



Drilling Fluids, Inc.

Petro Drill Oil Base Product

HOT LIME

Description

HOT LIME is Calcium Oxide, also called anhydrous lime or quick lime, and has the chemical formula CaO . A separate product, LIME. LIME is calcium hydroxide, also called Hydrated Lime, has the chemical formula Ca(OH)_2

Uses

HOT LIME is used for alkalinity control and as a calcium source for saponification (soap building) in the GEO PetroDrill oil based drilling fluid system. Because it is more volatile to handle and is subject to changing to hydrated lime by absorbing moisture from the atmosphere, HOT LIME is used only in oil based drilling fluid and occasionally in Lime based drilling fluids where the alkalinity is essential.

Benefits

HOT LIME is an essential ingredient in GEO PetroDrill oil based drilling fluid to form the emulsification soap. Using lime in place of HOT LIME requires 2 times as much material. HOT LIME may be used as an alternative to CAUSTIC SODA in some water based drilling fluids. Excess HOT LIME in the drilling fluid acts as a scavenger for hydrogen sulfide (H_2S).

Treatment

HOT LIME is maintained at or above 2.0 ppb in the GEO PetroDrill system. Additions are based on titration of the whole drilling fluid.

Function

In GEO PetroDrill oil base drilling fluid HOT LIME is used combine with the fatty acid emulsifiers to form a calcium soap which emulsifies the water droplets.

Typical Physical Properties

Physical Appearance..... white powder
Specific gravity..... 2.3
Hygroscopic.....No



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**Safe Handling
Recommendations**

Packaging

HOT LIME (continued)

HOT LIME can be more hazardous than most mud chemicals. *Read Material Safety Data Sheet (MSDS) for this product prior to use.* Use of appropriate respirator, gloves, goggles, and apron is recommended for employee's comfort and protection.

HOT LIME is packaged in 50 pound. moisture-proof multiwall bags.