

FORTRON® 6150T4

Polyphenylene sulfide

Fortron 6150T4 is a 50% glass-fiber reinforced and mineral-filled grade with improved impact and thermal shock resistance.

Product information

Resin Identification	PPS-I-(GF+MD)50	ISO 1043
Part Marking Code	>PPS-I-(GF+MD)50<	ISO 11469

Rheological properties

Moulding shrinkage, parallel	0.2 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.5 %	ISO 294-4, 2577

Typical mechanical properties

Tensile modulus	16000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	170 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.7 %	ISO 527-1/-2
Flexural modulus	15500 MPa	ISO 178
Flexural strength	260 MPa	ISO 178
Charpy impact strength, 23°C	50 kJ/m ²	ISO 179/1eU
Charpy notched impact strength, 23°C	10 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.33 ^[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	273 °C	ISO 75-1/-2
Coefficient of linear thermal expansion (CLTE), parallel	12 E-6/K	ISO 11359-1/-2
Coefficient of linear thermal expansion (CLTE), normal	40 E-6/K	ISO 11359-1/-2

Flammability

Burning Behav. at 1.5mm nom. thickn.	V-0 class	IEC 60695-11-10
Thickness tested	1.5 mm	IEC 60695-11-10
Glow Wire Flammability Index, 1.0mm	960 ^[OT, 1] °C	IEC 60695-2-12
Glow Wire Flammability Index, 2.0mm	960 ^[OT, 1] °C	IEC 60695-2-12
Glow Wire Ignition Temperature, 1.0mm	775 ^[OT, 1] °C	IEC 60695-2-13
Glow Wire Ignition Temperature, 2.0mm	825 ^[OT, 1] °C	IEC 60695-2-13

[OT]: One time tested

[1]: SR 01407577 | Case | Salesforce 24COR032B _Glow Wire

Electrical properties

Relative permittivity, 1000Hz	3.69	IEC 62631-2-1
Relative permittivity, 1MHz	3.67	IEC 62631-2-1
Dissipation factor, 1000Hz	20 E-4	IEC 62631-2-1
Dissipation factor, 1MHz	20 E-4	IEC 62631-2-1

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Physical/Other properties

Water absorption, 2mm	0.02 %	Sim. to ISO 62
Density	1720 kg/m ³	ISO 1183

Injection

Drying Recommended	yes
Drying Temperature	130 °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

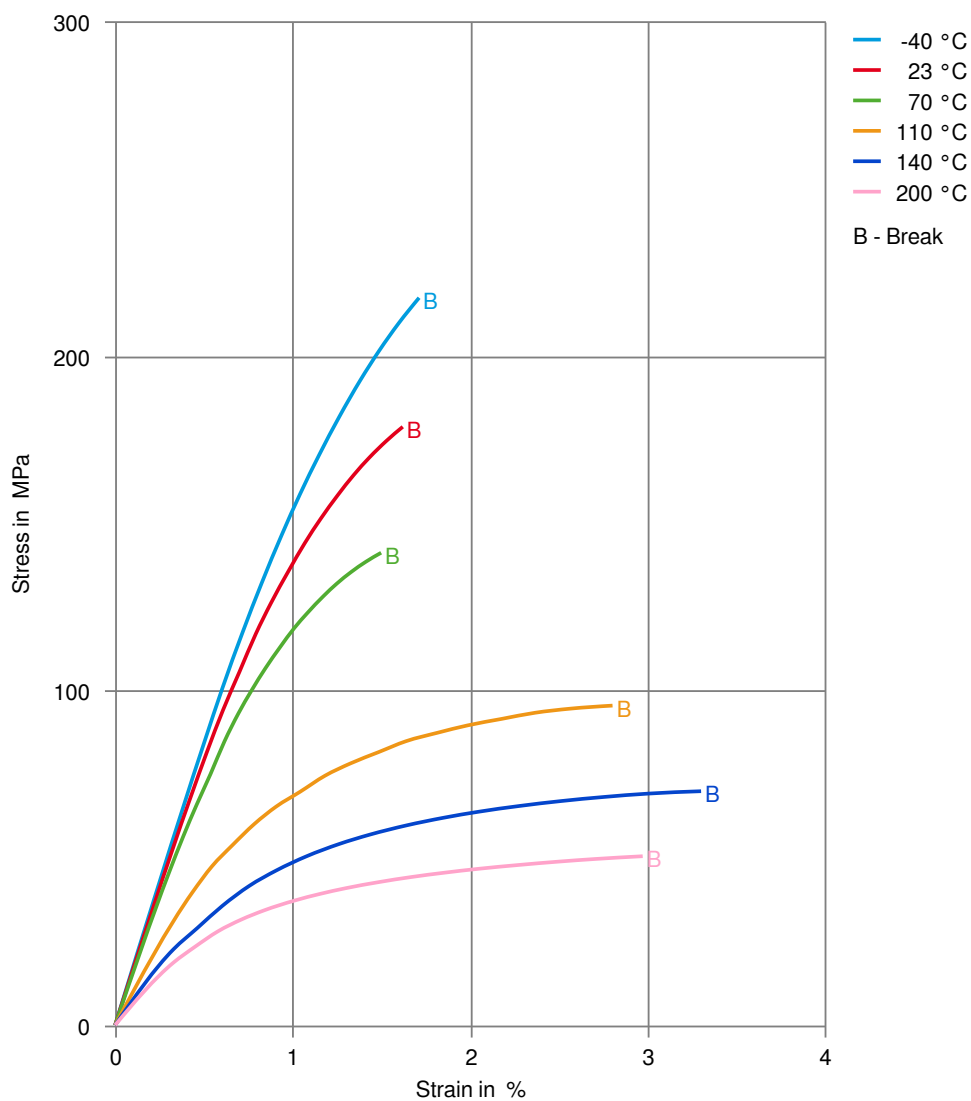
Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	High impact or impact modified, Thermal shock resistant

