



## Technical Datasheet

# BENTONITE API

### Description

Bentonite API is a high-quality grade bentonite (sodium montmorillonite clay) which is widely used as a viscosifier and filtration control in water-based drilling fluids. Bentonite API may be used in fresh water or low-saline waters for better performance.

Bentonite API meets the API specifications for bentonite.

### Application

Main function of Bentonite API is increasing viscosity and lowering fluid loss in water-base drilling fluids. It is also used in preparing gunk pills to control severe to total loss circulations.

### Advantages

- Cost-effective
- Forming high quality filter cake on wellbore walls
- Hydrates more than other types of clays
- Increase gel strength of drilling fluid in order to suspending cuttings in wellbore
- provides excellent filtration characteristics.

### Limitations

- Not recommended to be used in reservoir section due to pore throats blocking and reduction in oil/gas production
- Reduced performance in salty environments (10,000 mg/L chlorides)
- Reduced performance in hard water

### Treatment

Dependent to quality of make-up water, normal concentrations for Bentonite API range from 5 to 30 lb/bbl. In case of using salty waters, the concentration of Bentonite API must be increased. In drilling fluids containing more than 10,000 mg/L chlorides, the performance of Bentonite API is significantly reduced. Treatments must be performed on an incremental basis to prevent any overtreatment and contaminating water-based muds.

### Typical Properties

APPEARANCE	Light tan / gray Powder
BULK DENSITY	48 – 52 lb/ft <sup>3</sup> (769 – 833 kg/m <sup>3</sup> )
MOISTURE	10% wt, max.
RESIDUE > 75 micron ( wet screen)	4% wt, max.
SPECIFIC GRAVITY	2.3 – 2.6

### Packaging

Bentonite API is available in 1 MT Big Bags.