



The Pioneer Of Geosynthetics

S I N C E 1 9 7 2

GSE Conductive White Smooth Geomembrane

GSE Conductive White is a smooth, patented, spark-testable high density polyethylene (HDPE) geomembrane that contains an integrated, specially formulated conductive layer on the bottom surface of the geomembrane. GSE Conductive White has a U.V. stabilized upper white surface that reflects light, improves damage detection, reduces wrinkles and subgrade desiccation. It can also be easily tested for post-installation damage using equipment capable of performing spark testing in the field per ASTM D7240. This product is used in applications that require post-installation testing on the liner system to increase the quality of the project.

Product Specifications

These product specifications meet or exceed GRI GM13.

TESTED PROPERTY	TEST METHOD	FREQUENCY	MINIMUM AVERAGE VALUE			
			40 mil	60 mil	80 mil	100 mil
Thickness, (minimum average) mil (mm) Lowest individual reading (-10%)	ASTM D 5199	every roll	40 (1.00) 36 (0.91)	60 (1.50) 54 (1.40)	80 (2.00) 72 (1.80)	100 (2.50) 90 (2.30)
Density, g/cm ³	ASTM D 1505	200,000 lb	0.94	0.94	0.94	0.94
Tensile Properties (each direction)	ASTM D 6693, Type IV Dumbbell, 2 ipm	20,000 lb				
Strength at Break, lb/in-width (N/mm)			152 (26)	243 (42)	327 (57)	410 (71)
Strength at Yield, lb/in-width (N/mm)			84 (14)	132 (23)	177 (30)	212 (37)
Elongation at Break, %	G.L. 2.0 in (51 mm)		700	700	700	700
Elongation at Yield, %	G.L. 1.3 in (33 mm)		13	13	13	13
Tear Resistance, lb (N)	ASTM D 1004	45,000 lb	28 (124)	42 (186)	58 (257)	73 (324)
Puncture Resistance, lb (N)	ASTM D 4833	45,000 lb	85 (378)	125 (556)	160 (711)	195 (867)
Carbon Black Content ⁽¹⁾ , % (Range)	ASTM D 1603*/4218	20,000 lb	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D 5596	45,000 lb	Note ⁽²⁾	Note ⁽²⁾	Note ⁽²⁾	Note ⁽²⁾
Notched Constant Tensile Load, hr	ASTM D 5397, Appendix	200,000 lb	1,000	1,000	1,000	1,000
Oxidative Induction Time, min	ASTM D 3895, 200° C; O ₂ , 1 atm	200,000 lb	>140	>140	>140	>140
TYPICAL ROLL DIMENSIONS						
Roll Length ⁽³⁾ , ft (m)			870 (265)	560 (171)	430 (131)	340 (104)
Roll Width ⁽³⁾ , ft (m)			22.5 (6.9)	22.5 (6.9)	22.5 (6.9)	22.5 (6.9)
Roll Area, ft ² (m ²)			19,575 (1,819)	12,600 (1,171)	9,675 (899)	7,650 (711)

NOTES:

- ⁽¹⁾GSE Conductive White may have an overall ash content greater than 3.0% due to the white and conductive outer layers. These values apply to the non-conductive black layers.
- ⁽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⁾Roll lengths and widths have a tolerance of ± 1%.
- GSE Conductive White is available in rolls weighing approximately 3,900 lb (1,769 kg).
- All GSE geomembranes have dimensional stability of ±2% when tested according to ASTM D 1204 and LT8 of <-77° C when tested according to ASTM D 746.
- *Modified.