



Technical Data Sheet

Lime

Product Description

Lime and **Hydrated Lime** are all common names for calcium hydroxide (Ca(OH)₂). It is used as a source of calcium and alkalinity in both water-base and oil base drilling fluids. Lime is a source of calcium and hydroxyl ions.

Applications: Increasing pH; providing excess Lime as an alkalinity buffer; flocculating bentonite; removing soluble carbonate (CO₃²⁻) ions; and activating oil base mud additives.

Treatments: Treatment for Lime depends on the three levels of concentration.

WBM

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

OBM

Raise Pom 0.75 mL = 2 lb/bbl.

*gas and barite dependent

Caution: Lime is a strong base and will form high pH solutions. Use proper PPE while handling and mixing.

Product Formulas

Lime (lb/bbl) = CO₃²⁻ (mg/l) x 0.000432 x Fw

Water-Base: Excess Lime (lb/bbl) = 0.26[Pm—(Fw x Pf)]

Oil-Base: Excess Lime (lb/bbl) = Pom x 1.3

KEY BENEFITS

- Calcium source
- Hydroxyl source
- Corrosion control
- Alkalinity buffer
- Precipitation of soluble carbonates
- Oil-Based mud additive activator

Key Properties

pH	12.4
Color	White
Physical Form	Powder
Sg	2.2
Solubility @ 68°	0.165g/100 ml water
Packaging	50 lb Sacks