



Geosynthetics

# CarbonBlock Geomembrane

## Hydrocarbon Membrane (HCM) Barrier

Geomembrane sheet manufactured from high quality polythene resin, the membrane prevents the ingress of latent hydrocarbons into a development. Typical uses are contaminated land and old petrol stations.

Tested Property	Test Method	Test Values		
	ASTM	Industry Standard 1.00mm	1.50mm	2.00mm
Thickness - mm (min ave.) • Lowest individual of 10 values	D 5199	-10%	-10%	-10%
Density (min.)	D 1505/D 792	0.940 g/cm <sup>3</sup>	0.940 g/cm <sup>3</sup>	0.940 g/cm <sup>3</sup>
Tensile Properties (min. ave.)  • Yield strength • Break strength • Yield elongation • Break elongation	D 6693 Type IV  GL = 33mm GL = 50mm	15 N/mm 27 N/mm 12% 700%	22 N/mm 40 N/mm 12% 700%	29 N/mm 53 N/mm 12% 700%
Tear Resistance (min. ave.)	D 1004	125 N	187 N	249 N
Puncture Resistance (min. ave.)	D 4833	320 N	480 N	640 N
Stress Crack Resistance	D 5397	300 hr.	300 hr.	300 hr.
Carbon Black Content - %	D 1603	2.0-3.0%	2.0-3.0%	2.0-3.0%
Carbon Black Dispersion	D 5596	9 in Category 1 or 2 and 1 in Category 3		
Reference Property	Test Method	Test Values		
	ASTM	1.00mm	1.50mm	2.00mm
Melt Flow Index	D 1238. Cond. 190° C/2.16kg	≤1.0 g/10 min	≤1.0 g/10 min	≤1.0 g/10 min
Oxidative Induction Time (OIT) (min. ave.)	D 3895. 200°C, Pure O <sub>2</sub> , 1 atm	≥100 min	≥100 min	≥100 min
Oven Aging at 85°C • Standard OIT (min. ave.) % Retained after 90 days • High Pressure OIT (min. ave.) % retained after 90 days	D 5721 D 3895  D 5885	≥55%  ≥80%	≥55%  ≥80%	≥55%  ≥80%
UV Resistance • High Pressure OIT (min. ave.) - % retained after 1600 hrs	D 5885	≥50%	≥50%	≥50%
Physical Properties	Units	Physical Values		
Roll Size (W X L) <sup>1</sup>	m	5.8 x 100	6.95 x 140	7.5 x 105
Roll Weight	Kg	600	1460	1576

### Notes

1. Roll sizes can vary depending on production: Please confirm sizes and weights prior to ordering.

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