

TECHNICAL DATA SHEET

HUITEX HDPE SPECIAL ENHANCED SMOOTH GEOMEMBRANE

Properties	Test Method	1.0mm	1.5mm	2.0mm	2.5mm	3.0mm	4.0mm	5.0mm
Thickness, mm	ASTM D5199							
Average values		1.00	1.50	2.00	2.50	3.00	4.00	5.00
Lowest Individual Reading		0.90	1.35	1.80	2.25	2.70	3.60	4.50
Sheet density, g/cm ³	ASTM D792	0.940	0.940	0.940	0.940	0.940	0.940	0.940
Tensile Properties (1)	ASTM D6693 Type IV							
1. Strength at Yield, kN/m		15	22	29	37	44	58	74
2. Strength at Break, kN/m		27	40	53	67	80	106	134
3. Elongation at Yield, %		12	12	12	12	12	12	12
4. Elongation at Break, %		700	700	700	700	700	700	700
Tear Resistance, N	ASTM D1004	125	187	249	311	374	498	622
Puncture Resistance, N	ASTM D4833	320	480	640	800	960	1280	1600
Stress Crack Resistance, hrs	ASTM D5397 (Appendix)				>2000			
Carbon Black Content, %	ASTM D1603				2-3			
Carbon Black Dispersion	ASTM D5596				Note (2)			
Oxidative Induction Time, mins								
- Standard OIT	ASTM D8117				>100			
- High Pressure OIT	ASTM D5885				>600			
Oven Aging at 85°C								
- Standard OIT, %	ASTM D5721				>55			
- High Pressure OIT	ASTM D8117				>80			
UV resistance (3)	ASTM D7238							
High Pressure OIT, %	ASTM D5885				>80			

(1). Machine direction (MD) and cross machine direction (XMD) average values should be on basis of 5 test specimens each direction.

Yield elongation is calculated using a gauge length of 33 mm.

Break elongation is calculated using a gauge length of 50 mm.

(2). Carbon black dispersion for 10 different views: all 10 in Categories 1 or 2.

(3). The condition of the test is 20 hr. UV cycle at 75°C followed by 4 hr. condensation at 60°C.

- All values are nominal test results, except as minimum or maximum when specified.

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