



# Sodium Bicarbonate

**Description:** Sodium Bicarbonate,  $\text{NaHCO}_3$  is used to lower the pH of drilling slurry from a pH of 12-13 (alkaline) to a neutral pH range of 8-9. A white powder, Sodium Bicarbonate is also added to a base drilling fluid as a pH neutralizing additive. A buffer sodium bicarbonate is added to acidic water to raise the pH to 8-9.

**Recommended Use:** Sodium Bicarbonate is used to treat cement contamination in Shore Pac<sup>®</sup> drilling slurry and bentonite water based drilling fluids. It is also used as a buffer. Sodium bicarbonate will remove calcium and manganese making hard water soft

**Advantages:**

- Easy to mix and use, soluble in water.
- Economical method to lower pH.
- Safe to use, noncombustible

**Mixing and Applications:** Sodium Bicarbonate should be added to the mixing water prior to mixing the primary drilling product. Sodium Bicarbonate dissolves readily in water. Add slowly through a hopper at a ratio of 5 lbs per 1000 gallons mix water.

<b>Characteristics:</b>	<b>Appearance</b>	White powder
	<b>Solubility</b>	7.8g/100g water @ 64 °F (18 °C)
	<b>pH (1% solution)</b>	8.3
	<b>Density</b>	2.2

**Packaging:** 50 lb, multi-wall bags, 49 bags per pallet.