

Polyphenylene sulfide

Fortron® 1115L0 is a 15% fiberglass-reinforced grade of polyphenylene sulfide with high melt strength suitable for blow molding and extrusion applications.

The recommended processing conditions are similar to those of our standard grades, except drying conditions are somewhat milder at 80 to 100 C for 3-4 hours.

Product information

Resin Identification Part Marking Code	PPS-GF15 >PPS-GF15<		ISO 1043 ISO 11469
Typical mechanical properties			
Tensile modulus Tensile stress at break, 5mm/min Tensile strain at break, 5mm/min Flexural modulus Flexural strength Charpy impact strength, 23°C Charpy notched impact strength, 23°C Izod notched impact strength, 23°C Ball indentation hardness, H 961/30 Poisson's ratio	2 7500 200 32 5 5.2	MPa %	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 179/1eU ISO 179/1eA ISO 180/1A ISO 2039-1
Thermal properties			
Temperature of deflection under load, 1.8 MPa Temperature of deflection under load, 8 MPa	220 115	_	ISO 75-1/-2 ISO 75-1/-2
Flammability			
Burning Behav. at thickness h Thickness tested	V-0 0.75	class mm	IEC 60695-11-10 IEC 60695-11-10
Electrical properties			
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Physical/Other properties			
Water absorption, 2mm Density	0.02 1440	% kg/m³	Sim. to ISO 62 ISO 1183
Injection			
Drying Recommended Drying Temperature Drying Time, Dehumidified Dryer Processing Moisture Content Melt Temperature Optimum Min. melt temperature Max. melt temperature Screw tangential speed Mold Temperature Optimum	yes 100 2 - 4 ≤0.02 330 310 340 0.2 - 0.3	h % °C °C °C m/s	

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Min. mould temperature140 °CMax. mould temperature160 °CHold pressure range30 - 70 MPaBack pressure3 MPa

Additional information

Processing Notes

Pre-Drying

FORTRON should in principle be predried. Because of the necessary low maximum residual moisture content the use of dry air dryers is recommended. The dew point should be =< - 30° C. The time between drying and processing should be as short as possible.

Storage

For subsequent storage the material should be stored dry in the dryer until processed (<= 60 h).

Processing Notes

The higher drying conditions result in higher melt vicosity

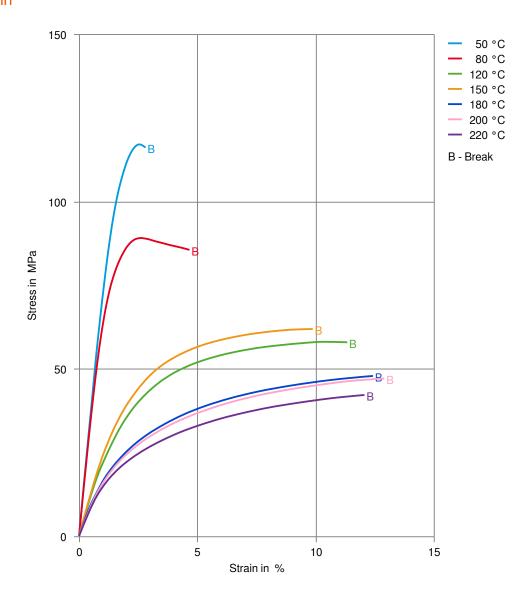
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Polyphenylene sulfide

Stress-strain

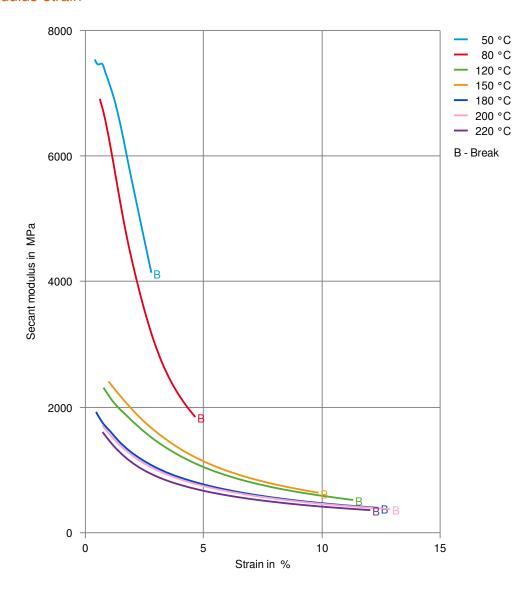


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Secant modulus-strain



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