

Scale Inhibitor KWC019

1. Introduction

KWC019 is a phosphonate-based scale inhibitor that may be used for controlling the deposition of calcium carbonate, calcium sulfate, strontium sulfate and barium sulfate scales. The advantages of KWC019 include its thermal stability and compatibility with most of the fracturing and acidizing fluids.

2. Physical Properties and Hazards

Additive	Form	Specific Gravity	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KWC019	Umber Liquid	1.30-1.40	Soluble	>93.1	Skin, Eye	Corrosive	2.0-3.0 (1%)

3. Chemical Properties and Application

KWC019 protects against general oilfield scales such as carbonates and sulfates and can be used to control scale formation in producing wells, injection wells and all surface injection systems and vessels with scaling potential.

KWC019 is also effective in water based and acid-based fracturing and stimulation treatments. Recommended upper temperature limit is 250°F (121°C), but field results show its effectiveness even at higher temperatures. Pre-job scale inhibitor tests are recommended to verify the optimum concentration of KWC019 for a cost-effective operation.

4. Treatment

KWC019 can be pre-mixed with fracturing water or added on the fly at the rate of 2 gallons per 1000 gallons (2 L/m³). The concentration may vary depend on the type of the scale and severity of the problem.

5. Packaging

KMWC019 is supplied in 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.