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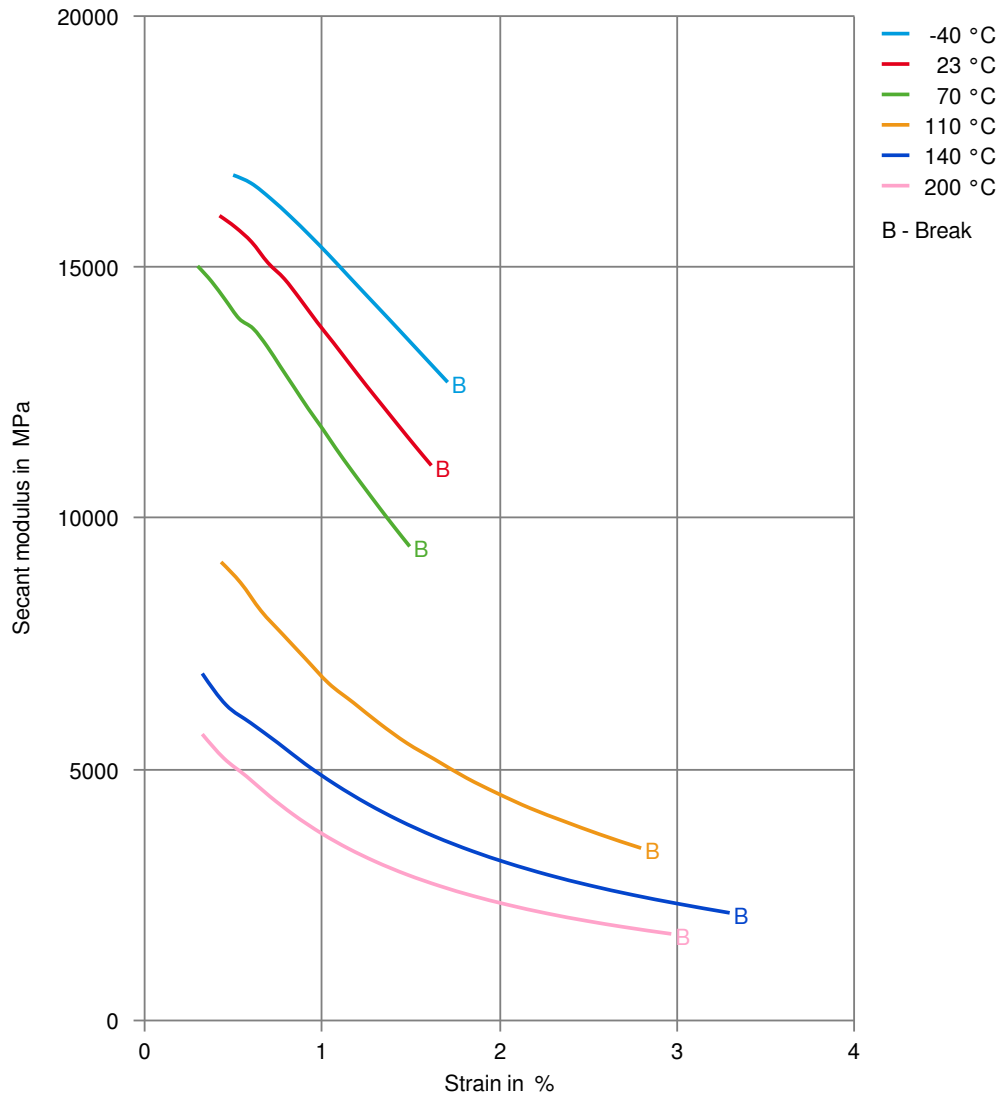
Stress-strain



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Secant modulus-strain



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