



Technical Data Sheet

Soda Ash

Product Description

Soda Ash is the common name for sodium carbonate. Soda Ash is used in water-base muds to precipitate calcium, increase pH and flocculating spud muds.

Applications: Increasing pH; precipitation of calcium, and flocculating spud muds.

Treatments: Treatment for Soda Ash depends on Calcium level and water chemistry of the drilling fluid. Treatments should be made on an incremental basis to prevent overtreatment which could result in flocculation due to carbonates.

Typical concentrations range from 0.25 to 2 lb/bbl

Product Formulas

One pound of Soda Ash will remove the calcium from 1.283 lb anhydrite.

Soda Ash to reduce hardness:

Soda Ash (lb/bbl) = $\text{Ca (mg/L)} \times 0.00093 \times \text{Fw}$

Where: Fw = Water Fraction from retort analysis (% water/100)

KEY BENEFITS

- **Precipitation of Calcium**
- **Increase pH**
- **Improve additions of calcium sensitive additives such as PHPA and SPA**

Key Properties

pH	11.4
Color	White
Physical Form	Powder
Sg	2.51
Solubility @ 86°	51g/100 ml water
Packaging	50 lb Sacks