

# 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)5 0	ISO 1043
Part Marking Code	>PPS-(GF+MD)50<	ISO 11469

### Typical mechanical properties

Tensile stress at break, 5mm/min	90 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.5 %	ISO 527-1/-2
Flexural modulus	11000 MPa	ISO 178
Flexural strength	130 MPa	ISO 178
Compressive strength	145 MPa	ISO 604
Charpy impact strength, 23°C	18 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23°C	6 kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, 23°C	6 kJ/m <sup>2</sup>	ISO 180/1A

### Thermal properties

Temperature of deflection under load, 1.8 MPa	260 °C	ISO 75-1/-2
Temperature of deflection under load, 8 MPa	200 °C	ISO 75-1/-2

### Physical/Other properties

Water absorption, 2mm	0.02 %	Sim. to ISO 62
Density	1580 kg/m <sup>3</sup>	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

### 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.

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## Storage

For subsequent storage the material should be stored dry in the dryer until processed ( $\leq 60$  h).

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