



Drilling Fluids, Inc.

DESCRIPTION

USES

BENEFITS

TREATMENT

FUNCTION

SODIUM HYDROXIDE

CAUSTIC SODA, sodium hydroxide [NaOH] is used primarily for pH and alkalinity control.

CAUSTIC SODA will minimize the solubility of calcium and magnesium contaminants in drilling muds. **CAUSTIC SODA** activates and solubilizes the organic dispersants such as Lignite, Lignosulfonate, and Desco. **CAUSTIC SODA** controls the pH and alkalinity properties of waterbase muds to treat Carbon Dioxide [CO₂] contamination and assists in control of Hydrogen Sulfide [H₂S] contamination.

CAUSTIC SODA is commonly used to control pH and alkalinity in water-base muds. **CAUSTIC SODA** is always added to solubilize and activate Lignite and Lignosulfonate. Increases pH without the addition of calcium [Lime] or carbonates [Soda Ash]. May be used to adjust pH for fish-eye control in HEC.

CAUSTIC SODA should be added as needed to control the pH and Pf alkalinity. The product should be added as a water solution from a chemical barrel. **CAUSTIC SODA** is a corrosive material and should be used with extreme caution. **CAUSTIC SODA** should not be mixed through the mud hopper. One sack should be added very slowly with careful agitation to 50 gallons of water in the chemical barrel. The solution can then be added to the mud system.

PH strips may be used to monitor the amount of **CAUSTIC SODA** to be added. For greater accuracy, an electronic pH meter is required.

Treating H₂S with **CAUSTIC SODA** is hazardous as the precipitate will dissolve into H₂S again when the pH drops.

Increasing pH increases the solubility of many organic dispersants. Increasing pH reduces the solubility of Calcium and Magnesium. In the presence of Carbon Dioxide [CO₂] and free calcium CAUSTIC SODA converts the carbonates to Calcium Carbonate. If excess calcium is absent Lime should be used in place of or along with CAUSTIC SODA

GEO Drilling Fluids, Inc.

1431 Union Avenue
Bakersfield, CA 93305

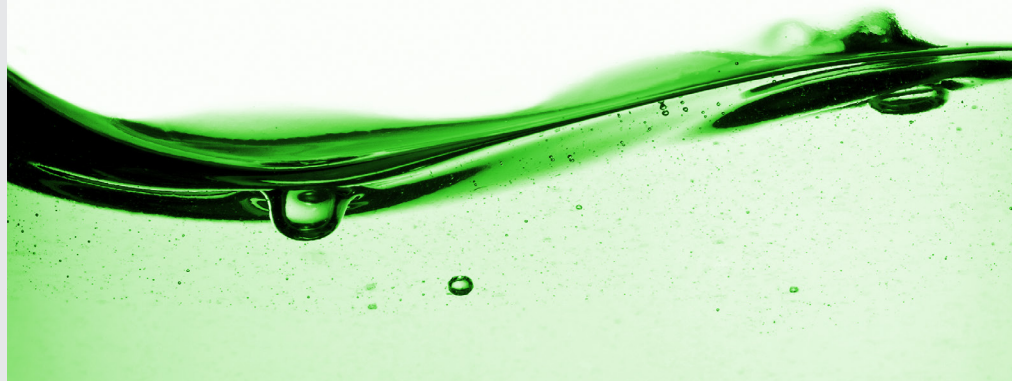
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For more info visit:

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TYPICAL PHYSICAL PROPERTIES

SODIUM HYDROXIDE

Physical Appearance: ...white, free-flowing beads, flakes, pellets, or clear liquid
Specific gravity:2.13 at 68oF
Bulk Density.....1.175g/ml
Hygroscopic.....Yes [strong]
pH:14.0
Solubility in water:50% by weight at 68oF

SAFE HANDLING RECOMMENDATIONS

International and domestic regulatory agencies classify **CAUSTIC SODA** as a corrosive material [UN 1823] for transportation.

CAUSTIC SODA is a very strong alkali and will cause severe burns. Read MSDS before use.

Use of appropriate respirator, gloves, goggles, and apron is recommended for employee comfort and protection. See Material Safety Data Sheet [MSDS] for this product prior to use.

PACKAGING

CAUSTIC SODA is packaged in 50 lb plastic multi-wall bags.

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