Celanese
The chemistry inside innovation™

FORTRON® 6450A6

Polyphenylene sulfide

Fortron 6450A6 is a fiberglass reinforced, mineral filled alloy that exhibits improved wear and sliding properties versus standard Fortron compounds.

Product information

Resin Identification	PPS-(GF+MD)50	ISO 1043
Part Marking Code	>PPS-(GF+MD)50<	ISO 11469

Typical mechanical properties

Tensile modulus	1.6E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	13100	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.5	%	ISO 527-1/-2
Flexural modulus	1.6E6	psi	ISO 178
Flexural strength	18900	psi	ISO 178
Compressive strength	21000	psi	ISO 604
Charpy impact strength, 23°C	8.56	ftlb/in²	ISO 179/1eU
Charpy notched impact strength, 23°C	2.85	ftlb/in²	ISO 179/1eA
Izod notched impact strength, 23°C	2.85	ftlb/in²	ISO 180/1A

Thermal properties

Temperature of deflection under load, 1.8 MPa	500	°F	ISO 75-1/-2
Temperature of deflection under load, 8 MPa	392	°F	ISO 75-1/-2

Physical/Other properties

Water absorption, 2mm	0.02	%	Sim. to ISO 62
Density	0.057	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	266	°F
Drying Time, Dehumidified Dryer	2 - 4	h
Processing Moisture Content	≤0.02	%
Melt Temperature Optimum	626	°F
Min. melt temperature	590	°F
Max. melt temperature	644	°F
Max. screw tangential speed	0.2 - 0.3	m/s
Mold Temperature Optimum	302	°F
Min. mold temperature	284	°F
Max. mold temperature	320	°F
Hold pressure range	4350 - 10200	psi
Back pressure	435	psi

Characteristics

Processing	Injection Molding
Special characteristics	Flame retardant, Low wear / Low friction, High Flow

Revised: 2026-09-08 Source: Celanese Materials Database

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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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