

Flow-off Additive KCM028

1. Introduction

The primary function of the gas migration control additive is to prevent gas migration, improve cement quality, and avoid gas channeling, thereby avoiding cementing failures and wellbore instability to ensure the safe and efficient cementing operations of oil and gas wells.

Flow-off technology which contains gas migration control agent KCM028 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

Additive	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KCM028	Milk Emulsion	0.98-1.08	Dispersed	>100	Eyes, Skin	None	6.0-8.0

3. Chemical Properties and Application

KCM028 itself can be used for cement slurry design at wide temperature (75-250°F) and density ranges (10.5-20 lbs/gal) due to its unique chemical natures. It can be mixed with freshwater, seawater, and salt water depend on application requirement.

Together with stabilizer KCM018A, Flow-off additive KCM028 can be used at a temperature up to 350°F. It also can provide superior fluid migration control in cementing gas-bearing formations while maintaining proper rheological properties, fluid loss control (less than 35 mL), and accurate thickening time (1-10 hour adjustable).

Lower free water is generally expected for cement slurries containing KCM028. It is compatible with most cement additives and environmentally friendly.

4. Treatment

1.0-3.5 gal/sack loading is generally required for effective gas migration control depends on temperature, mixing water, and slurry density. Typically, higher the temperature, lower the density, and more KCM028 is required for effective gas migration control.

5. Packaging

KCM028 is supplied in 53 gallons high density polyethylene (HDPE) drums. Keep it away from extreme conditions such as places near flames or direct sunlight.