

Low to Medium Temperature Retarder KCM067

1. Introduction

Hydration time and cement set period are critical for well cementing design. Retarders are generally utilized in cement slurry to control cement thickening time to reduce job risks especially at medium to high temperature applications.

KCM067 is specially designed for low-to-medium temperature oil and gas well cementing operations. It is applicable to circulating temperatures up to 250°F, offering both excellent retarding performance and cost-effectiveness. KCM067 delivers stable retarding performance at low to medium temperatures without causing over-retardation, while ensuring normal early strength development of cement.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KCM067	Brown Powder	1.25-1.45	Soluble	-	Eyes	Dust	N/A

3. Chemical Properties and Application

KCM067 lignosulfonate-based retarder is an environmentally friendly wood-pulp derivative utilized to extend cement hydration and setting time. It is manufactured using natural lignosulfonate as the primary raw material, processed through modification process. The unique molecular structure makes KCM067 form a protection layer around the cement particles that delay the cement hydration.

KCM067 also disperse the cement particles by electrostatic repulsion and work as an effective dispersant in cement slurry design.

KCM067 can be used up to BHCT 250°F, and it is compatible with most cement additives in cement slurry such as fluid loss control agents and dispersants.

4. Treatment

KCM067 concentration of 0.25-0.50% BWOC is generally required for most cement slurry design. Higher concentration (0.75-1.0% BWOC) might be needed at higher temperature range (225-250°F).

5. Packaging

KCM067 is supplied in plastic-lining bags with net weight of 25 kg/sack.

It should be stored in shaded areas with good ventilation. Keep it away from high temperature, humidity, and direct sunlight.