

GSE HD Colortex Geomembrane (RAL 6005 Moss-Green)



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

GSE HD Colortex is a high density polyethylene (HDPE) geomembrane that consists of two layers: a black primary layer and a colored textured surface(**). It is manufactured from the highest quality resin specifically formulated for flexible geomembranes. It has a UV stabilized green upper surface that improves the aesthetics for the community. GSE HD Colortex provides an increased frictional resistance surface and is primarily used in exposed applications which can eliminate the need for cover soil and vegetative layers. Other colors (RAL-based) are available upon request. The UV-resistance as well as the color stability is variable in time dependent on the selected color. The smooth edges (width approx. 15 cm) allow for an easier, quicker welding process according to the state of the art. Other colors (RAL-based) are available upon request. The color stability is variable in time dependent on the selected color.

Product Specifications

These product specifications meet or exceed GRI GM13.

Tested Property	Unit	Test Method	Values (*)		
Thickness ^(a)	mm	DIN EN ISO 9863-1	1.0	1.5	2.0
Density	g/cm ³	DIN EN ISO 1183-1/A	≥ 0.94	≥ 0.94	≥ 0.94
Tensile Properties (each Direction)		DIN EN ISO 527-3 (Type 5; 100 mm/min; lo = 50 mm)			
Stress at Yield	MPa		17 (16)	17 (16)	17 (16)
Elongation at Yield	%		10 (9)	11 (10)	11 (10)
Stress at Break	MPa		35 (26)	35 (26)	35 (26)
Elongation at Break	%		800 (700)	800 (700)	800 (700)
Tear Resistance	N	DIN ISO 34-1/B (a)	145 (130)	225 (210)	300 (280)
Puncture Resistance	N	DIN EN ISO 12236	2,850 (2,400)	4,150 (3,700)	5,450 (4,900)
Carbon Black Content	%	ASTM D 1603	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 (120°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
Stress Crack Resistance (NCTL)	h	ASTM D 5397; Appendix	≥ 400	≥ 400	≥ 400
Asperity height (each side) (Minimum Average)	mm	GRI-GM 12	0.25 ^(d)	0.25 ^(d)	0.25 ^(d)
Oxidative Induction Time (OIT)	min	ASTM D 3895 (200°C; Pure O ₂ ; 1 atm)	≥ 100	≥ 100	≥ 100
Reference Property					
Low Temperature Brittleness	°C	ASTM D 746	- 77	- 77	- 77
UV Resistance ^(e) HP-OIT retained after 1,600 hours ^(f)	%	GRI-GM 11 ASTM D 5885	≥ 50	≥ 50	≥ 50
Roll Width ^(g)	m	---	6.95	6.95 / 7.5	
Surface	---	---	single-sided or double-sided textured		

NOTES:

- (*): All values - unless otherwise noted - are nominal values. Values in brackets are minimum values within the 95% confidence interval.
- (a): Tolerance ± 10%.
- (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): 8 out of 10 readings must be ≥ 0.18 mm and lowest individual reading must be ≥ 0.13 mm.
- (e): Test conditions: 20 hours UV cycle at 75°C followed by 4 hours condensation at 60°C; total: 1,600 hours.
- (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.

