

# 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.

**Product Specifications**

These product specifications meet GRI GM13.

Tested Property	Unit	Test Method	Values ( * )		
Thickness (min. ave.) <sup>(a)</sup>	mm	ASTM D 5199	1.0	1.5	2.0
Density (min.)	g/cm <sup>3</sup>	ASTM D 792	≥ 0.94	≥ 0.94	≥ 0.94
Tensile Properties (each Direction)		ASTM D 638 / D 6693; Type IV			
Strength at Yield	N/mm	50 mm/min	16 (15)	24 (22)	32 (30)
Elongation at Yield	%	lo = 33 mm	15 (12)	15 (12)	15 (12)
Strength at Break	N/mm	50 mm/min	33 (27)	49 (40)	66 (53)
Elongation at Break	%	lo = 50 mm	800 (700)	800 (700)	800 (700)
Tear Resistance	N	ASTM D 1004	140 (130)	205 (190)	275 (250)
Puncture Resistance	N	ASTM D 4833	420 (320)	560 (480)	690 (640)
Carbon Black Content <sup>(b)</sup>	%	ASTM D 4218	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	Category	ASTM D 5596	1/2 <sup>(c)</sup>	1/2 <sup>(c)</sup>	1/2 <sup>(c)</sup>
Dimensional Stability (each Direction)	%	ASTM D 1204 (120°C/1 h)	± 2	± 2	± 2
Melt Flow Index <sup>(d)</sup>	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
Stress Crack Resistance (NCTL)	h	ASTM D 5397; Appendix	≥ 500	≥ 500	≥ 500
Oxidative Induction Time (OIT)	min	ASTM D 3895 (200°C; Pure O <sub>2</sub> ; 1 atm)	≥ 100	≥ 100	≥ 100
<b>Reference Property</b>					
Low Temperature Brittleness	°C	ASTM D 746	- 77	- 77	- 77
UV Resistance <sup>(e)</sup> HP-OIT retained after 1,600 hours <sup>(f)</sup>	%	ASTM D 7238 ASTM D 5885	≥ 50	≥ 50	≥ 50
Roll Width (approx.) <sup>(g)</sup>	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](http://GSEworld.com), call 49.40.767420 or contact your local sales office.

