

GSE ProFlex Geomembrane

GSE ProFlex is a propylene/ethylene copolymer geomembrane produced from a resin formulation designed to provide quality geomembrane with excellent flexibility, and improved elasticity and resistance to puncture. These properties assure maximum multiaxial elongation to accommodate differential settlement. GSE ProFlex is ideal for most geomembrane applications and major benefits to installation are provided by lower coefficient of thermal expansion and a wide temperature-welding window.



AT THE CORE:
Geomembrane with excellent flexibility, improved elasticity and resistance to puncture to assure maximum multiaxial elongation.

Product Specifications

Tested Property	Unit	Test Method	Values (*)		
Thickness ^(a)	mm	DIN EN ISO 9863-1	1.0	1.5	2.0
Density	g/cm ³	DIN EN ISO 1183-1/A	0.89	0.89	0.89
Tensile Properties (each Direction)		DIN EN ISO 527-3 (Type 5; 100 mm/min; lo = 50 mm)			
Stress at Break	MPa		19 (16)	19 (16)	19 (16)
Elongation at Break	%		900 (700)	900 (700)	900 (700)
Tear Resistance	N	DIN ISO 34-1/B (a)	60	90	120
Puncture Resistance	N	DIN EN ISO 12236	1,000	1,500	2,000
Carbon Black Content	%	ASTM D 4218	3.0	3.0	3.0
Carbon Black Dispersion	Category	ASTM D 5596	1/2 ^(b)	1/2 ^(b)	1/2 ^(b)
Dimensional Stability (each Direction)	%	DIN 53377 (100°C/1 h)	± 2	± 2	± 2
Melt Flow Index ^(c)	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
Reference Property					
Multiaxial Elongation at Break	%	similar to ASTM D 5617; Ø = 500 mm	120	120	120
Low Temperature Brittleness	°C	ASTM D 2136	- 40	- 40	- 40
Roll Width (approx.) ^(d)	m	---	7.0		
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% - Special thickness available upon request.
- (b): 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.
- (c): Standard test conditions: 190°C / 5.0 kg.
- (d): 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.

