

Corrosion Inhibitor KMA054

1. Introduction

KMA054 is a quaternary ammonium based surfactant, a synergistic blend of solvents, and a highly effective dispersion package that enables it to inhibit corrosion in all hydrochloric (HCl) and HCl-hydrofluoric (HCl-HF) acid up to 375°F. 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
KMA054	Dark red liquid	1.00-1.05	Dispersible	Eyes, skin	Moderate-Fire	N/A

3. Chemical Properties and Application

KMA054 contains no propargyl alcohol, which makes this product environmentally friendly. 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. KMA054 provides corrosion protection in all HCl and HCl-HF blends up to 375°F. 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.

KMA054 is particularly suitable for emulsified acid systems. It contains special surfactants that enhance the stability of emulsified acid and reduce the corrosion rate.

4. Treatment

The recommended concentration range is 1 to 40 gal/1,000 gal (1 to 40 L/m³) of the total acid blend. Concentration is dependent on acid type, strength, bottomhole temperature, contact time, and additional additives. By adding KMA054 with the water during the loading operation, the product can be better dispersed in the resultant acid solution.

5. Packaging

KMA054 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 temperatures from 5°C to 30°C.