

Low Density Coarse Particles KCM021

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 KCM021 is specifically designed in PETCem-LD cement systems in order to prepare low density (1.00-1.50 g/cc) cement slurries.

2. Physical Properties and Hazards

| Additives | Form | S.G. | Water Solubility | Melting/Flash Point (°C) | Health Hazard | Physical Hazard | рН |
|-----------|-------------------|-----------|---------------------|-----------------------------|------------------|--------------------|-----|
| KCM021 | Gray particulates | 0.68-0.88 | Insoluble | >93 | Eyes, inhalation | Dust | N/A |

3. Chemical Properties and Application

KCM021 is low density (0.7-0.8 g/cc) inorganic particulates that can be added into cement systems to reduce slurry density. Engineeringly-designed KCM021 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.

KCM021 can be used at applicable cementing temperature (up to 250°C), however it should not be used if working pressure is greater than 4000psi.

Follow special procedures while mixing cement slurries containing KCM021 both in laboratory and in the field. KCM021 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 KCM021 required in cement slurry. Please contact field engineers for advice.

5. Packaging

KCM021 is supplied in 25kg plastic-lining sacks.