TM800i-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]	TM830i-ST	TM840i-ST	TM860i-ST	TM880i-ST	TM8-100i-ST
Physical								
Nominal thickness	-	mils	-	30.0	40.0	60.0	80.0	100.0
Thickness (min. avg.)	ASTM D5199	mils	Every roll	28.5	38.0	57.0	76.0	95.0
Lowest individual 8/10 values	ASTM D5594	mils	Every roll	27.0	36.0	54.0	72.0	90.0
Lowest individual 10/10 values	ASTM D5594	mils	Every roll	25.5	34.0	51.0	68.0	85.0
Asperity height (min. avg.)	ASTM D7466	mils	Every roll	16	16	16	16	16
Melt index-190/2.16 (max.)	ASTM D1238	g/10 min	1/batch	1.0	1.0	1.0	1.0	1.0
Sheet density [2]	ASTM D792	g/cc	Every 10 rolls	≤ 0.939	≤ 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	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	Cat. 1 / Cat. 2
OIT - standard (avg.)	ASTM D3895	min	Formulation	100	100	100	100	100
Mechanical								
Stength at break [4]	ASTM D6693	ppi	Every 2 rolls	75	100	132	176	220
Elongation at break [4]	ASTM D6693	%	Every 2 rolls	250	400	400	400	400
2% Modulus (max.)	ASTM D5323	ppi	Formulation	1800	2400	3600	4800	6000
Tear resistance [4]	ASTM D1004	lbf	Every 5 rolls	19	25	37	50	60
Puncture resistance [4]	ASTM D4833	lbf	Every 5 rolls	56	56	84	112	140
Dimensional stability [4]	ASTM D1204	%	Certification	± 2	± 2	± 2	± 2	± 2
Multi-axial tensile (min.)	ASTM D5617	%	Formulation	30	30	30	30	30
Oven aging- % retained 90 jours STD OIT [4] HP OIT [4]	ASTM D5721 ASTM D3895 ASTM D5885	% %	Formulation	35 60	35 60	35 60	35 60	35 60
UV resistance-% retained 1600h HP-OIT [4]	GRI -GM11 ASTM D5885	%	Formulation	35	35	35	35	35
Dimensions (may vary ± 1%)								
Width X length	-	ft	-	22.3 X 1000	22.3 X 780	22.3 X 560	22.3 X 440	22.3 X 320

This technical informations 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 18,000 lbs (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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