

Surfactant KCM035

1. Introduction

Most drilling fluids are not designed for easy displacement and are not compatible with cement slurry. A buffer generally called pre-flush or spacer must be placed between the drilling fluid and cement slurry to avoid the contacts between drilling fluid and cement slurry.

KCM035, generally together with KCM036, is added into the pre-flushes or spacers to alter their properties and compatibility with cement slurry and muds, especially oil-based or synthetic-based muds.

KCM035 (and/or KCM036) is a surfactant compatible with cement slurries and most oil based or synthetic based drilling fluids. It is mixed with water (or other solvent) to form a chemical wash solution and can also be incorporated into the washers or spacers.

2. Physical Properties and Hazards

Additive	Form	S.G.	Water Solubility	Flash Point (°C)	Health Hazard	Physical Hazard	pH
KCM035	Clear Liquid	0.90-1.00	Soluble	66°C	Eyes	None	5.0-6.0

3. Chemical Properties and Application

KCM035 is recommended to be mixed with fresh water or possibly with seawater and generally concentration is at 1-2 gal/bbl of chemical wash, to achieve good mud removal. It is recommended to use a volume corresponding to at least a 10 mins contact time.

The compatibility test should be performed according to ISO-10426-2 (API-RB10B-2) with actual sample of materials. The reverse emulsion test should be performed if it is used with oil-based mud (OBM) or synthetic based mud (SBM). It is strongly recommended to use KCM035 together with KCM036.

4. Treatment

KCM035 is generally recommended at 1-2 gal/bbl of chemical wash or spacer.

5. Packaging

KCM035 is supplied in 5 gallons high density polyethylene (HDPE) drums or 53 gallons HDPE drums. Keep it away from extreme conditions such as places near flames or direct sunlight.