

Technical Data Sheet

Pileman® Trenchless II

General Description:

Especially made to the requirements of Horizontal Directional Drilling operations, our product is a one bag additive to achieve a sturdy slurry.

Pileman® Trenchless II is a polymer-based bentonite and for use in trenchless technologies. It has much better soil and cuttings carrying capacity having an improved Gel Strength and Yield point values and can be used immediately after 20 minutes of total mixing time with no further ageing time required.

Its unique formula can practically be used in any soil condition. A mixture of 30Kg/m³ in fresh water will produce slurry of 60" Marsh Viscosity.

Product Features:

- Low mud density suspension suitable for large drilling
- Maintains pump pressure
- Prevents Frack-outs
- Produces Thixotropic Gel
- Improved fluid loss characteristic, reduced seepage rate
- Optimum cuttings carrying capacity
- Stabilizes bore holes in loose formation
- Cools as well as lubricates the drilling bit

Technical Specification: - Properties at 30g/l

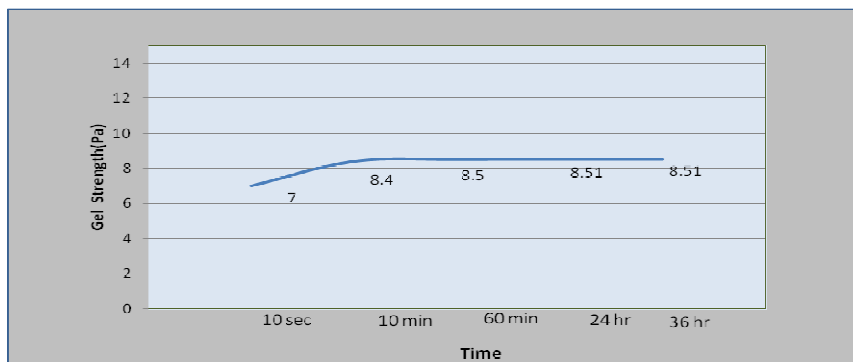
Yield Point : Min. 26 lbs/100 sqFt
 Plastic Viscosity : 8 mPas
 Filtrate Volume : 23 ml Max. (30 min under 7kg/cm²)

Please refer to the rheology chart in the following page with concentration @ 35Kg/m³

Concentration	Kg/m ³	30
Hamilton Beach mixer 11000 RPM, 20 minutes		
Marsh Funnel Viscosity	Sec/qt	60"
Fann Viscosity		
@600	rpm	41
@300	rpm	33
@6	rpm	10
Apparent Viscosity	cPs	20.5
Plastic viscosity	cPs	8
Yield Point	lb./100ft2	25
10s Gel Strength	lb./100ft2	10
10min Gel Strength	lb./100ft2	10.5
Filtrate Loss (As per API after 30min)	ml	23
Water Hardness	ppm	DW
Sand content (wet sieve analysis API)	%	1.6
Dry mesh # 200 passing	%	85

Slurry not aged.

Gel strength curve chart on Pileman Trenchless II, at concentration 35Kg/m³



Rheology chart comparing the slurry properties at different time interval and concentration

TIME	Test-1			Test-2		
	Instant	10 Min. stand by	1 Hr. Stand by	Instant	10 Min. stand by	1 Hr. Stand by
	concentration @30Kg/m ³			concentration @35Kg/m ³		
	Hamilton Beach Mixer 11000 RPM			Hamilton Beach Mixer 11000 RPM		
Fluid loss (22.5 min 7Kg/cm ²)	23 ml			19 ml		
600 rpm	43	52	54	59	66	69
300 rpm	35	44	46	52	58	61
200 rpm	33	40	41	50	52	54
100 rpm	26	36	37	46	48	50
6 rpm	10	11	11	14	18	18
3 rpm	8	9	9	12	14	14
Apparent Viscosity	21.5	26	27	29.5	33	34.5
Plastic Viscosity	8	8	8	7	8	8
Yield Point	27	36	38	45	50	53
Gel Strength 10 Sec. (Pascal)	5	5.5	5.5	7	8.5	8.5
Gel Strength 10 Min. (Pascal)	5.5	5.5	5.5	8.5	8.5	8.5
Marsh Viscosity(Sec/qt)	60	70	75	73	81	84

Chart prepared using distilled water however fresh water upto 200 ppm can be used. Use soda ash ight to optimise the water hardness level. This product is not suitable to be used in saline water.



Corporate & Marketing Office :
 32A, Chittaranjan Avenue, Calcutta 700012, India
 Ph: +91 33 4007 2855 | Mobile: +91 9831013136
 Fax: +91 33 2212 2040
 Email: amrfeo@amrfeo.com or amrfeo@gmail.com
 Web : www.amrfeo.com

[Star Export House accreditation by Govt. of India]

ISO 9001 : 2015 Quality System

Bentonite Processing plant :
 Survey no: 583/1 plot 2-6, Bhuj Bacaho Road
 Kutch – Gujarat , India

Only in-house production & process:
 Bentonite | Drilling Polymer & Cellulose | Drilling Foam | Bentonite Pellets| Super Absorbent Clay