

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

These product specifications meet GRI GM17.

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	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	g/cm ³	ASTM D 792	≤ 0.939	≤ 0.939	≤ 0.939
Tensile Properties (each Direction) (Minimum Average)		ASTM D 638 / D 6693 Type IV; 200 mm/min; lo = 50 mm)			
Strength at Break	N/mm		12	18	24
Elongation at Break	%		250	250	250
Tear Resistance (Minimum Average)	N	ASTM D 1004	100	150	200
Puncture Resistance (Minimum Average)	N	ASTM D 4833	200	300	400
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 ^(a)	1/2 ^(a)	1/2 ^(a)
Dimensional Stability (each Direction)	%	ASTM D 1204 (120°C/1 h)	± 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
Asperity Height (each Side) (Minimum Average)	mm	ASTM D 7466	0.40 ^(c)	0.40 ^(c)	0.40 ^(c)
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
Roll Width ^(f)	m	---	6.95		
Surface	---	---	single-sided or double-sided 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.
- (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): 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.

