

FORTRON® 6162A7

Polyphenylene sulfide

Fortron 6162A7 is a mineral/glass reinforced grade for applications requiring the highest flow.

Р	ro	di	ıct	info	orm	nation

Resin Identification	PPS-(GF+MD)6		ISO 1043
Part Marking Code	0 >PPS-(GF+MD)60-	<	ISO 11469
Rheological properties			
Moulding shrinkage range, parallel Moulding shrinkage range, normal	0.1 - 0.3 ° 0.4 - 0.8 °		ISO 294-4, 2577 ISO 294-4, 2577
Typical mechanical properties			
Tensile modulus Tensile stress at break, 5mm/min Tensile strain at break, 5mm/min Flexural modulus Flexural strength Flexural strain at failure Charpy impact strength, 23°C Charpy impact strength, -30°C Charpy notched impact strength, 23°C Charpy notched impact strength, -30°C Izod notched impact strength, 23°C Izod notched impact strength, -30°C Izod impact strength, 23°C Izod impact strength, 23°C Hardness, Rockwell, M-scale Poisson's ratio [C]: Calculated	28.2 k 4.5 k 7.7 k 6 k 8.9 k	MPa % MPa MPa % kJ/m²	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 178 ISO 179/1eU ISO 179/1eU ISO 179/1eA ISO 180/1A ISO 180/1A ISO 180/1U ISO 2039-2
Thermal properties Melting temperature, 10°C/min Glass transition temperature, 10°C/min Temperature of deflection under load, 1.8 MPa Temperature of deflection under load, 8 MPa Coefficient of linear thermal expansion (CLTE), parallel Coefficient of linear thermal expansion (CLTE), normal Flammability		°C °C	ISO 11357-1/-3 ISO 11357-1/-3 ISO 75-1/-2 ISO 75-1/-2 ISO 11359-1/-2
Burning Behav. at 1.5mm nom. thickn. Thickness tested Burning Behav. at thickness h Thickness tested	V-0 0 1.5 r V-0 0 0.8 r	mm class	IEC 60695-11-10 IEC 60695-11-10 IEC 60695-11-10 IEC 60695-11-10

Printed: 2025-03-24 Page: 1 of 3

Revised: 2024-06-13 Source: Celanese Materials Database



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Electrical properties

Relative permittivity, 1MHz	5.68	IEC 62631-2-1
Dissipation factor, 1MHz	10 E-4	IEC 62631-2-1
Comparative tracking index	225	IEC 60112

Physical/Other properties

Water absorption, 2mm	0.017 %	Sim. to ISO 62
Density	1920 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
Hold pressure range	30 - 70	MPa
Back pressure	3	MPa
Ejection temperature	228	°C

Characteristics

Processing Injection Moulding

Delivery form Pellets

Additives Release agent

Special characteristics Flame retardant, High Flow

Additional information

Injection molding Preprocessing

Predrying in a dehumidified air dryer at 130 - 140 degC/3-4 hours is recommended.

Processing

On injection molding machines with 15-25 D long three-section screws, as are usual in the trade, the FORTRON is processable. A shut-off nozzle is preferred to a free-flow nozzle.

Melt temperature 320-340 degC

Mold wall temperature at least 140 degC

Printed: 2025-03-24 Page: 2 of 3

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A medium injection rate is normally preferred. All mold cavities must be effectively vented.

Postprocessing

Tool temperature of at least 135 degC is recommended for parts to achieve maximum crystallizable potential.

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).

Automotive

OEM STANDARD
Continental TST N 055 58.03

Printed: 2025-03-24 Page: 3 of 3

Revised: 2024-06-13 Source: Celanese Materials Database

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