Celanese
The chemistry inside innovation™

FORTRON® 9115L0

Polyphenylene sulfide

Fortron® 9115L0 is a 15% fiberglass-reinforced grade of polyphenylene sulfide with high melt strength suitable for blow molding and extrusion applications.

Product information

Resin Identification	PPS-GF15	ISO 1043
Part Marking Code	>PPS-GF15<	ISO 11469

Typical mechanical properties

Tensile modulus	7700	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	120	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2	%	ISO 527-1/-2
Flexural modulus	7500	MPa	ISO 178
Flexural strength	200	MPa	ISO 178
Charpy impact strength, 23°C	32	kJ/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	5	kJ/m²	ISO 179/1eA
Izod notched impact strength, 23°C	5.2	kJ/m²	ISO 180/1A
Poisson's ratio	0.34[C]		

[C]: Calculated

Thermal properties

Temperature of deflection under load, 1.8 MPa	220	°C	ISO 75-1/-2
Temperature of deflection under load, 8 MPa	115	°C	ISO 75-1/-2

Flammability

Burning Behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10

Electrical properties

Surface resistivity	>1E15	Ohm	IEC 62631-3-2

Physical/Other properties

Water absorption, 2mm	0.02	%	Sim. to ISO 62
Density	1440	kg/m³	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

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Hold pressure range	30 - 70 MPa
Back pressure	3 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).

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