

TM800-ST SERIES

TECHNICAL DATASHEET

Geomembrane (GMB) type	Smooth/textured (ST)
Composition	Linear low density polyethylene (LLDPE)
Main function	Impermeabilisation

Property	Test Method	Unit	Frequency ⁽¹⁾	TM840-ST	TM860-ST	TM880-ST	TM8-100-ST
Physical							
Nominal thickness	-	mm	-	1.00 (40 mils)	1.50 (60 mils)	2.00 (80 mils)	2.50 (100 mils)
Thickness (min. avg.)	ASTM D5199	mm	Every roll	0.95	1.43	1.90	2.38
Lowest individual 8/10 values	ASTM D5594	mm	Every roll	0.90	1.35	1.80	2.25
Lowest individual 10/10 values	ASTM D5594	mm	Every roll	0.85	1.28	1.70	2.13
Asperity height (min. avg.)	ASTM D7466	mm	Every roll	0.4	0.4	0.4	0.4
Melt index-190/2.16 (max.)	ASTM D1238	g/10 min	1/batch	1.0	1.0	1.0	1.0
Sheet density ⁽²⁾	ASTM D7492	g/cc	Every 10 rolls	≤ 0.939	≤ 0.939	≤ 0.939	≤ 0.939
Carbon black content ⁽³⁾	ASTM D4218	%	Every 2 rolls	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon black dispersion	ASTM D5596	Category	Every 10 rolls	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2
OIT - standard (avg.)	ASTM D3895	min	Formulation	100	100	100	100
Mechanical							
Strength at break ⁽⁴⁾	ASTM D6693	kN/m	every 2 rolls	18	23	31	39
Elongation at break ⁽⁴⁾	ASTM D6693	%	every 2 rolls	400	400	400	400
2% Modulus (max.)	ASTM D5323	kN/m	Formulation	420	630	840	1050
Tear resistance ⁽⁴⁾	ASTM D1004	N	every 6 rolls	110	165	220	265
Puncture resistance ⁽⁴⁾	ASTM D4833	N	every 6 rolls	250	375	500	625
Dimensional stability ⁽⁴⁾	ASTM D1204	%	Certification	± 2	± 2	± 2	± 2
Multi-axial tensile (min.)	ASTM D5617	%	Formulation	30	30	30	30
Oven aging- % retained 90 days	ASTM D5721						
STD OIT ⁽⁴⁾	ASTM D3895	%	Formulation	35	35	35	35
HP OIT ⁽⁴⁾	ASTM D5885	%		60	60	60	60
UV resistance-% retained 1600h	GRI -GM11						
HP-OIT ⁽⁴⁾	ASTM D5885	%	Formulation	35	35	35	35
Dimensions (may vary ± 1%)							
Width X length	-	m	-	6.80 X 237.7	6.80 X 170.7	6.80 X 134.1	6.80 X 97.5

This technical information comes from the manufacturer and was transcribed by Texel. All values are nominal test results, except when otherwise specified.

1-Testing frequency based on standard roll dimensions and one batch is approximately 180,000 lb (or one railcar). / 2 - ASTM D1505 and ASTM D792 give the same results

3 - ASTM D1603 and ASTM D4218 give the same results / 4 - Minimum average value on the basis of 5 specimens each direction (MD & TD)

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