

Iron Stabilizer KMA033

1. Introduction

Ferric and ferrous ions remain in acid solutions during acidizing operations. When acid travels from surface to formation, it will dissolve iron from equipment, tubulars, scales and iron minerals in the formation. It is therefore required to add iron agent in acid systems. KMA033 is an effective iron control agent used in acids to prevent iron hydroxide precipitations.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KMA033	Colorless liquid	1.12-1.17	Soluble	Eyes	N/A	7.0-8.0

3. Chemical Properties and Application

KMA033 is used in both fresh and spent acids as a chelating agent to form a complex with iron ions, which helps to prevent the precipitation of iron hydroxide in acid solutions. It is typically used for low to medium temperature depend on the iron concentration presented at well conditions.

Ferrous iron will not form iron hydroxides until pH of 8. As we know that pH of most spent acids will not be more than pH of 6 and therefore Ferric irons are generally required to be stabilized in solution because it will precipitate to ferric hydroxide at pH of 2-3. KMA033 is often used to react with ferric irons in acids especially organic acids and keep it in solution.

KMA033 is compatible with most additives in stimulation fluid systems except for high concentration of calcium presented.

4. Treatment

15-50 Gal /1,000 Gal KMA033 is typically enough for most cleanup and acidizing jobs. 50 Gal/1,000 Gal KMA033 is typically enough for control each 3000 ppm of ferric iron.

5. Packaging

KMA033 is supplied in 265 gallons high density polyethylene (HDPE) totes. Keep it away from extreme conditions such as places near flames or direct sunlight.