

FORTRON® 1130T4

Polyphenylene sulfide

Fortron® 1130T4 is a 30% glass filled, impact modified grade for injection molding with excellent thermal shock resistance.

Product information

Resin Identification	PPS-GF30	ISO 1043
Part Marking Code	>PPS-GF30<	ISO 11469

Rheological properties

Moulding shrinkage, parallel	0.3 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.7 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	11000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	160 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2.3 %	ISO 527-1/-2
Flexural modulus	10000 MPa	ISO 178
Flexural strength	240 MPa	ISO 178
Charpy impact strength, 23°C	60 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	13 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	10 kJ/m ²	ISO 179/1eA
Hardness, Rockwell, M-scale	90	ISO 2039-2
Poisson's ratio	0.34 ^[C]	

[C]: Calculated

Thermal properties

Melting temperature, 10°C/min	280 °C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	90 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	260 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	18 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	56 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at thickness h	V-0 class	IEC 60695-11-10
Thickness tested	0.8 mm	IEC 60695-11-10

Electrical properties

Volume resistivity	>1E13 Ohm.m	IEC 62631-3-1
Surface resistivity	>1E15 Ohm	IEC 62631-3-2
Electric strength	21 kV/mm	IEC 60243-1

Physical/Other properties

Water absorption, 2mm	0.02 %	Sim. to ISO 62
Density	1510 kg/m ³	ISO 1183

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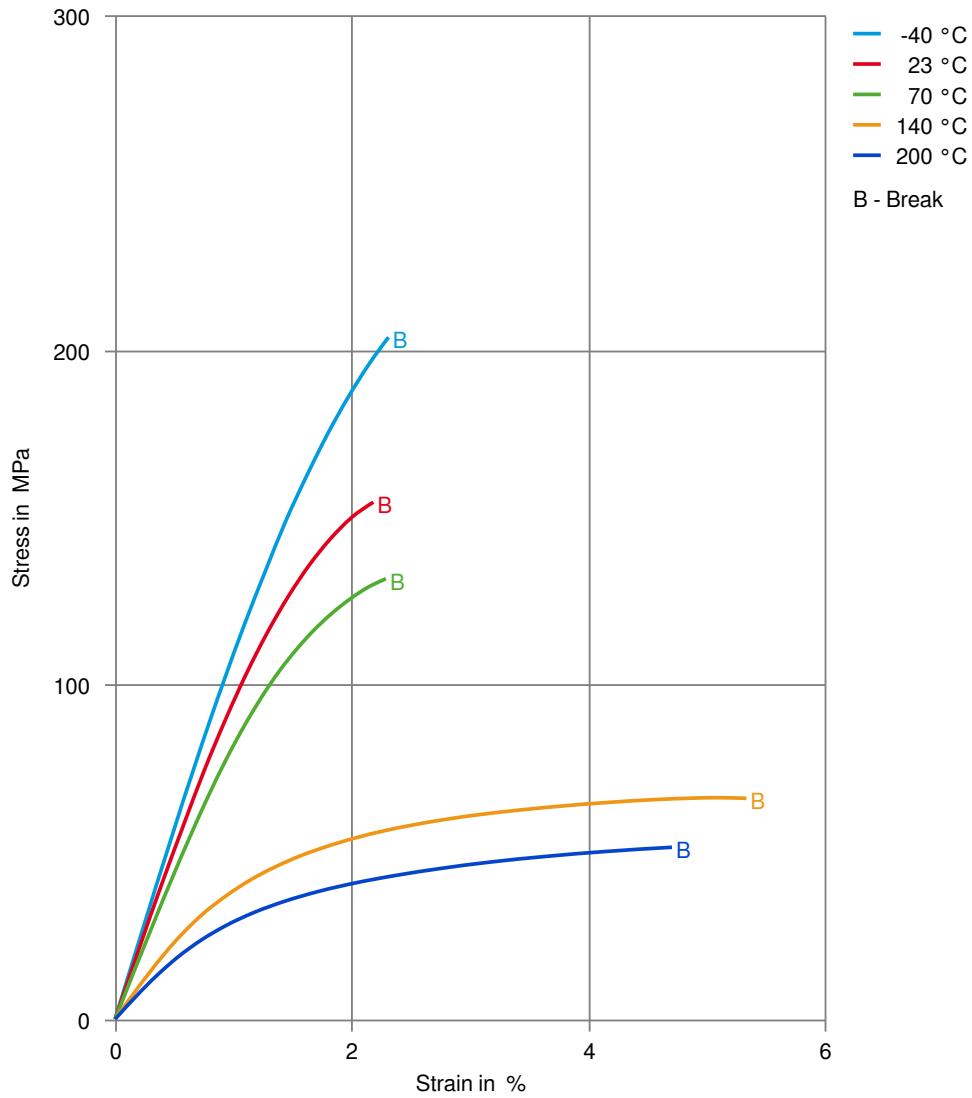
Injection

