

DuraCem Additive KCM044A

1. Introduction

DuraCem additive are generally used to prevent formation fluid migration from occurring. KCM044A is specifically developed to form flow resistance to formation fluids so that the formation fluids cannot migrate during the transition period of cement hydration.

2. Physical Properties and Hazards

Additives	Form	S.G.	Water Solubility	Health Hazard	Physical Hazard	pH
KCM044A	White grain	1.06-1.26	Insoluble	Eyes	Dust	-

3. Chemical Properties and Application

KCM044A can be used for cement slurry design at wide temperature (150-350°C) and density ranges (10.5-20lbs/gal) due to its unique chemical natures. It can be mixed with freshwater, seawater, and saltwater depend on application requirement.

KCM044A provides superior fluid migration control in cementing gas-bearing formations while maintaining proper rheological properties (PV 10-60cP/YP 1-10 lb/100ft²), fluid loss control (less than 35mL), and accurate thickening time (1-10 hour adjustable).

Lower free water is generally expected for cement slurries containing KCM044A. It is compatible with most cement additives and environmentally friendly.

4. Treatment

1-10% loading is generally required for effective gas migration control depend on temperature, mixing water, and slurry density. Typically, the higher is temperature, the lower is density, the more KCM044A is required for effective gas migration control.

5. Packaging

KCM044A 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.