

PRODUCT DESCRIPTION

PCD-1C is an environmentally safe, chloride free, clay control additive. It is a liquid product designed specifically for use as a replacement for bag KCl (potassium chloride). PCD-1C is a very effective temporary stabilizer for smectite, illite and mixed layer clay minerals that are encountered in many hydrocarbon reservoirs. PCD-1C offers superior performance without the handling, mixing and disposal problems associated with bag KCl. The use of PCD-1C on the fly eliminates premixing and leftover saltwater disposal problems. Because PCD-1C is non-surface active, it does not effect wettability or cause emulsions.

Toxicity tests conducted by an independent laboratory showed PCD-1C to be toxicologically safe. It has a low potential to accumulate in the membranes of biological organisms and was readily biodegradable in seawater.

RECOMMENDED APPLICATION

Recommended loading 0.2 to 2 ppb of fresh water, depending on mineralogy of the formation. PCD-1C can be run on the fly or batch mixed.

COMPATIBILITY

When PCD-1C contacts an acidic material, a rapid neutralization reaction occurs liberating carbon dioxide (CO₂) gas. Hoses used to transfer PCD-1C and storage tanks should be flushed with water if they have been in contact with an acid. PCD-1C is compatible with most water based drilling fluids, frac fluids, cross-linkers and breakers. A compatibility test should be run with anionic viscosifiers before use.

TYPICAL PHYSICAL PROPERTIES

Form:	Liquid
Chemical Family:	Quat. Amine salt
Color:	Clear, pale green
Solubility:	Water and brines
Odor:	Slight Amine
Wt. per Gal.:	9.12 lb
Charge:	Cationic
Flash Point:	None

HANDLING/STORAGE

Keep drum tightly sealed to avoid contamination. Avoid contact with eyes, skin or clothing. Recommend use of splash goggles and rubber gloves. Refer to the Material Safety Data Sheet (MSDS) for handling and hazard data.

PACKAGING

PCD-1C is shipped in 55 gallon drums and 330 gallon tote tanks.