Drying Recommended	yes
Drying Temperature	100 °C
Drying Time, Dehumidified Dryer	2 - 4 h
Processing Moisture Content	≤0.02 %
Melt Temperature Optimum	330 °C
Min. melt temperature	310 °C
Max. melt temperature	340 °C
Screw tangential speed	0.2 - 0.3 m/s
Mold Temperature Optimum	150 °C
Min. mould temperature	140 °C
Max. mould temperature	160 °C
Hold pressure range	30 - 70 MPa
Back pressure	3 MPa
Ejection temperature	217 °C

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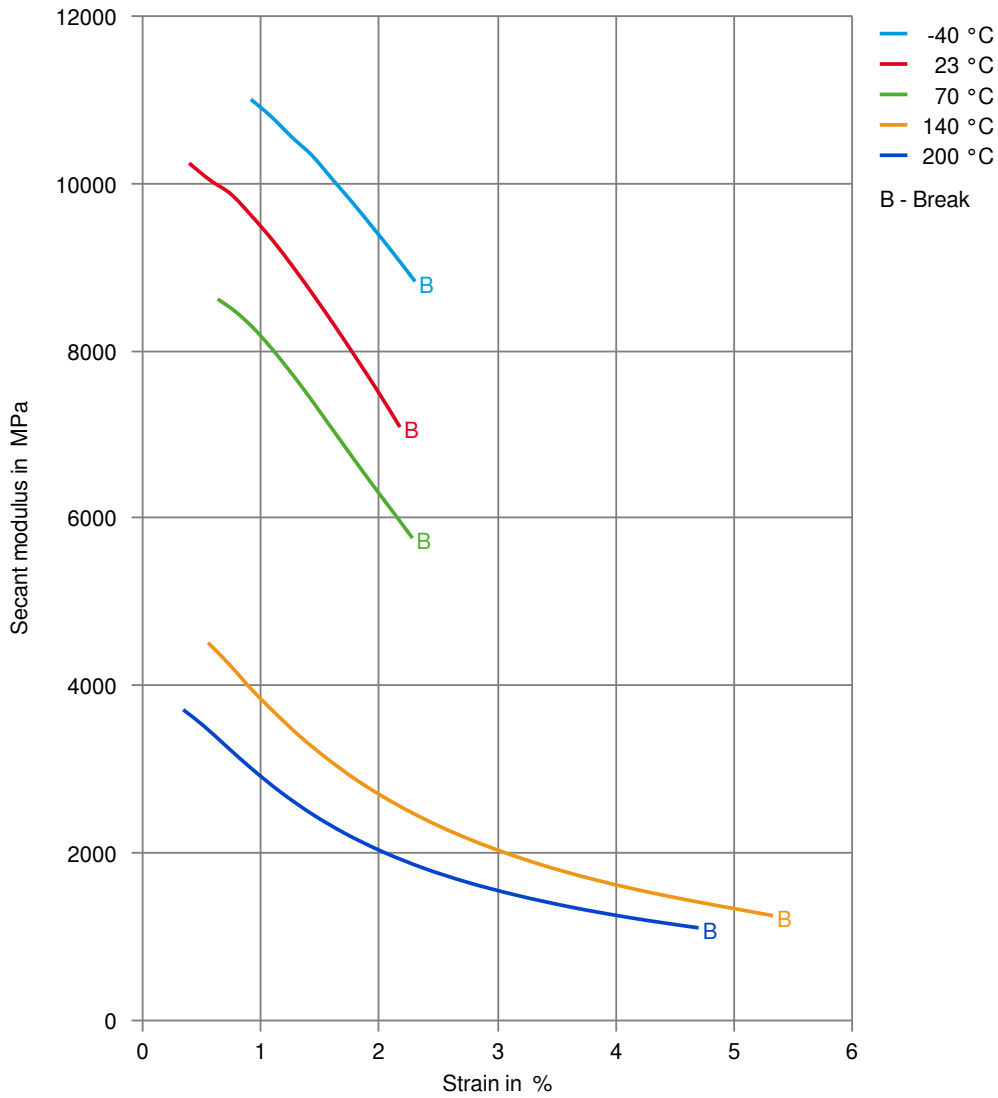
Stress-strain



