfacial tension dramatically. The capillary pressure for stimulation fluids containing KMA013 is therefore reduced to facilitate cleanup and fluid recovery.

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KMA013	Clear Liquid	0.9-1.0	Soluble	32	Eyes	Fire	4.5-5.5 (1%)

3. Chemical Properties and Application

KMA013 is unique in chemical nature. It not only reduces surface tension and interfacial tension of the stimulation fluids but also changes wettability behavior of the fluids in rock matrix. The capillary pressure that is required to initiate fluid flow is greatly reduced. Therefore, KMA013 can provide quicker and better fluid recovery following acidizing and fracturing stimulation treatment. It leaves both sandstone and carbonate formations water-wet for more effective stimulation treatment.

KMA013 is compatible with most additives in stimulation fluid systems. It is also biodegradable and presents lower toxicity to organisms than other surface-active agents.

4. Treatment

0.1-0.5% volume is typically enough for most acidizing and fracturing jobs. 0.2% volume is considered optimum concentration in most fluid design.

5. Packaging

KMA013 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.