

# Pileman<sup>®</sup> - Trenchless

### General Description:

Aimed for superior and high technology requirement of trenchless drilling and more specially microtunneling and HDD **Pileman<sup>®</sup> -Trenchless** is the recommended bentonite.

**Pileman<sup>®</sup> -Trenchless** can be used on almost all soil types including sand and rock. The Gel strength is effectively calibrated depending upon the soil strata to ensure proper floatation of the cuttings.

**Pileman<sup>®</sup> -Trenchless** contains water soluble polymer to reduce skin friction and can be used both as face and side slurry during microtunneling.

### Product features:

Produce thixotropic Gel  
Shear thinning fluid, ensuring cutting carrying capacity  
The mud is designed to deposit thin low permeability filter cake, ensuring low filter loss.  
Cools as well as lubricates the drill bit.

### Mixing procedure:

Simply mix 45 kg of **Pileman<sup>®</sup> -Trenchless** in 1000 ltr. fresh water and the slurry will be ready to use after 20 minutes of mixing, giving a marsh viscosity 45" or more.

Parameter	unit	Results
Free Swelling Volume	ml	28min
pH (3% dispersion)	-	9-10.5
Moisture	%	12 max
Loose Bulk density	g/cm <sup>3</sup>	0.75-0.85
Dry residue # 200	%	20max
Wet residue # 200	%	< 2%

Rheology in fresh water		
Concentration	Kg/m <sup>3</sup>	45
Marsh Viscosity	Sec/qt	45 min
Gel Strength	Pa	5 min
Yield	bb/sht	145
API filtrate (30 min under 7kg/cm <sup>2</sup> )	ml	20 max

Bentonite | Polymer | Polymer-Clay Nanocomposites

**Amrfeo pte. ltd.**

*the future of bentonite™*

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An "Export House" recognized by Govt of India  
ISO 9001 : 2008 Company  
Certified bentonite producer by 'Saudi Arabian Standard Organisation'

WELL DRILLING AIDS | HIGH YIELD BENTONITE |

GROUTING | PILING | D- WALLING | THRUST BORING |

SLURRY WALLS | BOREHOLE SEALING | HDD

MICROTUNNELING | PIPE JACKING