

TOC Retarder KCM040

1. Introduction

The retarder in thixotropic cement slurry systems is primarily used to regulate the operational time of the cement slurry, ensuring that it maintains excellent thixotropic properties for easy pumping under complex downhole conditions while safely setting at the predetermined time.

KCM040 is a typical non-lignin retarder specifically designed for TOC. It exhibits a good linear relationship between thickening time and dosage, facilitating precise control. It demonstrates excellent compatibility with other additives and does not impair the performance of fluid loss additives.

2. Physical Properties and Hazards

Additive	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH 1% Solution
KCM040	White Solid	1.50-1.70	Soluble	>93	None	Eyes, Skin	2-4

3. Chemical Properties and Application

KCM040 is a TOC system specific retarder, and its application requires a balance between the retarding effect and the establishment of a thixotropic structure. KCM040 can be used in TOC slurry design at wide temperature (50-200°F) and density ranges (1.10-2.70s.g.) due to its unique chemical nature. It can be mixed with freshwater, seawater, and saltwater depending on applications.

4. Treatment

0.1-1.0%BWOC loading is generally required for effective thickening time depending on temperature, mixing water, and slurry density.

5. Packaging

25 kg/sack packaging is available for KCM040. The sack consists of two paper layers and a plastic liner. It should be stored in shaded areas with good ventilation. Keep it away from high temperature, humidity and direct sunlight.