



Technical Data Sheet K_60109

API BENTONITE

DESCRIPTION

API Bentonite is a premium drilling grade bentonite, which is a naturally occurring clay containing the clay mineral smectite. Its raw ore body is calcium based montmorillonite. It is treated with soda ash to ion-exchange to obtain sodium montmorillonite.

In fresh water it yields 91-100 bbl/ton of 15 cps viscosity mud (1.7 m³/100 kg). API Bentonite is a high-quality product conforming to API specifications (API Spec 13A, Section 9 Sixteenth Ed. Feb. 2004).

PROPERTIES

Physical		Chemical	
Appearance:	Tan powder	Mineral:	Sodium Montmorillonite
Specific Gravity:	2.4 -2.76 kg/L	Solubility:	Not soluble (forms colloidal suspension)
Bulk Density:	880 kg/m ³	pH:	9.5 – 9.9 (5% suspension)

Suspension Properties*	
Viscometer dial reading at 600 rpm	30 minimum
Yield point/plastic viscosity ratio	3 maximum
Filtrate volume	15.0 cm ³ maximum
Residue of diameter greater than 75 µm	4% maximum

* Suspension of 22.5 grams of bentonite in 350 ml of distilled water.

APPLICATION

API Bentonite is used for viscosity and filtration control in fresh water mud systems. The bentonite must be prehydrated for 24 hours in fresh water.

ADVANTAGE

API Bentonite has very high yield point, which can be used for extended reach drilling (ERD).

LIMITATION

Performance reduced in salt (> 5,000 ppm Cl⁻).

MIXING AND HANDLING

Mix directly through the mud hopper. Avoid breathing dust. It is advisable to use a dust mask and eye protection while mixing all powdered products.

ORIGIN

China

PACKAGING AND STORAGE

API bentonite is packed in 25 kg (standart packing; on pallets 1 FCL = 24mt) , 50 kg or 50 lb (22.7 kg), 100 lb (45.4 kg) paper and PE laminated bag with plastic liner inside. It also can be packed in 1.0 and 1.2 Mt polypropylene bulk bag with a polyethylene liner inside.

API bentonite must be stored in a dry place.

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