

Megaplast Smooth Geomembrane

Megaplast High Density Polyethylene (HDPE) Geomembrane is manufactured with the highest quality resin specifically formulated and used in applications that require excellent chemical resistance and endurance properties.



MEGAPLAST

AT THE CORE:

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

MEGADIAMOND PRODUCTS

Technical data Sheet

This product specifications exceed GRI GM 13

Sr.No.	Properties	Test Method (ASTM)	Unit (English)	Testing Frequency	MEGADIAMOND 75	MEGADIAMOND 100	MEGADIAMOND 150	MEGADIAMOND 200	MEGADIAMOND 250	MEGADIAMOND 300
1	Thickness - (min.)	D 5199	mils	Every roll	30	40	60	80	100	120
	Lowest Individual Reading of 10 values				30	40	60	80	100	120
2	Density (min. ave)	D 792	g/cc	Every 200,000 lb	0.940	0.940	0.940	0.940	0.940	0.940
	Melt Flow Index (MFI) . (190 °C / 2.16 kgf)	D 1238	g/10 min	Per batch / Lot	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0	≤ 1.0
3	Tensile Properties (min.ave) (Note4)	D 6693 Type IV Dumbbell , 2ipm	lb/in	Every 5th roll						
	→Break strength				131	171	263	343	423	502
	→ Yield strength				68	91	137	183	228	274
	→Break Elongation				700	700	700	700	700	700
	→Yield Elongation				13	13	13	13	13	13
4	Tear Resistance (min.ave)	D 1004	lb	Every 10th roll	23	30	45	60	74	88
5	Puncture Resistance (min.ave)	D 4833	lb	Every 10th roll	56	81	115	154	185	220
6	Carbon Black Content (Range)	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
7	Carbon Black Dispersion	D 5596	Category	Every 10th roll	Note 1	Note 1	Note 1	Note 1	Note 1	Note 1
8	Stress Crack Resistance (SP - Notched Constant Tensile Load)	D 5397 (Appendix)	Hrs.	Each two resign lots (One lot = 200,000 lb)	500	500	500	500	500	500
9	Oxidative Induction Time (min.ave) Standard -OIT	D 3895 (at 200 dig C)	Minutes	Every 200,000 lb	> 150	> 150	> 150	> 150	> 150	> 150
	-- OR--- High Pressure -OIT	D 5885 (at 150 dig C)			> 750	> 750	> 750	> 750	> 750	> 750
10	Oven Aging at 85 deg C. Standard -OIT (min.ave) - % retained after 90 days	D 5721 D 3895	%	Per each formulation	55	55	55	55	55	55
	---OR---- High Pressure -OIT (min.ave) - % retained after 90 days	D 5721 D 5885			80	80	80	80	80	80
11	UV Resistance HP -OIT (min.ave) - % retained after 1600 hrs	D 7238 D 5885	%	Per each formulation	50	50	50	50	50	50

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TYPICAL ROLL DIMENSIONS (Note2)										
Roll Width , feet					23.0	23.0	23.0	23.0	23.0	23.0
Roll Length , feet					920	690	460	345	280	230
Roll Area , Sq. Feet					21160	15870	10580	7935	6440	5290

Note 1 : Dispersion only applies to near spherical agglomerates 9 of 10 views shall be category 1 or 2 . No more than 1 view from category 3 .

Note 2 : Roll length & widths have a tolerance of +/- 1% .

Note 3 : All geomembranes have dimensional stability of +/- 2% when tested according to ASTM D 1204 .

Note 4 : Machine direction(MD) & Cross direction (XMD) average values should be on the basis of 5 specimens each direction.