



HDPE Geomembrane

Description:

The HDPE geomembrane shall be made of high density polyethylene (HDPE). Our high density polyethylene (HDPE) geomembranes provide an impermeable barrier against a wide range of solids and liquids. They exhibit excellent chemical resistance, impermeability, and high yield and welded seam strengths.

Technical data sheet: (ASTM standards)

Tested Property	Test Method	Frequency	Minimum Average Value				
			0.75mm	1.00 mm	1.50 mm	2.00 mm	2.50 mm
Thickness, (minimum average), mm Lowest individual reading	ASTM D 5199	every roll	0.750 0.675	1.00 0.90	1.50 1.35	2.00 1.80	2.50 2.25
Density, g/cm ³	ASTM D 1505	90,000 kg	0.940	0.940	0.940	0.940	0.940
Tensile Strength at Break, N/mm	ASTM D 669	9,000 kg	20	27	40	53	67
Strength at Yield, N/mm			11	15	22	29	37
Elongation at Break, %			700	700	700	700	700
Elongation at Yield, %			12	12	12	12	12
Tear Resistance, N			ASTM D 1004	20,000 kg	93	125	187
Puncture Resistance, N	ASTM D 4833	20,000 kg	240	320	480	640	800
Carbon Black Content, % (Range)	ASTM D 1603*/4218	9,000 kg	2.0 - 3.0				
Carbon Black Dispersion	ASTM D 5596	20,000 kg	Note ⁽¹⁾	Note ⁽¹⁾	Note ⁽¹⁾	Note ⁽¹⁾	Note ⁽¹⁾
Notch Constant Tensile Load, hr	ASTM D 5397,	90,000 kg	300	300	300	300	300
Oxidative Induction Time, min	ASTM D 3895,	90,000 kg	>100	>100	>100	>100	>100

NOTES:

- ⁽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.

Application:

1. Municipal environmental projects , water conservancy projects
2. Landfill cap(closures), mining heap leach pads
3. Pond liner, canal linings, tank linings, raw water treatment reservoirs, retention ponds,
4. Waste water treatment lagoon, secondary containment
5. solid waste landfills, Hazardous waste landfills

