High Density Polyethylene MicroDrain Liner[®]



Product Data

Property	Test Method	Frequency	Minimum Average Values			
Thickness (nominal), mil (mm)	ASTM D5994	Per Roll	50 (1.25)	60 (1.5)	80 (2.0)	100 (2.5)
Thickness (min avg), mil (mm)			47.5 (1.19)	57 (1.43)	76 (1.9)	95 (2.38)
Thickness (min 8 of 10), mil (mm)			45 (1.12)	54 (1.35)	72 (1.8)	90 (2.25)
Thickness (lowest individual), mil (mm)			42.5 (1.06)	51 (1.28)	68 (1.7)	85 (2.13)
Drainage Stud Height, mil (mm)	ASTM D7466	2nd Roll	130 (3.3)	130 (3.3)	130 (3.3)	130 (3.3)
MicroSpike [®] Asperity Height, mil (mm)	ASTM D7466	2nd Roll	20 (0.51)	20 (0.51)	18 (0.46)	18 (0.46)
Density, g/cc, minimum	ASTM D792, Method B	200,000 lb	0.94	0.94	0.94	0.94
Tensile Properties (both directions)	ASTM D6693, Type IV					
Strength @ Yield, Ib/in width (N/mm)	2 in/minute	20,000 lb	110 (19.3)	132 (23.1)	176 (30.8)	220 (38.5)
Elongation @ Yield, % (GL=1.3in)			13	13	13	13
Strength @ Break, lb/in width (N/mm)			110 (19.3)	132 (23.1)	176 (30.8)	220 (38.5)
Elongation @ Break, % (GL=2.0in)			300	300	300	300
Tear Resistance, lbs. (N)	ASTM D1004	45,000 lb	38 (169)	42 (187)	56 (249)	70 (310)
Puncture Resistance, lbs. (N)	ASTM D4833	45,000 lb	80 (356)	95 (422)	126 (560)	158 (703)
Carbon Black Content, % (range)	ASTM D4218	20,000 lb	2 - 3	2 - 3	2-3	2 - 3
Carbon Black Dispersion (Category)	ASTM D5596	45,000 lb	Only near spherical agglomerates: 10 views in Cat. 1 or 2			
Stress Crack Resistance (SP-NCTL), hrs.	ASTM D5397 Appendix	200,000 lb	500	500	500	500
Oxidative Induction Time, minutes	ASTM D3895, 200°C, 1 atm O ₂	200,000 lb	≥140	≥140	≥140	≥140

Agru America's geomembranes are certified to pass Low Temp. Brittleness via ASTM D746 (-80°C), Dimensional Stability via ASTM D1204 (±2% @ 100°C). Oven Aging and UV Resistance are tested per GRI GM 13. These product specifications meet or exceed GRI's GM13.

Supply Information (Standard Roll Dimensions)

Thic mil	kness mm	Wie ft	dth m	Len ft	ngth m	Area (a ft ²	npprox.) m ²
50	1.25	23	7	300	91.4	6,900	640
60	1.5	23	7	300	91.4	6,900	640
80	2.0	23	7	300	91.4	6,900	640
100	2.5	23	7	300	91.4	6,900	640

Note:

Average roll weight is 4,000 lbs (1,814 kg) for 100 mil and 3,000 lbs (1,300 kg) for other thicknesses. All rolls are supplied with two slings. Rolls are wound on a $6^{"}$ core. Special length available upon request. Roll length and width have a tolerance of $\pm 1\%$. The weight values may change due to project specifications (i.e. absolute minimum thickness or special length) or shipping requirments (i.e. international contanerized shipments).

All information, recommendations and suggestions appearing in this literature concerning the use of our products are based upon tests and data believed to be reliable; however, it is the users responsibility to determine the suitability for their own use of the products described herein. Since the actual use by others is beyond our control, no guarantee or warranty of any kind, expressed or implied, is made by Agru America as to the effects of such use or the results to be obtained, nor does Agru America assume any liability in connection herewith. Any statement made herein may not be absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations. Nothing herein is to be construed as permission or as a recommendation to infringe any patent.

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