

# H<sub>2</sub>S Scavenger KMA009

## 1. Introduction

Major problems are generally encountered when acidizing sour oil or gas wells. Sulfide scales or minerals presented in the formation or production tubular will react with acids to release H<sub>2</sub>S, which is corrosive and hazardous. H<sub>2</sub>S scavenger is generally required while acidizing sour gas or oil wells to inhibit corrosion and resolve safety concerns. H<sub>2</sub>S scavenger KMA009 is used in acid fluids to control corrosion effect of H<sub>2</sub>S that may present due to acid reaction with sulfide scales or formation minerals. KMA009 will remove H<sub>2</sub>S in acids by reaction to form non-corrosive or non-hazardous compounds.

## 2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KMA009	Colorless to light yellow liquid	1.05-1.15	Dispersible	Eyes, skin	Fire	N/A

## 3. Chemical Properties and Application

Sulfide minerals present in the formation or sulfide scales deposited at tubulars will react with acids while acidizing sour gas or oil wells. KMA009 is a mixture of organic compound that can be easily dispersed in acids, brines, or solvents. The active ingredients in KMA009 will react with H<sub>2</sub>S to form stable and non-corrosive compounds.

KMA009 is effective in most acid systems such as HCl and mud acids. It can be used at temperature up to 350°F and for protection time up to 24 hours.

The loading of KMA009 depends on formation mineralogical property and scaling conditions of wellbore. The acidizing design must also include procedures to flush away produced gas from tubing or casing before acid comes in contact with formation or scales.

KMA009 is compatible with most additives in acids. It is also readily biodegradable and presents lower toxicity to organisms than other H<sub>2</sub>S scavengers.

## 4. Treatment

Typical concentrations range from 2 to 10 Gal/1,000 Gal (2 to 10 L/m<sup>3</sup>) of acid. Laboratory testing is required to determine the optimum concentration that will provide enough protection time at well conditions.

## 5. Packaging

KMA009 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.