

HYDRATED LIME

Calcium Hydroxide

INCREASE PH AND CALCIUM IONS

Hydrated Lime or calcium hydroxide $[Ca(OH)_2]$ is a source of Ca and OH and is used to raise the pH.

In clear water drilling, **Hydrated Lime** is added to the sump water to increase the pH and to provide calcium ions.

In a Gyp-based mud system, **Hydrated Lime** is added at a concentration of 1.0 kg/m³, and then used as needed to maintain a pH of 10.0-11.0 in the drilling fluid.

Hydrated Lime is used as a means of adjusting the alkalinity when bicarbonate/carbonate contamination exists. It is used to maintain the alkalinity of oil-based drilling fluids where it enhances the performance of emulsifiers and offers a degree of corrosion protection.

MIXING & HANDLING

Premix in water in the chemical barrel and add slowly to the system. Excess lime treatment will cause thickening of a bentonite based mud system.

Hydrated Lime gives off heat when mixed with water. Strong solutions have a high pH and may cause skin burns. Avoid contact with skin and eyes and wear protective clothing and goggles when handling and mixing. Store in a dry place.

WHMIS: Controlled (See SDS)

TDG: Not regulated

Packaging: 25kg sack

PHYSICAL PROPERTIES:

Appearance: Fine white powder

Specific Gravity: 2.3-2.4

Bulk Density: 320-690 kg/m³

CHEMICAL PROPERTIES:

Type: Humalite (Humic acid)

Solubility: 0.165g/100g @ 20°C

pH: 12.45

