CELSTRAN® CFR-TP PPS GF60-01

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Celstran® CFR-TP PPS GF60-01 is a 60% E-glass by weight PPS (polyphenylene sulfide) continuous fiber (uni-directional) reinforced thermoplastic composite tape. This material exhibits a high strength-to-weight ratio, excellent chemical and flame, smoke, and toxicity or (FST) performance, and long-term heat stability. It is well suited for aerospace, oil/gas and industrial applications where demanding chemical and FST performance is necessary. The E-glass fiber offers a lower cost solution as compared to other PPS materials reinforced with S-glass. This material is available in natural and black colors. Alternate tape widths and thicknesses may be available.

Product information

Fiber volume content	44	%	ISO 11667
Tape thickness	0.0114	in	ISO 16012
Tape width	12	in	ISO 16012
Tape areal weight	510	g/m²	
Fiber areal weight	306	g/m²	

Typical mechanical properties

Tensile modulus, Tape 0°	4.96E6	psi	ASTM D 3039 M
Tensile strength, Tape 0°	113000	psi	ASTM D 3039 M
Tensile strain at failure, Tape 0°	2.44	%	ASTM D 3039 M
Flexural modulus, Tape 0°	5.44E6	psi	ASTM D 790
Flexural strength, Tape 0°	126000	psi	ASTM D 790
Flexural strain at failure, Tape 0°	3.22	%	ASTM D 790

Thermal properties

Melting temperature, 10°C/min	540	°F	ISO 11357-1/-3
Glass transition temperature, 10°C/min	194	°F	ISO 11357-1/-3

