SMOOTH LLDPE GEOMEMBRANE ENGLISH UNITS

Property	Test Method	Minimum Average Values			
		30 Mil	40 Mil	60 Mil	80 Mil
Thickness, mils	ASTM D 5199				
minimum average		30	40	60	80
lowest individual reading		27	36	54	72
Sheet Density, g/cc (max.)	ASTM D 1505/D 792	0.939	0.939	0.939	0.939
Tensile Properties[1]	ASTM D 6693				
1. Break Strength, lb/in		114	152	228	304
2. Break Elongation, %		800	800	800	800
2% Modulus, lb/in^2 (max.)	ASTM D 5323	60,000	60,000	60,000	60,000
Tear Resistance, lb	ASTM D 1004	16	22	33	44
Puncture Resistance, lb	ASTM D 4833	42	56	84	112
Axi-Symetric Break Strain, %	ASTM D 5617	30	30	30	30
Carbon Black Content[2], %	ASTM D 1603	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D 5596	--Note 3--			
Oxidative Induction Time (OIT)					
Standard OIT, minutes	ASTM D 3895	100	100	100	100
Oven Aging at 85°C	ASTM D 5721				
High Pressure OIT - % retained after 90 days	ASTM D 5885	60	60	60	60
UV Resistance[4]	ASTM D 7238				
High Pressure OIT[5] - % retained after 1600 hrs	ASTM D 5885	35	35	35	35
Roll Dimensions					
1. Width (feet):		23	23	23	23
2. Length (feet):		1,000	750	500	375
3. Area (square feet):		23,000	17,250	11,500	8,625
4. Gross weight (pounds, approx.):		3,435	3,435	3,435	3,435

1   Machine direction (MD) and cross machine direction (XMD) average values should be on the basis of 5 test specimens each direction. Break elongation is calculated using a gauge length of 2.0 inches.
2   Other methods such as ASTM D 4218 or microwave methods are acceptable if an appropriate correlation can be established.
3   Carbon black dispersion for 10 different views: Nine in Categories 1 and 2 with one allowed in Category 3.
4   The condition of the test should be 20 hr. UV cycle at 75°C followed by 4 hr. condensation at 60°C.
5   UV resistance is based on percent retained value regardless of the original HP-OIT value.