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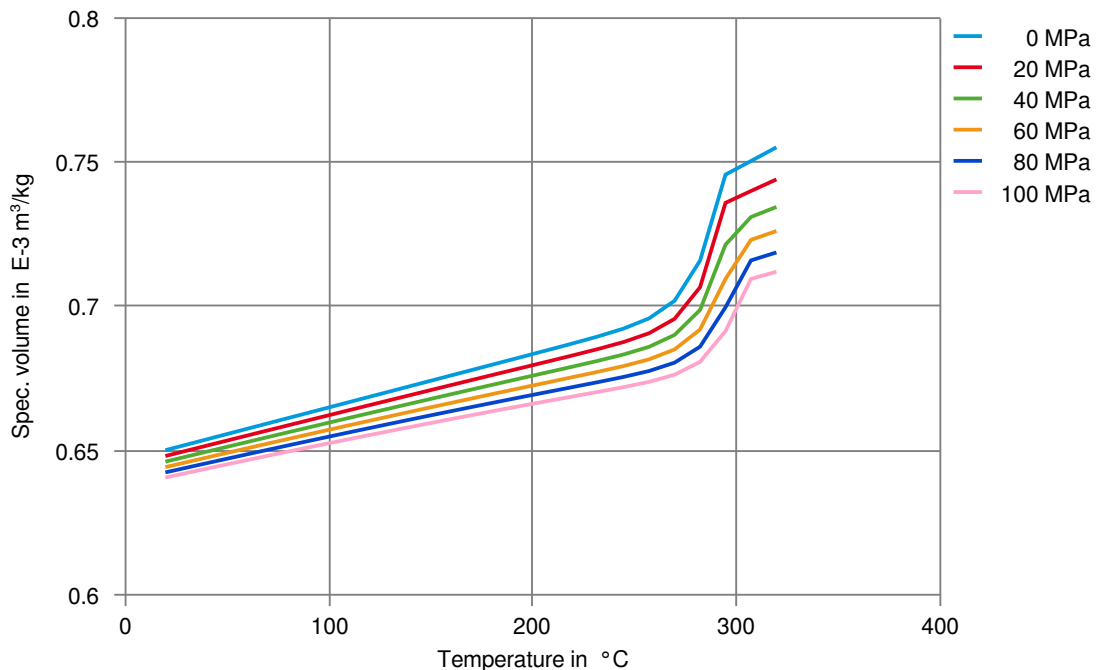
Secant modulus-strain



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Specific volume-temperature (pvT)



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