

CELSTRAN® CFR-TP PPS GF60-01

CELSTRAN® CFR-TP

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	0.29 mm	ISO 16012
Tape width	305 mm	ISO 16012
Tape areal weight	510 g/m ²	
Fiber areal weight	306 g/m ²	

Typical mechanical properties

Tensile modulus, Tape 0°	34200 MPa	ASTM D 3039 M
Tensile strength, Tape 0°	776 MPa	ASTM D 3039 M
Tensile strain at failure, Tape 0°	2.44 %	ASTM D 3039 M
Flexural modulus, Tape 0°	37500 MPa	ASTM D 790
Flexural strength, Tape 0°	867 MPa	ASTM D 790
Flexural strain at failure, Tape 0°	3.22 %	ASTM D 790

Thermal properties

Melting temperature, 10°C/min	282 °C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	90 °C	ISO 11357-1/-3

Physical/Other properties

Density	1880 kg/m ³	ISO 1183
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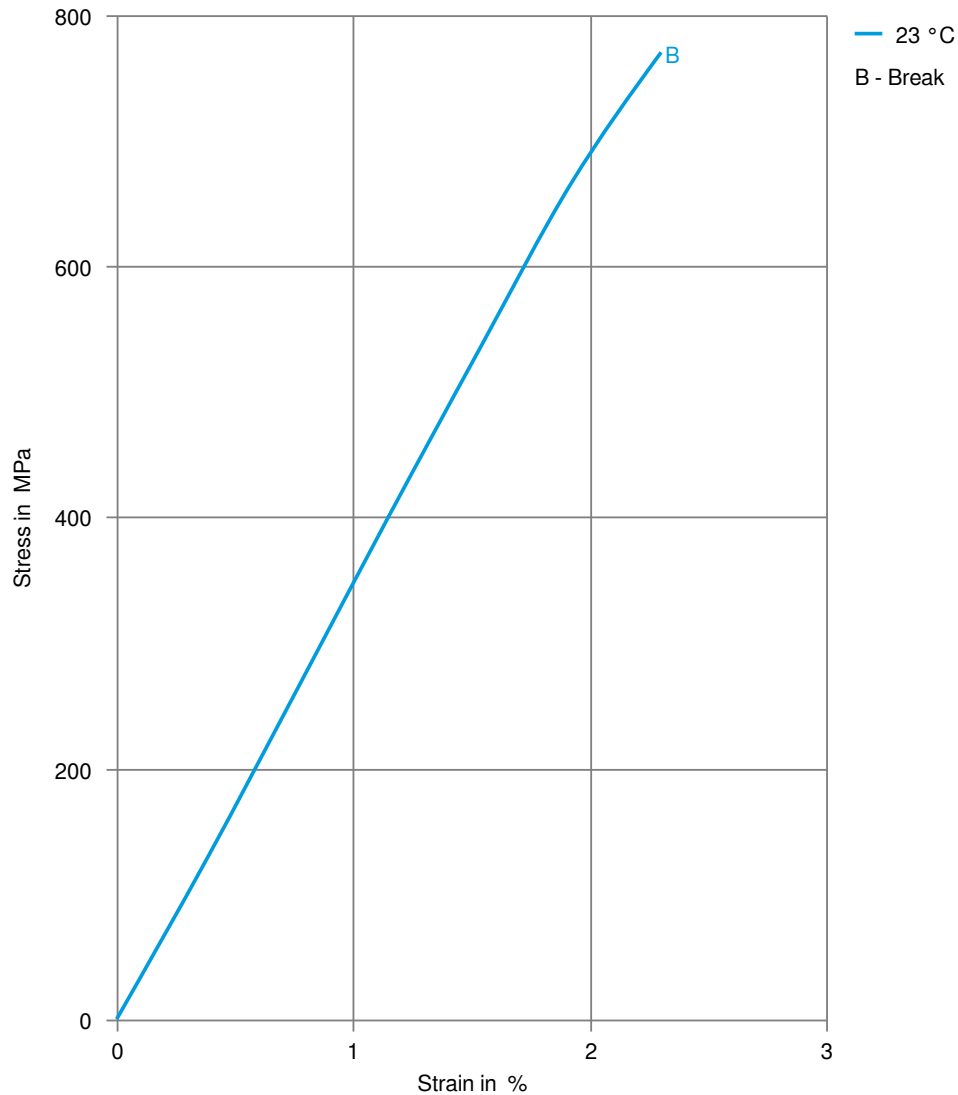
Characteristics

