



Oreworld trade (Tangshan) co., Ltd.

BENTONITE

Introduction of Bentonite:

Bentonite is rock that consists mainly of montmorillonite, a clay mineral, and contains impurities such as quartz, feldspar, and other minerals. Bentonite is a highly colloidal clay mineral. Primarily there are two kinds of bentonite - sodium bentonite (high swelling, gelling and thermal durability) and calcium bentonite (more commonly available worldwide but with less swelling).

PROPERTIES:

Bentonite presents strong colloidal properties and its volume increases several times when coming into contact with water, creating a gelatinous and viscous fluid. The special properties of bentonite (hydration, swelling, water absorption, viscosity, thixotropy) make it a valuable material for a wide range of uses and applications.

Different specifications of the bentonite

Foundry: Bentonite is used as a bonding material in the preparation of molding sand for the production of iron, steel and non-ferrous casting. The unique properties of bentonite yield green sand moulds with good flowability, compactability and thermal stability for the production of high quality castings.

Cat Litter: Bentonite is used for cat litter, due to its advantage of absorbing refuse by forming clumps (which can be easily removed) leaving the remaining product intact for further use.

Pelletizing: Bentonite is used as a binding agent in the production of iron ore pellets. Through this process, iron ore fines are converted into spherical pellets, suitable as feed material in blast furnaces for pig iron production, or in the production of direct reduction iron (DRI).

Construction and Civil Engineering: Bentonite in civil engineering applications is used traditionally as a thixotropic, support and lubricant agent in diaphragm walls and foundations, in tunnelling, in horizontal directional drilling and pipe jacking. Bentonite, due to its viscosity and plasticity, also is used in Portland cement and mortars.

Environmental Markets: Bentonite's adsorption/absorption properties are very useful for wastewater purification. Common environmental directives recommend low permeability soils, which naturally should contain bentonite, as a sealing material in the construction and rehabilitation of landfills to ensure the protection of groundwater from the pollutants. Bentonite is the active



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protective layer of geosynthetic clay liners.

Drilling: Another conventional use of active bentonite is as a mud constituent for oil and water well drilling. Its roles are mainly to seal the borehole walls, to remove drill cuttings and to lubricate the cutting head.

Packages of the bentonite

25/50kgs bags or according to your requirement.