

FORTRON® FX530T4

Polyphenylene sulfide

FORTRON(R) FX530T4 is a 30% glass filled, impact modified grade for injection molding with good thermal shock resistance

Product information

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

Typical mechanical properties

Tensile modulus	10000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	145 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	2 %	ISO 527-1/-2
Flexural modulus	9700 MPa	ISO 178
Flexural strength	200 MPa	ISO 178
Charpy notched impact strength, 23°C	10 kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	9 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.34 ^[C]	

[C]: Calculated

Thermal properties

Temperature of deflection under load, 1.8 MPa	260 °C	ISO 75-1/-2
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Electrical properties

Volume resistivity	1E14 ^[OT] Ohm.m	IEC 62631-3-1
Volume resistivity, at high temperature	4E9 ^[OT] Ohm.m	IEC 62631-3-1
Temperature	180 ^[OT] °C	
Surface resistivity	1E11 ^[OT] Ohm	IEC 62631-3-2
Surface resistivity, at high temperature	1E11 ^[OT] Ohm	IEC 62631-3-2
Temperature	180 ^[OT] °C	
Electric strength	21 ^[OT] kV/mm	IEC 60243-1
Electric strength, Direct Current	40 ^[OT] kV/mm	IEC 60243-2
Electric strength, DC, high temperature	34 ^[OT] kV/mm	IEC 60243-2
Temperature	180 ^[OT] °C	
Comparative tracking index, 100 drops	125 ^[OT]	IEC 60112

[OT]: One time tested

Physical/Other properties

Density	1500 kg/m ³	ISO 1183
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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

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Mold Temperature Optimum	120 °C
Min. mould temperature	80 °C
Max. mould temperature	160 °C
Hold pressure range	30 - 70 MPa
Back pressure	3 MPa

Characteristics

Processing	Injection Moulding
Special characteristics	High impact or impact modified

Additional information

Processing Notes

Pre-Drying

Pre-drying conditions:

FORTRON PPS should, in principle, be pre-dried. 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.