

GSE UltraFlex Textured Geomembrane

GSE UltraFlex Textured is a co-extruded linear low density polyethylene (LLDPE) geomembrane available on one or both sides. It is manufactured from the highest quality resin specifically formulated for flexible geomembranes. This product is used in applications that require increased frictional resistance, flexibility and elongation properties where differential or localized subgrade settlements may occur such as in landfill closure application.



AT THE CORE:
An LLDPE geomembrane that is used in applications requiring increased frictional resistance, flexibility, and elongation properties, such as landfills, and mining applications.

Product Specifications

Tested Property	Unit	Test Method	Values		
Thickness ^(a) (Core Thickness)	mm	ASTM D 5994	1.0	1.5	2.0
Density	g/cm ³	DIN EN ISO 1183-1/A	≤ 0.939	≤ 0.939	≤ 0.939
Tensile Properties (each Direction) (Minimum Average)		DIN EN ISO 527-3 (Type 5; 100 mm/min; lo = 50 mm)			
Stress at Break	MPa		12	12	12
Elongation at Break	%		250	250	250
Tear Resistance (Minimum Average)	N	DIN ISO 34-1/B (a)	110	165	220
Puncture Resistance (Minimum Average)	N	DIN EN ISO 12236	1,350	2,050	2,750
Carbon Black Content	%	ASTM D 4218	2.0 – 3.0	2.0 – 3.0	2.0 – 3.0
Carbon Black Dispersion	Category	ASTM D 5596	1/2 ^(b)	1/2 ^(b)	1/2 ^(b)
Dimensional Stability (each Direction)	%	DIN 53377 (100°C/1 h)	± 2	± 2	± 2
Melt Flow Index ^(c)	g/10 min	DIN EN ISO 1133 (190°C / 5.0 kg) (190°C / 2.16 kg)	≤ 3.0 ≤ 1.0	≤ 3.0 ≤ 1.0	≤ 3.0 ≤ 1.0
Oxidative Induction Time (OIT)	min	ASTM D 3895 (200°C; Pure O ₂ ; 1 atm)	≥ 100	≥ 100	≥ 100
Reference Property					
Multiaxial Elongation at Break	%	similar to ASTM D 5617 ; Ø = 500 mm	≥ 30	≥ 30	≥ 30
Low Temperature Brittleness	°C	ASTM D 746	- 77	- 77	- 77
UV Resistance ^(d) HP-OIT retained after 1,600 hours ^(e)	%	ASTM D 7238 ASTM D 5885	≥ 35	≥ 35	≥ 35
Asperity Height (each Side) (Minimum Average)	mm	ASTM D 7466	0.25 ^(f)	0.25 ^(f)	0.25 ^(f)
Roll Width (approx.) ^(g)	m	---	6.95		
Surface	---	---	single-sided or double-sided coextruded textured		

NOTES:

- (a): Minimum average: - 5%, lowest individual for 8 out of 10: - 10%, lowest individual: - 15% - Special thickness available upon request.
- (b): 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.
- (c): Standard test conditions: 190°C / 5.0 kg.
- (d): Test conditions: 20 hours UV cycle at 75°C followed by 4 hours condensation at 60°C.
- (e): UV Resistance is based on percent retained value regardless of the original High Pressure - OIT value.
- (f): 8 out of 10 readings must be ≥ 0.35 mm and lowest individual reading must be ≥ 0.30 mm.
- (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.

