

## SODIUM BICARBONATE

### GENERAL INFORMATION

SODIUM BICARBONATE pure grade (commonly known as baking soda) is primarily used to precipitate calcium in water base muds arising from cement or anhydride contaminations.

### TYPICAL PROPERTIES

Appearance	White powder
Solubility in water	10.3 gr/100ml
Water insolubles	0.01% max
Density	2200 kg/m <sup>3</sup>
Molecular formula	Na <sub>2</sub> HCO <sub>3</sub>
Purity	99.0% min
H <sub>2</sub> O	0.25% max
Heavy metals	10 ppm max

### PRODUCT APPLICATION

SODIUM BICARBONATE is a high purity grade of pH=8.3 effectively and economically used at low concentrations in all types of water based muds to precipitate soluble calcium ion arising from cement contaminations.

The bicarbonate reacts with soluble calcium ions to form insoluble carbonate. This reaction is irreversible.



### RECOMMENDED USAGE

SODIUM BICARBONATE is a free flowing powder and should be added through the hopper on rig site.

SODIUM BICARBONATE should be used at 0.25 lb/bbl as a pre-treatment of the mud to be used for drilling cement after cement jobs and prior to commencing drilling operations of new phase.

In the mud system already contaminated with cement and having pH more than 8.3, the soluble calcium ion should be removed by adding 2 parts of SODIUM BICARBONATE for each 1.1 parts of cement until the desired results are obtained. Overtreatment or excessive addition of SODIUM BICARBONATE can cause high gel strength to the mud system.

### HANDLING AND STORAGE

SODIUM BICARBONATE is non-toxic. Special care must be taking during mixing or handling to avoid inhalation and skin, eye contact. Wash with water after use.

SODIUM BICARBONATE should be stored in a cool dry place.

### PACKAGING

SODIUM BICARBONATE is packaged in 25kg multiply paper bags with PE liner.