



PRODUCT INFORMATION

TEQGEL HD®

TEQGEL HD is a special one sack bentonite polymer formulation for use in horizontal directional drilling and other trenchless applications. **TEQGEL HD** is developed to provide superior drilling fluid qualities. This cost effective material is mixing very easily, therefore is ideal for drilling operations where high yielding and fast mixing bentonite is required. **TEQGEL HD** provides wellbore stability, water loss control and helps reducing torque and drag in long horizontal, large diameter wells. **TEQGEL HD** is non toxic and environmental safe.

APPLICATIONS

- Horizontal Directional Drilling
- Oilfield
- Microtunnelling
- Water Well Drilling
- Mineral Exploration
- Slurry Wall Technology

FUNCTIONS

- low solids content drilling fluid
- high rheological parameters for effective cutting transport and hole cleaning
- Viscosifier and water loss control
- Torque and drag reducing
- improves borehole stability for easy well installation
- rapid suspending gelstructure

ADVANTAGES

- high rate of drilling penetration
- makes obvious more mud with the same viscosity than other standard drilling bentonites
- highly effective viscosifier and stabiliser in low consolidated, porous formations

- fragile non progressive gel strength
- minimize drilling problems such as stuck pipes, bit balling, mud losses
- sealing lost circulation, permeability zones
- low water loss level
- excellent carrying capacity at low annular velocities
- easy build and modify rheology in water base mud
- low pressure drops in drilling systems
- low torque and drag in long horizontal wellbores
- provides lubricity and stability in water sensitive formations
- high thermal stability
- compatible with wide range of drilling polymers
- easy to handle one sack system
- dispersed easily with high shear
- non fermenting
- easy to clean in shale shakers and hydrocyclones
- extremely high content of montmorillonit
- Transportation and storage costs are reduced due to lower treatment requirements as compared to other bentonite systems.

GELTEQ e.K.

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LIMITATIONS

Thermal stability	100 °C
Range of pH solution	7 – 12
Calcium content	1000 mg/l
Chloride content	2000 mg/l

In case of high content of chlorides, Magnesium or calcium in makeup water, please consult with your supplier. Increasing concentration and chemical treatment is possible.

TYPICAL PROPPERTIES

Appearance	beige powder
Bulk density	0,9 t/m ³
Moisture	9 – 10 %

TYPICAL RHEOLOGICAL PARAMETERS

Fresh water 20 °C, after 1 hour
Fann Rheometer

Kg/m³	30	35	40	45
PV (cP)	8	11	13	15
YP (lbs/100ft²)	20	31	44	66
Gel 1	15	19	23	28
Gel 2	20	24	30	35
FV (s/1000ml)	45	55	70	100

PV – plastic viscosity
YP – yield point
FV – funnel viscosity

RECOMMENDED CONCENTRATION

	Kg/m³
Rock, clay	25 – 28
Sand	28 – 35
Fine gravel	35 – 40
Coarse gravel, mud losses	> 40

TREATMENT

TEQGEL HD should be added through the hopper with Venturi jet and circulate until the material is dispersed.

Do not overdose.

TRANSPORTATION

Not classified as dangerous in the meaning of transport regulations.

TOXICITY AND HANDLING

TEQGEL HD is a safe non toxic product and has excellent environmental acceptance.

Handling as an industrial chemical, wearing protective equipment.

Observe the precautions as described in Material Safety Data Sheet.

Product has Hygienic Attest issued by HuK Umweltlabor GmbH and National Institute of Hygiene in Warsaw

Product is accepted for all drilling Operations without any restrictions.

PACKING AND STORAGE

TEQGEL HD is packed in 25 kg multiwall paper sacks at 40 pieces on pallet or in 650 kg Big Bags on pallet.

Store in a dry location away from sources of heat or ignition, and minimize dust.

DISPOSAL

Dispose in accordance with local Standards. Contact waste disposal service.

The before mentioned data meet the present state of our knowledge and experience. For warranty and responsibility are our General Terms and Conditions valid.

BESTBORE is registered trade mark of HEADS Polska.

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