

Surfactant KWC008

1. Introduction

ChanPlug is remedial treatment technology for well repairs or well problems including casing or liner leaks, unsuccessful primary cementing job, top of cement, water production, depleted zones or high fluid loss. Premature destabilization and “false-gelling” are sometimes encountered in ChanPlug treatment because of the instability of KWC030 at elevated temperature. Surfactant KWC008 is specifically developed to mitigate the problem and helps KWC030 to provide ultra-low fluid loss control in ChanPlug design. ChanPlug has the following advantages compared to conventional squeeze jobs:

1. Low fluid loss and high resistance to dehydration
2. Low viscosity but better fluid stability
3. Low gel set permeability and better gas or water tightness.

2. Physical Properties and Hazards

Additive	Form	S.G.	Water Solubility	Melting/Flash Point (°C)	Health Hazard	Physical Hazard	pH
KWC008	Clear Liquid	1.02-1.12	Soluble	Not Combustible	None	None	7-9

3. Chemical Properties and Application

KWC008 is applied in most ChanPlug systems if application temperature is more than 200°F. It changes the interaction mechanisms between KWC030 and other additives such as KWC020 and KWC021 so that premature destabilization and gelation is minimized. It is effective in wide temperature (75-325°F) and density (10-20 lbs/gal) ranges.

KWC008 does not affect other ChanPlug properties such as gelling time, compressive strength although it performs good KWC030 stabilization and “right-angle set” properties.

4. Treatment

0.1-0.3 gal/sack of KWC008 loading is generally required depend on temperature, mixing water and ChanPlug density.

5. Packaging

KWC008 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.