

### **Description**

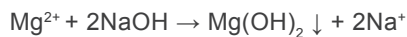
CAUSTIC SODA is a high purity sodium hydroxide (NaOH).

### **Typical Properties**

Appearance : White flakes, pallets or beads  
pH (0.1 N sol.) : 13  
Specific Gravity : 2.13  
Sol. in water : Completely

### **Features and Benefits**

CAUSTIC SODA is a cost effective chemical to remove magnesium as insoluble hydroxide from sea water when used as make-up water.



CAUSTIC SODA activates and solubilizes the organic dispersants such as lignite and lignosulfonate (KAR-CFL or KAR-CFL HT).

CAUSTIC SODA controls the pH and alkalinity properties of water-base drilling fluids to treat carbon dioxide contamination.

CAUSTIC SODA reduces corrosion rate by maintaining high pH.

### **Application**

CAUSTIC SODA is used to control pH and alkalinity in all water-base drilling fluids. When seawater is used as make-up water, CAUSTIC SODA is also added to treat magnesium in sea water.

### **Limitations**

CAUSTIC SODA is incompatible with high hardness brines such as calcium chloride and magnesium chloride.

CAUSTIC SODA is a corrosive material and should be used with extreme caution.

### **Treatment**

Normal treatment levels of CAUSTIC SODA ranges from 0.25 to 4 lb/bbl (0.7 to 11.4 kg/m<sup>3</sup>) depending on fluid type and chemistry.

When seawater is used as make-up water, CAUSTIC SODA needed to treat magnesium in sea water is calculated from

$$\text{Soda Ash (lb/bbl)} = 0.00116 \times F_w \times \text{Mg}^{2+} \text{ (mg/l)}$$

Where  $F_w$  is water fraction in the fluid.

When the system is treated with KAR-CFL or KAR-CFL HT, one sack of caustic potash is added for every four sacks of KAR-CFL or KAR-CFL HT.

CAUSTIC SODA is not added 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 slowly to the circulating system over a complete circulation.

### **Packaging**

CAUSTIC SODA is supplied in 25 kg (55 lb) moisture-proof, multiwall paper sacks.