PRODUCT DATA SHEET

High Performance GSE Green Textured Geomembrane

METRIC

High Performance GSE Green Textured is a co-extruded high density polyethylene (HDPE) geomembrane specifically designed to be used in the most stringent applications. A textured surface is available on one or both sides for applications that require increased frictional resistance. This product has a UV stabilized, green upper surface that improves the aesthetics of closure applications for the community. It is primarily used in exposed applications, which can eliminate the need for cover soil and vegetative layers. This product contains only the finest raw materials to enable exceptional elasticity, environmental stress crack resistance, and excellent multi-axial break resistance. Included in this product is a custom additive package that has been engineered to enable extended geomembrane lifetime and improved resilience in elevated temperatures, hazardous waste containment, or a harsh chemical environment. In addition to a superior UV stabilization package, a well-dispersed premium grade of carbon black is utilized in the black layers to deliver superb UV resistance in exposed applications.

AT THE CORE:
An HDPE geomembrane that provides increased frictional resistance and is ideal for exposed applications when aesthetics is an issue.

Product Specifications

These product specifications exceed GRI GM13

Tested Property	Test Method	Frequency	Minimum Average Value				
			0.75 mm	1.00 mm	1.50 mm	2.00 mm	2.50 mm
Thickness, mm Lowest individual reading	ASTM D 5994	every roll	0.75 0.68	1.00 0.90	1.50 1.35	2.00 1.80	2.50 2.25
Density, g/cm^3	ASTM D 1505	90,000 kg	0.94	0.94	0.94	0.94	0.94
Tensile Properties (each direction) Strength at Break, N/mm Strength at Yield, N/mm Elongation at Break, % Elongation at Yield, %	ASTM D 6693, Type IV Dumbbell, 50 mm/min G.L. 50 mm G.L. 33 mm	9,000 kg	 11 11 200 13	 13 15 200 13	 20 23 200 13	 27 31 200 13	 40 39 200 13
Tear Resistance, N	ASTM D 1004	20,000 kg	106	142	200	266	333
Puncture Resistance, N	ASTM D 4833	9,000 kg	289	422	578	711	845
Multi-axial Break Resistance, %	ASTM D 5617	per formulation	15	15	15	15	15
Carbon Black Content[1], % (Range)	ASTM D 1603*/4218	9,000 kg	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D 5596	20,000 kg	Note[1]	Note[1]	Note[1]	Note[1]	Note[1]
Asperity Height[3], mm	ASTM D 7466	second roll	0.40	0.45	0.45	0.45	0.45
Notched Constant Tensile Load[4], hr	ASTM D 5397, Appendix	90,000 kg	1,000	1,000	1,000	1,000	1,000
Oxidative Induction Time, mins	ASTM D 3895, 200°C; O_2, 1 atm	90,000 kg	>160	>160	>160	>160	>160
High Pressure Oxidative Induction Time, mins	A5TM D 5885, 150°C; O_2, 3.4 MPa	per formulation	>800	>800	>800	>800	>800
Oven aging at 85°C High Pressure OIT (min. avg.) - % retained after 90 days	ASTM D 5721 ASTM D 5885	per formulation	80	80	80	80	80
UV Resistance High Pressure OIT (min. avg.) - % retained after 1,600 hours	GM 11 ASTM D 5885	per formulation	80	80	80	80	80
TYPICAL ROLL DIMENSIONS							
Roll Length[5], m	Double-Sided Textured Single-Sided Textured		253 308	213 238	158 165	122 125	101 101
Roll Width[5], m			6.86	6.86	6.86	6.86	6.86
Roll Area, m^2	Double-Sided Textured Single-Sided Textured		1,736 2,113	1,461 1,633	1,084 1,132	837 858	693 693

[Product specifications continued on back]

Product Specifications [continued]

NOTES:

- (1)High Performance GSE Green Textured may have an overall ash content of 3.0% due to the green layer. These values apply to the black layer only.
- (2)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.
- (3)Consult GSE for information regarding asperity heights exceeding the specified values.
- (4)NCTL for High Performance Green Textured is conducted on representative smooth geomembrane samples.
- (5)Roll lengths and widths have a tolerance of ±1%.
- High Performance GSE Green Textured is available in rolls weighing approximately 1,800 kg.
- All GSE geomembranes have dimensional stability of ±2% when tested according to ASTM D 1204 and LTB of <-77° C when tested according to ASTM D 746.
- *Modified.

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.

GSE ENVIRONMENTAL™

[DURABILITY RUNS DEEP] For more information on this product and others, please visit us at GSEworld.com, call 800.435.2008 or contact your local sales office.

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