Celanese
The chemistry inside innovation™

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

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/m²	ISO 179/1eU
Charpy notched impact strength, 23°C	10	kJ/m²	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

Physical/Other properties

Water absorption, 2mm	0.02	%	Sim. to ISO 62
Density	1720	kg/m³	ISO 1183

Revised: 2024-09-04 Source: Celanese Materials Database

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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
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

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