Processing	Injection Moulding, Thermoforming, Selective reinforcement
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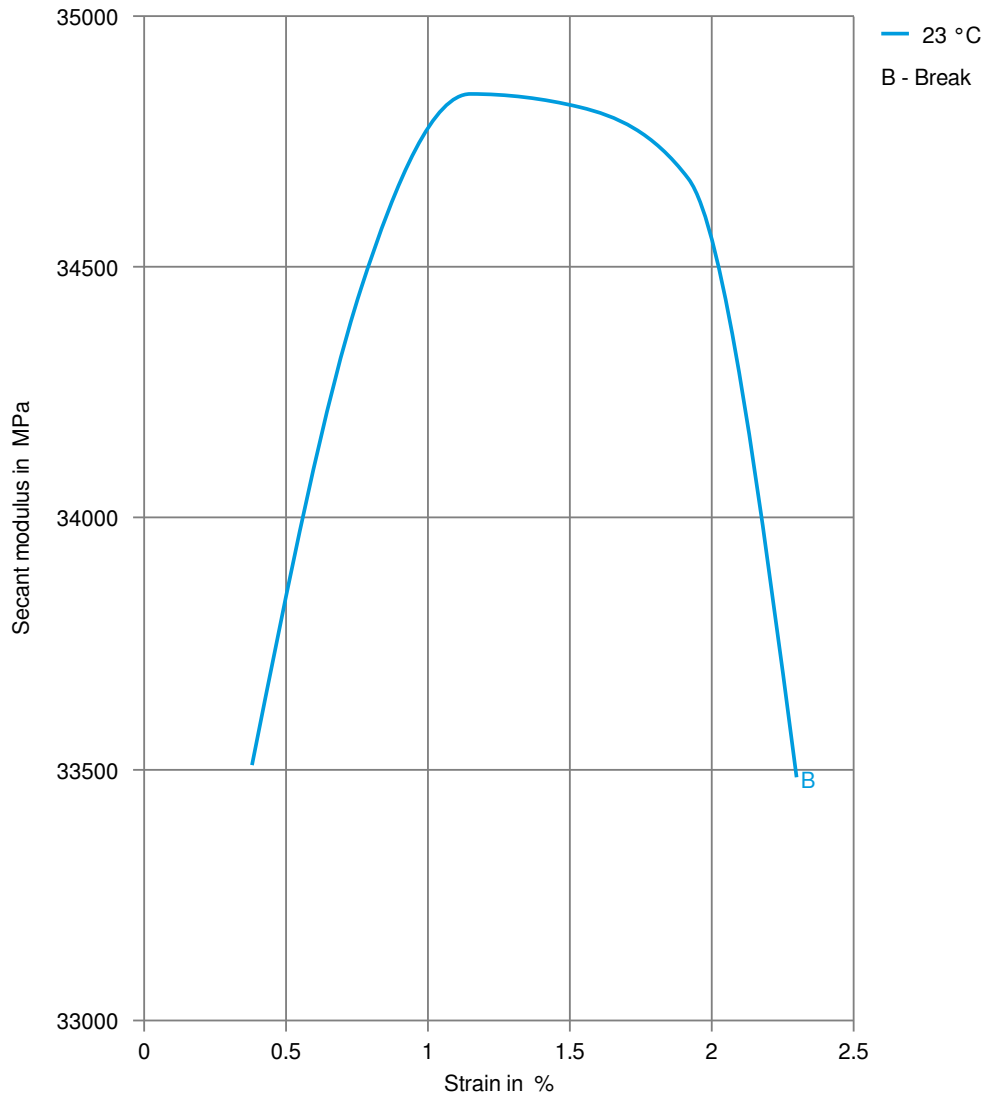
Stress-strain



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Secant modulus-strain



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