

GSE Leak Location Smooth Geomembrane

METRIC



AT THE CORE:

An HDPE geomembrane used in applications that require post-installation leak testing on the liner system to increase the quality of the project.

GSE Leak Location is a smooth spark-testable high density polyethylene (HDPE) geomembrane that contains an integrated, specially formulated conductive layer on the bottom surface of the geomembrane. GSE Leak Location can be easily tested for post-installation damage using equipment capable of performing spark testing in the field per ASTM D 7240. This product is used in applications that require post-installation testing on the liner system to increase the quality of the project.

Product Specifications

Tested Property	Unit	Test Method	Values (*)		
Thickness (min. ave.) ^(a)	mm	DIN EN ISO 9863-1	1.0	1.5	2.0
Density (min.)	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)			
Strength at Yield	MPa		17 (16)	17 (16)	17 (16)
Elongation at Yield	%		10 (9)	11 (10)	11 (10)
Strength 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 ^(b)	%	ASTM D 4218	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	Category	ASTM D 5596	1/2 ^(c)	1/2 ^(c)	1/2 ^(c)
Dimensional Stability (each Direction)	%	DIN 53377 (120°C/1 h)	± 2	± 2	± 2
Melt Flow Index ^(d)	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	≥ 500	≥ 500	≥ 500
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)		ASTM D 7238			
HP-OIT retained after 1,600 hours ^(f)	%	ASTM D 5885	≥ 50	≥ 50	≥ 50
Roll Width (approx.) ^(g)	m	---	6.95		
Surface	---	---	double-sided smooth		

NOTES:

- (*): All values - unless otherwise noted - are nominal values. Values in brackets are minimum values within the 95% confidence interval.
- (a): Tolerance ± 10% for the lowest individual reading.
- (b): GSE Leak Location Smooth may have an overall ash content of 3.0% due to the conductive layer. These values apply to the black non-conductive layer only.
- (c): 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.
- (d): Standard test conditions: 190°C / 5.0 kg.
- (e): Test-Conditions: 20 hours UV cycle at 75°C followed by 4 hours condensation at 60°C.
- (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.

