

Corrosion Inhibitor KMA034A

1. Introduction

KMA034A is a synergistic blend of an ammonium quaternary compound, aldehyde and other solvents, and a highly effective dispersion package that enables it to inhibit corrosion in all hydrochloric (HCl), HCl-hydrofluoric (HCl-HF) and VES acid concentrations up to 350°F (177°C). This corrosion inhibitor can be used for mild steel to very exotic tubulars.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KMA034A	Dark brown liquid	1.15-1.20	Miscible	Eyes, skin	Moderate-Fire	2.0-3.0 (1%)

3. Chemical Properties and Application

KMA034A contains no propargyl alcohol and has a high flash point, which makes the product nonhazardous for U.S. Department of Transportation (DOT) and shipping purposes. This product disperses well in acid solutions, resulting in good inhibitor distribution and pipe protection. It can provide acid-corrosion protection for as long as 24 hours. KMA034A provides corrosion protection in all HCl, HCl-HF and VES blends up to 350°F (177°C). It can increase the upper temperature limit by use of acid corrosion inhibitor intensifiers, and is compatible with intensifiers such as organic acids, metal halides, and antimony compounds for higher temperature.

4. Treatment

The recommended concentration range is 4 to 20 Gal/1,000 Gal (1 to 20 L/m³) of the total acid blend. Concentration is dependent on acid type, strength, bottom hole temperature, contact time, and additional additives. By adding KMA034A with the water during the loading operation, the product can be better dispersed in the resultant acid solution.

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.