

# EGS Geosolutions

## HDPE Smooth Geomembrane Liner- ASTM

EGS geomembrane is manufactured from high density polyethylene, from the process of triple extrusion film blowing, designed for waterproof and anti-seepage application. EGS geomembrane features with high tensile strength, UV resistance, high puncture resistance, widely used in aquaculture fish farm pond, water reservoir waterproofing and dam, landfill, dam liner, conform to ASTM GRI GM13.

Properties		Test Method	Test Value							
			0.5 mm	0.75mm	1.00 mm	1.25 mm	1.50 mm	2.00 mm	2.50 mm	3.00 mm
Maximum Deviation of thickness			-15%	-15%	-15%	-15%	-15%	-15%	-15%	-15%
Density (min. ave.)		D 1505/D792	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc	0.940 g/cc
Tensile Properties(min.ave)	Yield strength	D6693	8N/mm	11 N/mm	15 N/mm	18 N/mm	22 N/mm	29 N/mm	37 N/mm	44 N/mm
	Break strength		14N/mm	20N/mm	27 N/mm	33 N/mm	40 N/mm	53N/mm	67 N/mm	80 N/mm
Yield elongation			12%	12%	12%	12%	12%	12%	12%	12%
Break elongation			700%	700%	700%	700%	700%	700%	700%	700%
Tear Resistance (min. ave.)		D 1004	63 N	93 N	125 N	156 N	187 N	249 N	311 N	374 N
Puncture Resistance (min. ave.)		D 4833	160N	240N	320 N	400 N	480 N	640 N	800 N	960 N
Carbon Black Content (range)		D 4218	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %	2.0-3.0 %
Oxidative Induction Time (OIT) (min.ave.) Standard OIT		D 3895	100 min.	100 min.	100 min.	100 min.	100 min.	100 min.	100 min.	100 min.
Oven Aging at 85°C Standard OIT (min. ave.) - % retained after 90 days		D 5721 D 3895	55%	55%	55%	55%	55%	55%	55%	55%
UV Resistance High Pressure OIT (min. ave.) - % retained after 1600 hrs		D 3895 D 5885	50%	50%	50%	50%	50%	50%	50%	50%