

FORTRON® 6450A6 - PPS

Description

Low wear and lowest coefficient of friction

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

Physical properties	Value	Unit	Test Standard
Density	98.6	lb/ft ³	ISO 1183
Water absorption, 23°C-sat	0.02	%	Sim. to ISO 62

Mechanical properties	Value	Unit	Test Standard
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, 23°C	1.6E6	psi	ISO 178
Flexural strength, 23°C	18900	psi	ISO 178
Charpy impact strength, 23°C	8.56	ft-lb/in ²	ISO 179/1eU
Charpy notched impact strength, 23°C	2.85	ft-lb/in ²	ISO 179/1eA
Izod impact notched, 23°C	2.85	ft-lb/in ²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	500	°F	ISO 75-1, -2
DTUL at 8.0 MPa	392	°F	ISO 75-1, -2

Typical injection moulding processing conditions

Pre Drying	Value	Unit
Necessary low maximum residual moisture content	0.02	%
Drying time	3 - 4	h
Drying temperature	266 - 284	°F

Temperature	Value	Unit
Hopper temperature	68 - 86	°F
Feeding zone temperature	140 - 176	°F
Zone1 temperature	554 - 572	°F
Zone2 temperature	590 - 608	°F
Zone3 temperature	626 - 644	°F
Zone4 temperature	626 - 644	°F
Nozzle temperature	590 - 626	°F
Melt temperature	626 - 644	°F
Mold temperature	284 - 320	°F
Hot runner temperature	626 - 644	°F

Pressure	Value	Unit
Back pressure max.	30	bar

Speed	Value
Injection speed	fast

Screw Speed	Value	Unit
Screw speed diameter, 25mm	120	RPM
Screw speed diameter, 40mm	75	RPM
Screw speed diameter, 55mm	50	RPM



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Other text information

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 $\leq -30^{\circ}\text{C}$. The time between drying and processing should be as short as possible.

Longer pre-drying times/storage

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

Characteristics

Special Characteristics	High flow, Wear resistant
Product Categories	Specialty, Tribological
Processing	Injection molding

