

High Temperature Inhibitor Aid KMA031

1. Introduction

Destructive reactions between metals and acids cause serious corrosion problems in acidizing operations especially at high temperatures. 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. KMA031 is an effective inhibitor aid used in hydrochloride and mud acid systems to prevent tubular or equipment from serious acid corrosion at very high temperatures.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KMA031	Colorless to white crystals	2.55-2.75	Soluble	Eyes, skin, inhalation	Fire	7.0-8.0 (1%)

3. Chemical Properties and Application

KMA031 is an inorganic salt which can be used in most strong acid systems to prevent tubular and tool materials from acid corrosion at very high temperatures.

KMA031 is soluble in acids. KMA031 is effective for most metals including carbon steel and chrome steel. It can also be used in most acid systems made using hydrochloride. Very low corrosion and pitting problems are observed on tubulars and tools using acids containing KMA031.

KMA031 is compatible with most additives and acid systems. Attention is required for KMA031 design if it is used for sour gas (H₂S and CO₂) wells or protection of special tubular or tool materials.

4. Treatment

5 to 30 lbs/1000 gal is the typical concentration of the Corrosion Inhibitor Aid used in most acidizing jobs. A lab test at the BHST is highly recommended before any acid treatment using this additive.

5. Packaging

KMA031 is supplied in 25 kg plastic lined paper bags. Keep it away from extreme conditions such as places near flames, direct sunlight and moisture.