

Low Density Particles KCM031

1. Introduction

Conventional low density cement slurries are prepared by adding regular light weight extenders such as bentonite and sand to reduce the amount of cement and water required in cement slurry. However, it is hard to design cement slurries if density is very low (less than 1.5 g/cc) since excess free water will be observed and the required compressive strength is hard to achieve.

Low density particles KCM031 is specifically designed in PETCem-LD cement systems in order to prepare low density (1.35-1.50 g/cc) cement slurries.

2. Physical Properties and Hazards

Additive	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KCM031	Gray particulates	0.78-0.98	Insoluble	>93	Eyes, inhalation	Dust	N/A

3. Chemical Properties and Application

KCM031 is low density (0.87-0.93 g/cc) organic particulates that can be added into cement systems to reduce slurry density. Engineeringly-designed particle size of KCM031 allows more cement and less water to be added into cement slurries so that low density is achieved while maintaining compressive strength and slurry rheological properties.

Compared to KCM021, KCM031 handles higher hydrostatic pressure. Therefore, it is generally used in light slurry design at above 4000 psi hydrostatic pressure.

KCM031 is typically used in the temperature range of 70-170°C and density range of 1.35-1.50 g/cc. KCM031 is compatible with most cement additives and can be used in fresh, salt and seawater cement slurries.

4. Treatment

Job designing tool is available to calculate amount of KCM031 required in cement slurry. Please contact field engineers for advice.

5. Packaging

KCM031 is supplied in 25kg plastic-lining sacks.