

## Product Information

## Bentonit W plus

### Horizontal Directional Drilling Bentonite

**Description:** *PHRIKOLAT BENTONIT W plus* is an extra high yield Wyoming-type sodium bentonite with a high montmorillonite content. *PHRIKOLAT BENTONIT W plus* is a single bag product using very fine-grained bentonite. The product is developed for difficult and changing ground conditions as encountered in Horizontal Directional Drilling.

**Applications:** One-bag product for Horizontal-Directional-Drilling (HDD);  
Jacking lubricant in Pipe Jacking and Microtunnelling

**Properties:** *PHRIKOLAT BENTONIT W plus* is easily to mix with water and provides in small concentrations stable suspensions with optimum gel strength and cuttings suspension while minimum resistance to flow/to pump.

*PHRIKOLAT BENTONIT W plus* reduces filtration by forming a thin filter cake with low permeability and improves borehole stability in poorly consolidated sand and gravel formations.

*PHRIKOLAT BENTONIT W plus* shows extraordinary high cuttings suspension and carrying capacities in gravel and reduces clay and shale swelling, bit balling and sticking problems in soft soils. The adaptation of the rheological properties onto changing ground conditions can be achieved easily by changing the product concentration.

*PHRIKOLAT BENTONIT W plus* is compatible with all Phrikolat-Polymers and does not contain any harmful ingredients.

### Typical Concentrations:

Clay + Clay/Sand:	20-25 kg/m <sup>3</sup>
Sand + Gravel:	25-35 kg/m <sup>3</sup>
Gravel:	35-40 kg/m <sup>3</sup>

Mixing slowly and uniformly through a high-shear, jet-type mixer over one or more cycles of the volume of slurry will increase the performance of the product.

The make-up water should be checked for pH-value and water hardness, where appropriate a conditioning with soda ash is required (a maximum of 0.5 kg/m<sup>3</sup>). Performance reduced in salty water due to decreased hydration.

**Packaging:** 25 kg multiple paper-bags with **green** band on pallets, shrink wrapped, 1000 kg per pallet

Big Bags à 1000 kg or 650 kg (on request)