PRODUCT DATA SHEET

DK HDPE Smooth Geomembrane

HDPE is a smooth high density polyethylene (HDPE) geomembrane manufactured with the highest quality resin specifically formulated for flexible geomembranes. This product is used in applications that require excellent chemical resistance and endurance properties.

AT THE CORE:

HDPE geomembrane suitable for applications that require excellent chemical resistance and endurance properties.

Product Specifications

Tested Property	Test Method	Frequency	Minimum Average Value					
Product Code								
Thickness (minimum average), mm Lowest individual reading, mm	ASTM D 5199	every roll	0.75 0.68	1.00 0.90	1.50 1.35	2.00 1.80	2.50 2.25	3.00 2.70
Density, g/cm^3	ASTM D 1505 / D 792	every 5th roll	0.94	0.94	0.94	0.94	0.94	0.94
Tensile Properties (each direction) Strength at Break, N/mm-width Strength at Yield, N/mm-width Elongation at Break, % Elongation at Yield, %	ASTM D 6693, Type IV Dumbbell, 50 mm/min G.L. 51 mm G.L. 33 mm	every 5th roll	 21 11 700 13	 28 15 700 13	 43 23 700 13	 57 30 700 13	 71 38 700 13	 85 45 700 13
Tear Resistance, N	ASTM D 1004	every 5th roll	93	125	187	249	311	374
Puncture Resistance, N	ASTM D 4833	every 5th roll	263	352	530	670	840	980
Carbon Black Content, % (Range)	ASTM D 4218 / D 1603	every 5th roll	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D 5596	every 5th roll	Note(1)	Note(1)	Note(1)	Note(1)	Note(1)	Note(1)
Notched Constant Tensile Load, hours	ASTM D 5397, Appendix	90,000 kg	500	500	500	500	500	500
Oxidative Induction Time, minutes	ASTM D 3895, 200°C; O_2, 1 atm	90,000 kg	> 100	> 100	> 100	> 100	> 100	> 100

NOTES:

- (1) Minimum Average Thickness and the lowest individual reading: Nominal -10%.
- (2) Dispersion only applies to near spherical agglomerates. 9 of 10 views shall be Categories 1 or 2. No more than 1 view from Category 3.
- (3) Stress crack resistance(NCTL) test is conducted on representative samples of the same resin formulation and in thicker gauge.
- (4) Roll lengths and widths have a tolerance of ±1%.