

Micro Silica KCM032

1. Introduction

Medium density extender KCM032 is one of the medium density extenders conventionally used for preparing low density cement slurries. Addition of KCM032 will reduce the amount of cement and increase the amount of water required in cement slurry so that slurry density is decreased.

Further density reduction is obtained if KCM032 is properly added into PETCem-LD cement systems.

2. Physical Properties and Hazards

Additive	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KCM032	Gray powder	2.48-2.68	Insoluble	>93	Eyes, inhalation	Dust	N/A

3. Chemical Properties and Application

KCM032 is fine inorganic particulates that can be added into cement systems to reduce slurry density. More water can be added into cement slurries while maintaining stable slurry and good fluid loss control of cement slurry because of high surface area properties of KCM032 particles.

Further slurry density reduction can be achieved if controlled-size KCM032 is added into low density cement slurries while maintaining proper compressive strength development and slurry rheological properties.

KCM032 can also be used at high temperature cement slurries to prevent cement strength retrogression problems. Theoretically KCM032 can be used at any applicable cementing temperature and hydrostatic pressure.

KCM032 is compatible with most cement additives and can be used in fresh, salt and seawater cement slurries.

4. Treatment

Typically, 5-20% BWOC is good enough in designing slurries containing KCM032. However, special job designing tool is available to calculate amount of KCM032 required for PETCem system design. Please contact field engineers for advice.

5. Packaging

KCM032 is supplied in 25kg plastic-lining sacks.