



HYDRATED LIME

DESCRIPTION

Hydrated Lime or Calcium Hydroxide ($\text{Ca}(\text{OH})_2$) is a source of Ca and OH and is used to raise the pH.

PROPERTIES

Physical		Chemical	
Appearance:	Grey-white powder	Type:	Calcium Hydroxide
Specific Gravity:	2.3-2.4	Solubility:	Soluble (0.185g/100 ml @ 0°C)
Boiling Point:	2850°C	pH:	12.0 (saturated solution)
Flash Point:	Not applicable	Microtox:	Not applicable

APPLICATION

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/m^3 , 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. Hydrated Lime 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 AND 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 MSDS)

TDG: Not regulated

PACKAGING: 25 kg sack