



## Product Information

### Caustic Soda

#### GENERAL 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.

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)
0.70	7.5-8.0	Trace
1.00	8.5-9.0	0.1-0.25
1.45	9.5-10.0	0.3-0.50
2.20	10.0-10.5	0.5-0.70
2.90	11.0-12.0	0.8-1.00
5.80	14.0	3.0
8.70	14.0	5.0
11.60	14.0	7.0

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

#### TYPICAL PHYSICAL PROPERTIES

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

#### HANDLING

Caustic Soda is classified as a E controlled product using the WHMIS classification. Refer to MSDS information for specific precautions and handling.

#### AVAILABILITY

Caustic Soda is packaged in 22.68kg bags and is available from HiTech Fluid Systems Ltd.