



Swellgel Plus Bentonite

Swellgel Plus is a composition of high-performance Wyoming-grade sodium bentonite and a polymer enhancing its natural rheological properties. Swellgel Plus is intended for the preparation of bentonite mud used for drilling operations in the HDD technology and during all types of vertical drilling (well drilling, drilling for vertical heat exchangers, geological exploratory drilling, etc.)

Product benefits

- high rheological parameters at low concentrations
- good stabilizing properties on borehole walls
- high degree of drill cutting removal from the hole
- good lubricating properties
- easy and quick process of preparing the drilling fluid

Properties

Composition: high quality sodium bentonite

Bulk density $\sim 780 \text{ kg/m}^3$

Humidity $\sim 11\%$

Physical properties (at 22°C in water with an electrical conductivity of 300 mS/cm):

Concentration in the drilling fluid [kg/m^3]	Structural strength 10'' [lb/100 ft^2]	Structural strength 10' [lb/100 ft^2]	Plastic viscosity [cP]	Yield limit [lb/100 ft^2]	Filtration after 30' [ml]
30	16	25	12	26	15.5

Recommended concentrations

Soil type	Concentration [kg/m^3]
Clays, loams	15 - 25

Fine and medium sands	25 – 30
Coarse sands, gravels, aggregates	30 – 35
Stones, pebbles, mud leaks	35 – 40

Packaging

Swellgel Plus is supplied as a beige powder, packaged in 25 kg multi-layer bags, 40 pieces per pallet wrapped in heat-shrinkable foil. Shelf life – 2 years from the date of manufacturing.