

GSE HD Textured Geomembrane

GSE HD Textured is a coextruded double-sided or single-sided textured high density polyethylene (HDPE) geomembrane. It is manufactured from the highest quality resin specifically formulated for flexible geomembranes. This product is used in applications that require increased frictional resistance, excellent chemical resistance and endurance properties.



AT THE CORE:
An HDPE geomembrane that is used in applications requiring increased frictional resistance, excellent chemical resistance and endurance properties.

Product Specifications

These product specifications meet GRI GM13.

Tested Property	Unit	Test Method	Minimum Average Values			
Thickness (nominal) Minimum Average Lowest individual for 8 out of 10 values Lowest individual for any of the 10 values	mm	ASTM D 5994	0.75 nom. -5% nom. -10% nom. -15%	1.0 nom. -5% nom. -10% nom. -15%	1.5 nom. -5% nom. -10% nom. -15%	2.0 nom. -5% nom. -10% nom. -15%
Density (Minimum Average)	g/cm ³	ASTM D 792	0.94	0.94	0.94	0.94
Tensile Properties (each Direction) (Minimum Average)		ASTM D 638 / D 6693; Type IV				
Strength at Yield	N/mm	50 mm/min	11	15	22	29
Elongation at Yield	%	lo = 33 mm	12	12	12	12
Strength at Break	N/mm	50 mm/min	8	10	16	21
Elongation at Break	%	lo = 50 mm	100	100	100	100
Tear Resistance (Minimum Average)	N	ASTM D 1004	93	125	187	249
Puncture Resistance (Minimum Average)	N	ASTM D 4833	200	267	400	534
Carbon Black Content	%	ASTM D 1603	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	Category	ASTM D 5596	1/2 ^(a)	1/2 ^(a)	1/2 ^(a)	1/2 ^(a)
Dimensional Stability (each Direction)	%	ASTM D 1204 (120°C/1 h)	± 2	± 2	± 2	± 2
Melt Flow Index ^(b)	g/10 min	ASTM D 1238 (190°C / 5.0 kg) (190°C / 2.16 kg)	≤ 3.0 ≤ 1.0	≤ 3.0 ≤ 1.0	≤ 3.0 ≤ 1.0	≤ 3.0 ≤ 1.0
Stress Crack Resistance (NCTL) ^(c)	h	ASTM D 5397; Appendix	≥ 500	≥ 500	≥ 500	≥ 500
Asperity Height (each Side) (Minimum Average)	mm	ASTM D 7466	0.40 ^(d)	0.40 ^(d)	0.40 ^(d)	0.40 ^(d)
Oxidative Induction Time (OIT)	min	ASTM D 3895 (200°C; Pure O ₂ ; 1 atm)	≥ 100	≥ 100	≥ 100	≥ 100
Reference Property						
Low Temperature Brittleness	°C	ASTM D 746	- 77	- 77	- 77	- 77
UV Resistance ^(e) HP-OIT retained after 1,600 hours ^(f)	%	ASTM D 7238 ASTM D 5885	≥ 50	≥ 50	≥ 50	≥ 50
Roll Width (approx.) ^(g)	m	---	6.95			
Surface	---	---	single-sided or double-sided coextruded textured			

NOTES:

- (a): 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.
- (b): Standard test conditions: 190°C / 5.0 kg.
- (c): Note: NCTL is conducted on representative smooth geomembrane samples.
- (d): 8 out of 10 readings must be ≥ 0.35 mm and lowest individual reading must be ≥ 0.30 mm
- (e): Test conditions: 20 hours UV cycle at 75°C followed by 4 hours condensation at 60°C.
- (f): UV Resistance is based on percent retained value regardless of the original High Pressure - OIT value.
- (g): Roll widths and lengths have a tolerance of ± 1%.

GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We've built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.



[DURABILITY RUNS DEEP] For more information on this product and other, please visit us at GSEworld.com, call 49.40.767420 or contact your local sales office.

