Lime

PRODUCT DESCRIPTION

LIME, hydrated Lime is the common name for calcium hydroxide [Ca(OH)2]. It is used as a source of calcium and alkalinity in both water-and oil-base drilling fluids. Drilling fluid applications for LIME include: increasing pH; providing excess LIME as an alkalinity buffer; flocculating bentonite muds; removing soluble carbonate (CO_3^{-2}) ions; controlling corrosion; and activating fatty-acid, oil-base mud additives.

APPLICATIONS

- Lime is used as an economical source of calcium for flocculating bentonite slurries for
- improved hole cleaning in spud muds.
- Excess Lime buffer pH, provides a reserve quantity of calcium to precipitate soluble
- carbonates.
- An alkaline pH which is buffered by excess Lime will prevent acidic conditions from occurring which can lead to accelerated corrosion from acid gasses.
- Lime precipitates soluble carbonate ions.

RECOMMENDED TREATMENT

Low-Lime	0.5 to 2.0 lb/bbl
Medium-Lime	2.0 to 5.0 lb/bbl
High-Lime	5.0 to 15.0 lb/bbl

Water-base: Excess Lime (lb/bbl) = 0.26 [Pm - (F*w* x Pf)]

Oil-base: Excess Lime (lb/bbl) = POM x 1.3

TYPICAL PHYSICAL PROPERTIES

Physical appearance	White powder
Specific gravity	2.20
pH (1% solution)	12.4

PACKAGING -50 lb sacks