

HDPE geomembrane select highest quality resin.The main components are HDPE and Carbon black/anti-aging agent/anti- oxygen/UV absorbent/stabilizer. All the material use 100% virgin resin!

All the productions are manufactured according to ASTM GM13 standard, complete specifications with superior quality.

Advantages:

High anti-seepage ratio,Chemical Stability,Aging resistance,High Mechanic strength, Low cost,Environmental protection formulation,Rapid construction

Applications:

Seepage prevention in special environments such as landfills, sewage treatment plants, power plant tailings treatment, chemical plants, fertilizer plants, sugar mill sewage tailings treatment, non-ferrous metallurgy, sulfuric acid pools, tailings treatment, subways, basements, tunnels, roof linings, etc. (special purpose); horizontal and vertical seepage prevention paving of reservoirs, canals, and dams; seepage prevention of seawater, fresh water, and aquaculture farms

Datasheet

ASTM GM13 HDPE Geomembrane - Smooth

Item	Properties		Test Method		0.5mm	0.75mm	1.0mm	1.25mm	1.5mm	2.00mm
1	Density	g/cm³		ASTM D1505/D792	0.94	0.94	0.94	0.94	0.94	0.94
2	Tensile properties			ASTM D6693 Type IV						
	Yield strength	N/mm			7	11	15	18	22	29
	Break strength	N/mm			10	20	27	33	40	53
					12	12	12	12	12	12
	Yield elongation	%								
	Break elongation	%			700	700	700	700	700	700
3	Tear Resistance(min.ave.)	N	ASTM D1004		56	93	125	156	187	249
4	Puncture resistance	N	ASTM D4833		120	240	320	400	480	640
5	Stress crack resistance	Hrs	ASTM D5397		500					
6	Carbon black				2.0-3.0					
	Carbon black content(range)	%	ASTM D1603		Carbon black dispersion(only near spherical agglomerates) for 10 different views:9 in categories 1 or 2 and 1 in category 3.					
	Carbon black dispersion		ASTM D5596							
Oxidation Induction Time(OIT)										
7	Standard OIT	min	ASTM D3895		100					
	High pressure OIT	min	ASTM D5885		400					
Oven aging at 85°C				ASTM D5721						
8	Standard OIT(min.ave.)-% retained		ASTM D3895		55					
	after 90 days	%								



	High pressure OIT(min.ave.)-% retained after 90 days	%	ASTM D5885	80
9	UV resistance Standard OIT (min.ave.)-% High pressure OIT (min.ave.)-% retained after 1600 hrs	% % %	ASTM D3895 ASTM D5885	50

ASTM GM13 HDPE Geomembrane - Textured

Item	Property		Test Method	Thickness				
				0.75mm	1.00mm	1.25 mm	1.50 mm	2.00 mm
1	Asperity Height	mm	ASTM D7466	0.25				
2	Density	g/cm ³	ASTM D1505/D792	0.940				
3	Tensile properties		ASTM D6693 Type IV	11	15	18	22	29
	Strength at Yield	N/mm						
	Strength at Break	N/mm		8	10	13	16	21
	Elongation at Yield	%				12		
	Elongation at Break	%				700		
4	Tear Resistance	N	ASTM D1004	93	125	156	187	249
5	Puncture Resistance	N	ASTM D4833	200	267	333	400	534
6	Stress Crack Resistance	Hrs	ASTM D5397	300				
7	Carbon Black		ASTM D1603 ASTM D5596	2.0～3.0 Carbon black dispersion for 10 different views:at least 9 in Categories 1 or 2,less than 1 in Categories 3				
	Carbon Black Content(range)	%						
	Carbon Black Dispersion							
8	Oxidation Induction Time(OIT)		ASTM D3895 ASTM D5885					
	Standard OIT	min		100				
	High pressure OIT	min		400				
9	Oven Aging at 85°C(min ave.)		ASTM D5721					
	Standard OIT% retained after 90 days,or	%	ASTM D3895	55				
	High pressure OIT% retained after 90 days	%	ASTM D5885	80				
10	UV Resistance		ASTM D3895 ASTM D5885					
	Standard OIT% retained after 1600 hrs,or	%		50				
	High pressure OIT% retained after 1600 hrs	%						