

TECHNICAL DATA SHEET

SODIUM BENTONITE POWDER

USES

SODIUM BENTONITE is used for drilling mud, binder (foundary-sand bond, iron ore pelletizer), purifier, absorbent (pet litter) and as a groundwater barrier. It is also used as a filler and as an ingredient in proprietary formulations in adhesives, grouts and mortars.

PRODUCT DESCRIPTION

BENTONITE is an absorbent aluminium phyllosilicate; essentially impure clay consisting mostly of montmorillonite: $(\text{NaCa})_{0.3}(\text{AlMg})_2 \cdot \text{Si}_4\text{O}_{10}(\text{OH})_n (\text{H}_2\text{O})$

PHYSICAL PROPERTIES

Colour:	Brown
pH (5 % in H₂O):	10 - 10.5
Bulk density:	0.85 – 1.0 g/cm ₃
Moisture:	<12%
Sieve grading (150 micron):	<5% retained
Sieve grading (75 micron):	<15% retained
Swelling volume:	22 to 26ml per 2gr
Water absorption:	>500%
Viscosity:	25 sec
Cation Exchange capacity:	>75meq/100g H ₂ SO ₄ Method

CHEMICAL PROPERTIES

Chemical %	
SiO ₂	50.0
Al ₂ O ₃	18.8
CaO	5.7
Fe ₂ O ₃	6.7
MgO	3.6
Na ₂ O	2.9
LOI	11.2

TYPICAL MINERALOGY

Mineral %	
Calcite	4
Quartz	6
Hematite	7
Kaolinite	6
Plagioclase	5
Muscovite	2
Montmorillonite	59
Smectite	12

PACKAGING

40kg
1000kg
Tankers

STORAGE

Must be stored in a moisture-free zone.