

GSE UltraFlex Leak Location Smooth Geomembrane

GSE UltraFlex Leak Location is a smooth linear low density polyethylene (LLDPE) geomembrane that contains an integrated, specially formulated conductive layer on the bottom surface of the geomembrane. GSE UltraFlex Leak Location can be easily tested for post-installation damage utilizing spark testing technology per ASTM D 7240 and utilizing electrical resistivity testing per ASTM D 7002 on exposed geomembranes and ASTM D 7007 after water or cover soil placement. This product is used in applications that require increased flexibility and elongation properties where differential or localized subgrade settlements may occur, such as in a landfill closure.



AT THE CORE:

An LLDPE geomembrane that is used in applications requiring increased frictional resistance, flexibility and elongation properties, such as landfill closures and mining applications.

Product Specifications

These product specifications meet GRI GM17

Tested Property	Test Method	Frequency	Minimum Average Value		
			40 mil	60 mil	80 mil
Thickness, mil Lowest individual reading	ASTM D 5199	every roll	40 36	60 54	80 72
Density, g/cm ³ , (max.)	ASTM D 1505	200,000 lb	0.939	0.939	0.939
Tensile Properties (each direction) Strength at Break, lb/in-width Elongation at Break, %	ASTM D 6693, Type IV Dumbbell, 2 ipm G.L. 2.0 in	20,000 lb	152 800	228 800	304 800
Tear Resistance, lb	ASTM D 1004	45,000 lb	22	33	44
Puncture Resistance, lb	ASTM D 4833	45,000 lb	56	84	112
Carbon Black Content ⁽¹⁾ , % (Range)	ASTM D 1603*/4218	20,000 lb	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⁾
Oxidative Induction Time, mins	ASTM D 3895, 200°C; O ₂ , 1 atm	200,000 lb	>100	>100	>100
TYPICAL ROLL DIMENSIONS					
Roll Length ⁽³⁾ , ft			870	560	430
Roll Width ⁽³⁾ , ft			22.5	22.5	22.5
Roll Area, ft ²			19,575	12,600	9,675

NOTES:

- ⁽¹⁾GSE Leak Location may have an overall ash content greater than 3.0%. 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 UltraFlex is available in rolls weighing approximately 3,900 lb.
- 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.



[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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GSE UltraFlex Leak Location is a smooth linear low density polyethylene (LLDPE) geomembrane that contains an integrated, specially formulated Conductive layer on the bottom surface of the geomembrane. GSE UltraFlex 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 increased flexibility and elongation properties where differential or localized subgrade settlements may occur, such as in a landfill closure.



BOTTOM LINE:

An LLDPE geomembrane that is used in applications requiring increased frictional resistance, flexibility and elongation properties, such as landfill closures and mining applications.

Product Specifications

These product specifications meet GRI GM17

Tested Property	Test Method	Frequency	Minimum Average Value		
			1.00 mm	1.50 mm	2.00 mm
Thickness, (minimum average) mm Lowest individual reading (-10%)	ASTM D 5199	every roll	1.00 0.90	1.50 1.35	2.00 1.80
Density, g/cm ³ , (max.)	ASTM D 1505	90,000 kg	0.939	0.939	0.939
Tensile Properties (each direction) Strength at Break, N/mm Elongation at Break, %	ASTM D 6693, Type IV Dumbbell, 50mm/min G.L. 51 mm	9,000 kg	27 800	40 800	53 800
Tear Resistance, N	ASTM D 1004	20,000 kg	100	150	200
Puncture Resistance, N	ASTM D 4833	20,000 kg	250	370	500
Carbon Black Content, % Range ⁽¹⁾	ASTM D 1603*/4218	9,000 kg	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion ⁽¹⁾	ASTM D 5596	20,000 kg	Note ⁽²⁾	Note ⁽²⁾	Note ⁽²⁾
Oxidative Induction Time, min	ASTM D 3895, 200°C; O ₂ , 1 atm	90,000 kg	>100	>100	>100
TYPICAL ROLL DIMENSIONS					
Roll Length ⁽³⁾ , m	Single-Sided Textured		265	171	131
Roll Width ⁽³⁾ , m			6.86	6.86	6.86
Roll Area, m ²	Single-Sided Textured		1,819	1,171	899

NOTES:

- ⁽¹⁾GSE Conductive may have an overall ash content greater than 3.0%. 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 UltraFlex is available in rolls weighing approximately 1,796 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.

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