

SODIUM CARBONATE (SODIUM SALT OF CARBONIC ACID)

GENERAL INFORMATION

SODA ASH is primarily used as a treatment of calcium ions, a pH buffering agent, to prevent flocculation from gypsum and anhydrite contamination.

TYPICAL PROPERTIES

Appearance	White powder
Solubility in water	30 gr/100ml
Water insolubles	0.02% max
Density	580-680 kg/m ³
Molecular formula	Na ₂ CO ₃
Purity	99.5% min
NaCl	0.15% max
Fe ₂ O ₃	0.0025% max
Na ₂ SO ₄	0.02% max
Heavy metals	10 ppm max

PRODUCT APPLICATION

SODA ASH is highly soluble in water forming carbonate (CO₃.-2) ions, which precipitates soluble calcium and magnesium ions in the form of Calcium carbonate and Magnesium carbonate.

Calcium and magnesium ions are usually soluble in the water phase of the mud system or can migrate with the formation water and drilled anhydrite formation or from cement contamination.

Soluble calcium ions should always be kept at low levels in order to avoid mud problems like foaming, internal aeration. In addition SODA ASH controls the pH but excessive amounts should not be used otherwise it can lead to increase in gel strength.

PRODUCT TREATMENT

SODA ASH should be added through the hopper to the water phase prior mixing other mud products.

The recommended dosage is 0.25 - 0.5 ppb.

In case excessive foams and internal aeration are existing during circulation, SODA ASH should be added especially in dispersed polymer/bentonite systems containing FCL/lignites.

SAFETY PRECAUTIONS

SODA ASH is non-toxic. A dust mask should be worn during mixing.

PACKAGING

SODA ASH is packaged in 25 kg/bag multiply with P/E liner and 1 M/T bulk bags.