

pH Buffer KMA049

1. Introduction

Control of fluid pH is crucial in most in-situ crosslinked gelled acids such as SGA and NISGA which is used in acidizing and acid fracturing treatment of carbonate reservoirs.

KMA049 is an organic acid used to adjust and stabilize the pH of the SGA and NISGA acids at 2-3, allowing the optimized diversion and maximum efficiency of SGA and NISGA treatment.

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KMA049	Clear Liquid	1.24-1.29	Soluble	>93	Eyes, Skin	Corrosive	0-2

3. Chemical Properties and Application

The chemical equilibrium introduced by KMA049 enables it as a pH buffer in SGA and NISGA gelled acid systems.

KMA049 does not interact with the crosslinker in SGA and NISGA systems, and therefore it does not have adverse effect on the crosslink reactions between crosslinker and the polymer.

KMA049 is compatible with other additives used in SGA and NISGA systems such as acid gelling agents, crosslinkers, iron control agents and corrosion inhibitors.

4. Treatment

The KMA049 concentration at 2 gal/1,000 gal KMA049 is generally enough to adjust pH between 2 and 3.

5. Packaging

KMA049 is packed in 55 gallons HDPE drum or 265 gallons HDPE IBC tank.

Keep it away from extreme conditions such as places near flames or direct sunlight. Store at temperature from 5°C to 30°C.