

## Product Information

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### CAUSTIC SODA

#### PRODUCT DESCRIPTION

Caustic Soda (NaOH) is used primarily to control the pH range in water base drilling fluids.

#### FEATURES AND BENEFITS

Caustic Soda is used to maintain the desired pH range in water base drilling fluids.

Caustic Soda provides the required pH range to allow for the solubility of most common dispersants.

Caustic Soda provides the required alkaline environment necessary for the dispersion of clays.

Caustic Soda aids in corrosion control and precipitates excess hardness as hydroxides.

#### APPLICATION

Caustic Soda is primarily used to control the pH range in water base drilling fluids. It is also used to reduce the total hardness of make-up water.

#### RECOMMENDED TREATMENT

Caustic Soda should be added carefully and slowly, utilizing a chemical barrel. The amount required to achieve a desired pH range will depend upon type and concentration of drilling fluid components. When added to water with a 7.0 pH the effect will be approximately:

Caustic (kg/m <sup>3</sup> )	pH	p-Alkalinity(cc)
0.7	7.5-8.0	trace
1.0	8.5-9.0	0.1-0.25
1.45	9.5-10.0	0.3-0.5
2.20	10.0-10.5	0.5-0.7
2.90	11.0-12.0	0.8-1.0
5.80	14.0	3.0
8.70	14.0	5.0
11.6	14.0	7.0

Caustic Soda is normally added in a concentration of 0.75-1.5 kg/m<sup>3</sup>

#### TYPICAL PHYSICAL PROPERTIES

Appearance	white pearls
Specific Gravity	2.13
Solubility	Soluble
pH of 3% solution	14.0

#### AVAILABILITY

Caustic Soda is packaged in 22.68 kg bags.