

# PH UP SODA ASH

## SODIUM CARBONATE

Sodium Carbonate anhydrous commonly known as **Soda Ash**, is a chemical compound used widely in the drilling industry as a water based mud conditioner and contaminant treatment additive.

**Earth Pro pH Up Soda Ash** is used to precipitate calcium in make up water, which softens the water and elevates the water's pH level prior to mixing mud additives. This is desirable since bentonite and some polymers provide better yield in soft, slightly alkaline water.

### PHYSICAL PROPERTIES:

**Appearance:** White granular crystal  
**Bulk Density:** 930 kg/m<sup>3</sup> (min)  
**Specific Gravity:** 2.533 gm/cm<sup>3</sup>

### CHEMICAL PROPERTIES:

**Solubility:** 18% by weight of water @ 21°C  
**Sodium Carbonate:** 99.5% min  
**Sodium:** 58.2% min  
**Calcium:** 150 ppm (max)  
**Magnesium:** 50 ppm (max)  
**Sodium Sulphate:** 400 ppm (max)  
**Sodium Chloride:** 500 ppm (max)  
**Iron:** 5 ppm (max)  
**Moisture:** .15% max  
**Water Insolubles:** 500 ppm (max)

## MIXING & HANDLING

**Earth Pro pH Up Soda Ash** is only partially soluble in water so prehydrating or attempting to dissolve it in water and then add it to a system will result in minimal benefit. **Earth Pro pH Up Soda Ash** is best added dry either through a mixing hopper or mechanically dispersed (sprinkled) over the top of the fluid surface or added at a point of agitation.

In make up water or to treat contamination from cement, anhydrite or to treat out Ca<sup>+</sup> from floc water the flowing guideline is used if hardness can be measured.

350ppm calcium ions requires 1.0 kg/m<sup>3</sup> (2lb/250gal) of **Earth Pro pH Up Soda Ash**.

If total hardness or calcium can not be measured at the time of treatment or if blindly pretreating make up water for premixing, add **Earth Pro pH Up Soda Ash** in 0.5 kg/m<sup>3</sup> (1lb/250gal) increments until pH is 8.5 – 9.0. Do not exceed 3 kg/m<sup>3</sup> (6.5lb/250gal) without being able to physically determine the effectiveness of the addition either through chemical tests or general analysis of the mud. Over-treatment of **Earth Pro pH Up Soda Ash** can result in carbonate alkalinity and consequent excessive gel strengths and problems due to increased fluid loss.

**WHMIS:** Controlled (see SDS)

**TDG:** Not regulated

**Packaging:** 25kg (55lb) bag, 22.7kg (50lb) pail