

## Geomembrane HDPE Smooth Nominal Product Specifications

Properties	Test Method	Minimum Average Values				
		20	30	40	60	80
Thickness*, (mil.) Lowest individual reading	ASTM D5199	18 16	27 24	36 32	54 49	72 65
Density, g/cm <sup>3</sup>	ASTM D1505	.940	.940	.940	.940	.940
Tensile Properties (Each Direction) Strength at Break (lbs.) (N/mm) Strength at Yield (lbs.) (N/mm) Elongation at Break (%) Elongation at Yield (%)	ASTM D6693, Type IV	68 (12) 38 (6) 700 12	103 (18) 57 (10) 700 12	137 (24) 76 (14) 700 12	205 (36) 113 (20) 700 12	274 (48) 151 (26) 700 12
Tear Resistance (lbs.) (N)	ASTM D1004	12 (53)	19 (84)	25 (113)	38 (168)	50 (224)
Puncture Resistance (lbs.) (N)	ASTM D4833	31 (137)	49 (216)	65 (288)	97 (432)	130 (576)
Carbon Black Content (%) (Range)	ASTM D1603	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	Note (1)	Note (1)	Note (1)	Note (1)	Note (1)
<b>Standard Roll Dimensions</b>						
Roll Length, ft		1,800	1,210	900	600	450
Roll Width, ft		22	22	22	22	22
Roll Area, ft <sup>2</sup>		39,600	26,620	19,800	13,200	9,900

(1) **Carbon black dispersion (only near spherical agglomerates) for 10 different views:  
9 in Categories 1 or 2 and 1 in Category 3.**

Note: To the best of our knowledge, unless otherwise stated, these are typical property values and are intended as guides only, not as specification limits. Chemical resistance, odor transmission, longevity as well as other performance criteria is not implied or given and actual testing must be performed for applicability in specific applications and/or conditions. GeoCHEM, Inc. MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.