



# GSE Proflex – Product Data Sheet

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

Tested Property	Unit	Test Method	Minimum Values			
Nominal Thickness	mm	ASTM D 5199	0.75	1.0	1.5	2.0
Minimum Thickness	mm	ASTM D 751	0.68	0.90	1.35	1.80
Density	g/cm <sup>3</sup>	ASTM D 792 / 1505A	0.87	0.87	0.87	0.87
Tensile Properties (each direction)		ASTM D 6693, Type IV, Speed: 50 mm/min				
Strength at Break	N/mm		12	17	25	35
Elongation at Break	%	lo = 50 mm	900	900	900	900
Tear Resistance	N	ASTM D 1004	45	55	90	120
Puncture Resistance	N	ASTM D 4833	120	150	200	300

Reference Property	Unit	Test Method	Nominal Values			
Multi-axial Strain	%	ASTM D 5617	> 100	> 100	> 100	> 100
Carbon Black Content	%	ASTM D 1603	3.0	3.0	3.0	3.0
Carbon Black Dispersion	Category	ASTM D 5596	Note <sup>(1)</sup>	Note <sup>(1)</sup>	Note <sup>(1)</sup>	Note <sup>(1)</sup>
Low Temperature Brittleness	°C	ASTM 746, Condition B	< - 40	< - 40	< - 40	< - 40
Melt Flow Index	g/10 min	ASTM D 1238. Cond. 190/2.16	< 1.0	< 1.0	< 1.0	< 1.0

(1): 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.

GSE Proflex is available in standard roll width approximately 5.9 m. Roll length is 200 m for 1.0 mm thickness and varies in inverse proportion for other thicknesses. Roll weight is approximately 1.2 tons. Contact GSE for further information on roll dimensions.



GSE ProFlex is produced at GSE Soham plant, United Kingdom.



*This information is provided for reference purposes only and is not intended as a warranty or guarantee. GSE assumes no liability in connection with the use of this information. Please check with GSE for current, standard minimum quality assurance procedures. This information is subject to change without prior notice. Please contact GSE for updated information.*

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