

## DESCRIPTION

Magnesium oxide- a solid, partially water-soluble reagent for controlling and stabilizing the alkalinity of drilling fluids. Magnesium oxide is recommended for buffering the alkalinity of clay-free polymer solutions. Unlike caustic soda (sodium hydroxide) and potassium hydroxide, traditionally used to regulate alkalinity, magnesium oxide is much less reactive, corrosive and hazardous. Due to its partial solubility, magnesium oxide has the ability to buffer the alkalinity of drilling fluids in the range of 8.5–10, depending on the formulation and salinity of the solution and bottomhole temperature.

## BASIC PHYSICAL PROPERTIES

Appearance	Fine white powder
Solubility	Partially soluble
Chemical composition	Ground magnesium oxide
Purity	94%
Density	3580kg/m <sup>3</sup>

## APPLICATION

Recommended concentrationmagnesium oxideduring initial processing - from 2 to 5 kg/m<sup>3</sup>. Typically, magnesium oxide is added to the solution in excess, because Unlike caustic soda, the pH of the solution with an increase in the concentration of magnesium oxide, the alkalinity of the solution practically does not increase, because the excess reagent remains in solution in an undissolved state. When pH decreases, some of the excessmagnesium oxidedissolves and increases the pH to the original level. As alkalinity increases, part of the dissolvedmagnesium oxidegoes back to the solid state, reducing the content of hydroxyl ions and the alkalinity of the solution

## STORAGE

It is recommended to store in a cool, ventilated area. The shelf life is unlimited.

## PACKAGE

Supplied in multi-layer moisture-resistant paper bags weighing25 kg.