

Corrosion Inhibitor KMA034A

1. Introduction

Destructive reactions between metals and acids cause serious corrosion problems in acidizing operations. Corrosion inhibitors are generally required in acids to minimize these destructive reactions without introducing adverse effect on reactions between acids and formations.

KMA034A is blend of corrosion inhibition immediate and solvent/surfactant package in order to control the corrosion and pitting problems between various acids such as hydrochloride and VES acids and metals such as C95 and N80 tubulars. KMA034A is especially effective in protection of metal tubulars in CAT acids (Viscoelastic Acids).

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH (1% sln.)
KMA034A	Dark Brown Liquid	1.15-1.20	Miscible	>85	Eyes, Skin	Fire	2.0-3.0

3. Chemical Properties and Application

The synergistic effects between key ingredients such as inhibitor intermediate, surfactant and solvent in KMA034A enable the superior inhibition performance of KMA034A.

KMA034A contains no propargyl alcohol and has high flash points, which makes the product non-hazardous for friendly handling and shipping. It can prevent corruptions up to 24 hours in HCl, HCl-HF and VES acids.

20% CAT acids (Viscoelastic Acids) containing KMA034A can be used at temperatures up to 300°F. It can increase the upper temperature limit by using together with inhibitor aids intensifiers such as organic acids, metal halides, and antimony compounds.

4. Treatment

The recommended concentrations range from 4 to 20 Gal/1,000 Gal (1 to 20 L/m³) of the total acid blend depend on acid type, strength, bottom hole temperature, contact time, and other additives in acids.

5. Packaging

KMA034A is packed in 265 gallons high density polyethylene (HDPE) totes.

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