

Inhibitor Aid KMA030

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. For high temperature or chemically aggressive environment, inhibitor aid is also required to prevent tubulars and downhole tools from strong acid corrosion and pitting. KMA030 is an effective inhibitor aid used in hydrochloride and mud acid systems to prevent tubular or equipment from serious acid corrosion.

2. Physical Properties and Hazards

| Additives | Form | S.G. | Water Solubility | Health Hazard | Physical Hazard | рН |
|-----------|------------------|-----------|---------------------|------------------------|-----------------|-----------------|
| KMA030 | Colorless liquid | 1.20-1.25 | Soluble | Eyes, skin, inhalation | Fire | 2.0-3.0 (1%) |

3. Chemical Properties and Application

KMA030 is an organic acid which can be used for most strong acid systems to prevent tubular and tool materials from acid corrosion.

KMA030 is soluble in acids. The decomposition products from KMA030 at well conditions create a barrier between acids and metal surfaces and therefore corrosion chemical reactions are stopped. KMA030 is effective for most metals including carbon steel and chrome steel. It can also be used in most acids such as hydrochloride and hydro fluoride. Minimal corrosion and pitting problems are observed on tubulars and tools using acids containing KMA030. KMA030 is compatible with most additives and acid systems. Attention is required for KMA030 design if it is used for sour gas (H₂S and CO₂) wells or protection of special tubular or tool materials.

4. Treatment

1-10% Volume is typically enough for most cleanup and acidizing jobs. 3-5% Volume is considered the optimum concentration in most fluid design.

5. Packaging

KMA030 is supplied with 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.