

# Dispersant KCM002S

#### 1. Introduction

Dispersants can improve mixability of cement slurry and reduce slurry viscosity. This will reduce pumping frictions and lower the critical rate for turbulence flow. Most dispersants achieve above objectives by separating solid particles and suspend them homogeneously in cement slurry. Many dispersing agents in cement slurry are also able to help improve fluid loss properties of the slurry.

## 2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	рН
KCM002S	Yellow powder	1.21-1.41	Soluble	>93	Eyes	None	7-9

### 3. Chemical Properties and Application

As described above, KCM002S provides cement slurry placement in turbulent flow easily and at minimal pumping pressure due to lower frictions, especially in applications of smaller tubular and viscous slurry designs. Unique chemical nature of KCM002S will disperse solid particles effectively and stabilize them homogeneously in cement slurries to prevent any settling problems and reduce free water content.

KCM002S is compatible with most of cement additives, it can be in salt solution up to salt saturation, but higher concentration is required than in fresh water. KCM002S is also effective in fluid loss control if used together with most polymeric fluid loss control agents.

#### 4. Treatment

KCM002S is generally used at concentrations from 0.025 to 2.0%BWOC depending on the brands of cement and applications. Caution should be taken to "over-disperse" the slurry at higher KCM002S concentrations. Excess free water and particle settling will be observed if slurries are "over-dispersed".

### 5. Packaging

KCM002S is supplied in plastic-lining bags with net weight of 25kg/sack. It should be stored in shaded areas with good ventilation. Keep it away from high temperature, humidity and direct sunlight.