Physical/Other properties

Density	0.0679	lb/in³	ISO 1183

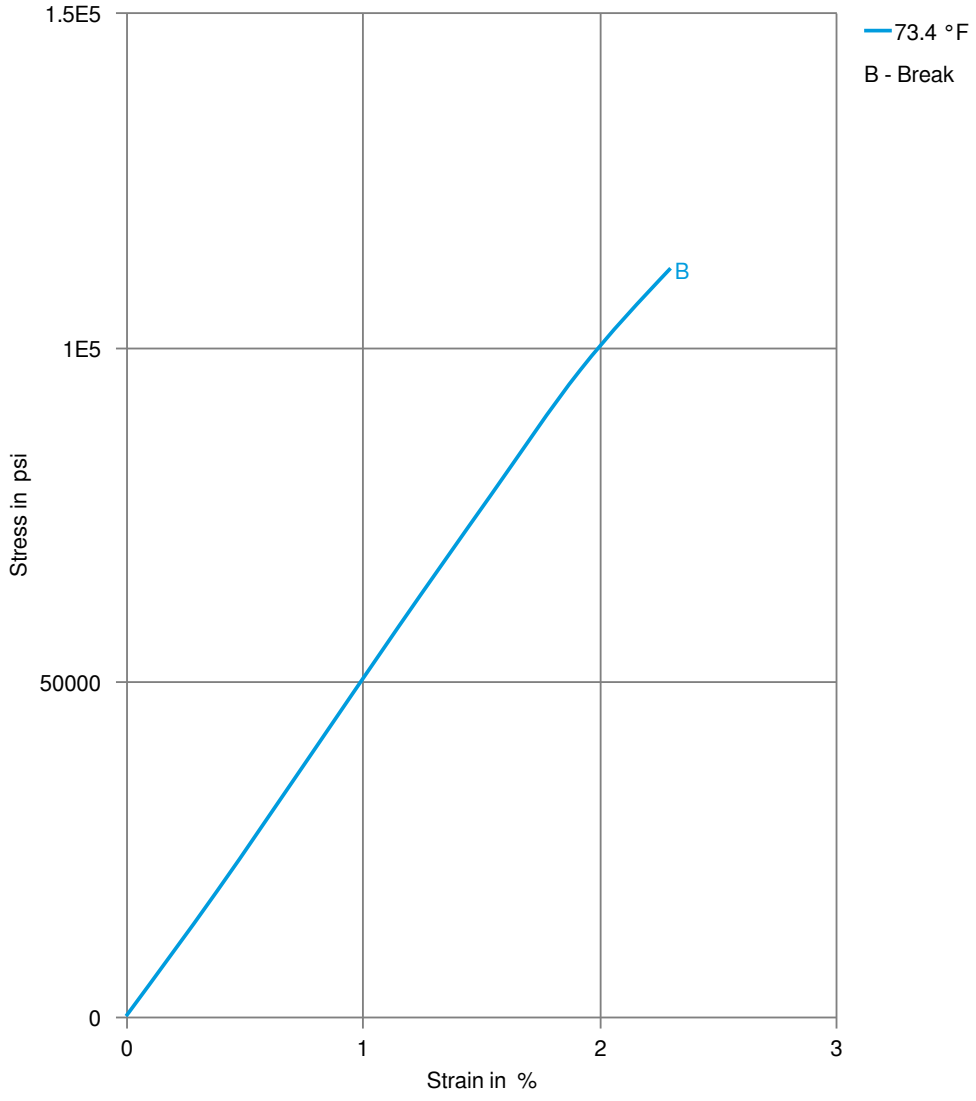
Characteristics

Processing	Thermoforming, Selective reinforcement

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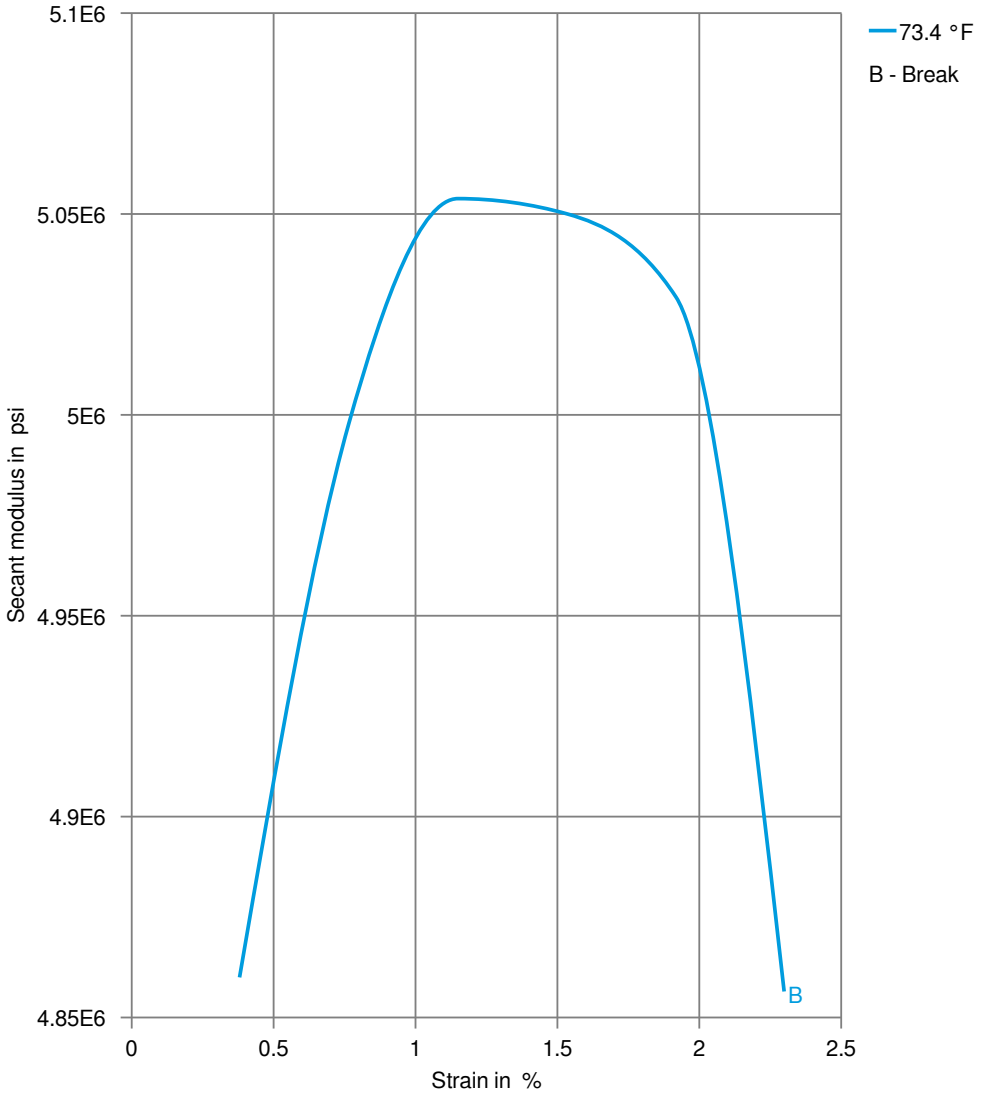
Stress-strain



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Secant modulus-strain



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