

# GSE UltraFlex Smooth Geomembrane

GSE UltraFlex is a smooth linear low density polyethylene (LLDPE) geomembrane manufactured with the highest quality resin specifically formulated for flexible geomembranes. 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 application.



**AT THE CORE:**  
An LLDPE geomembrane suitable for applications that require increased flexibility and elongation properties.

## Product Specifications

These product specifications meet or exceed GRI GM17.

Tested Property	Test Method	Frequency	Minimum Average Value					
Thickness, (minimum average) mm (mil) Lowest individual reading, mm (mil)	ASTM D 5199	every roll	0.5 (20) 0.45 (18)	0.75 (30) 0.68 (27)	1.0 (40) 0.9 (36)	1.5 (60) 1.35 (54)	2.0 (80) 1.8 (72)	2.5 (100) 2.25 (90)
Density, g/cm <sup>3</sup>	ASTM D 1505	every 5th roll	≤0.939	≤0.939	≤0.939	≤0.939	≤0.939	≤0.939
Tensile Properties (each direction) Strength at Break, N/mm-width (lb/in) Elongation at Break, %	ASTM D 6693, Type IV Dumbbell, 2 ipm G.L. 51 mm (2.0 in)	every 5th roll	14 (80) 800	20 (114) 800	27 (154) 800	40 (228) 800	53 (303) 800	66 (377) 800
Tear Resistance, N (lb)	ASTM D 1004	every 5th roll	54 (12)	71 (16)	100 (22)	150 (34)	200 (45)	250 (56)
Puncture Resistance, N (lb)	ASTM D 4833	every 5th roll	138 (31)	205 (46)	276 (62)	409 (92)	547 (123)	685 (154)
Carbon Black Content, %	ASTM D 1603 / D 4218	every 5th roll	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D 5596	every 5th roll	Note <sup>(1)</sup>	Note <sup>(1)</sup>	Note <sup>(1)</sup>	Note <sup>(1)</sup>	Note <sup>(1)</sup>	Note <sup>(1)</sup>
Oxidative Induction Time, minutes	ASTM D 3895, 200° C; O <sub>2</sub> , 1 atm	90,000 kg	>100	>100	>100	>100	>100	>100
<b>TYPICAL ROLL DIMENSIONS</b>								
Roll Length <sup>(2)</sup> , m (ft)			420 (1,378)	280 (918)	210 (689)	140 (459)	105 (344)	85 (279)
Roll Width <sup>(2)</sup> , m (ft)			71 (23.3)	7.0 (23)	7.0 (23)	7.0 (23)	7.0 (23)	7.0 (23)
Roll Area, m <sup>2</sup> (ft <sup>2</sup> )			2,982 (32,107)	1,960 (21,114)	1,470 (15,847)	980 (10,557)	735 (7,912)	595 (6,417)
40' Standard Container, roll			16	16	16	16	16	16

NOTES:

- <sup>(1)</sup>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.
- <sup>(2)</sup>Roll lengths and widths have a tolerance of ±1%.
- GSE UltraFlex is provided in rolls weighing approximately 1,410 kg (3,108 lb) each.
- 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.

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](http://GSEworld.com), call 66.2.937.0091 or contact your local sales office.