CELSTRAN® PPS-GF50-01 AF3001 NATURAL

CELSTRAN® Long Fibre

50% long strand glass fiber reinforced polyphenylene sulfide.

Product information

Resin Identification	PPS-LGF50	ISO 1043
Part Marking Code	>PPS-LGF50<	ISO 11469

Typical mechanical properties

Tensile modulus	2.69E6	psi	ISO 527-1/-2
Tensile stress at break, 5mm/min	25100	psi	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.1	%	ISO 527-1/-2
Flexural modulus	2.6E6	psi	ISO 178
Flexural strength	42600	psi	ISO 178
Charpy notched impact strength, 23 °C	15.9	ftlb/in²	ISO 179/1eA

Thermal properties

Melting temperature, 10 °C/min	534	°F	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	536	°F	ISO 75-1/-2

Physical/Other properties

Density	0.0621	lb/in³	ISO 1183

Injection

Drying Recommended	yes	
Drying Temperature	284	°F
Drying Time, Dehumidified Dryer	3 - 4	h
Processing Moisture Content	≤0.02	%
Melt Temperature Optimum	599	°F
Min. melt temperature	563	°F
Max. melt temperature	617	°F
Max. screw tangential speed	0.1 - 0.2	m/s
Mold Temperature Optimum	302	°F
Min. mold temperature	284	°F
Max. mold temperature	320	°F

Characteristics

Processing	Injection Molding
Additives	Flame retardant
Special characteristics	Flame retardant

Additional information

Processing Notes

Pre-Drying

CELSTAN PPS 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 (<= 60 h).

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