

LUSEP FC5400

Injection Molding, PPS+GF40%

Description

High temperature, Low halogen, Fast cycle time

Application

Automotive, E&E Part

Properties	Test Condition	Test Method	Unit	Typical Value
Physical				
Specific Gravity		ASTM D792	-	1.6
Molding Shrinkage, 2mm		ASTM D955	%	
Flow				0.15
Cross-flow				0.39
Mechanical				
Tensile Strength, 3.2mm @ Break	5mm/min	ASTM D638	MPa	190
Tensile Elongation, 3.2mm @ Break	5mm/min	ASTM D638	%	1.8
Flexural Strength, 3.2mm	1.3mm/min	ASTM D790	MPa	265
Flexural Modulus, 3.2mm	1.3mm/min	ASTM D790	MPa	14,000
IZOD Impact Strength, 3.2mm (Notched)	23°C	ASTM D256	J/m	75
Thermal				
Melting Temperature		ASTM D3418	°C	310
Heat Deflection Temperature, 6.4mm (Unannealed)	18.6kg	ASTM D648	°C	265
Coefficient of Linear Thermal Expansion Flow		ASTM D696	10^{-5} m/m°C	-
Cross-flow			10^{-5} m/m°C	-
Electrical				
Comparative Tracking Index(CTI)	Solution A	IEC 60112	Volts	
Volume Resistivity	23°C	ASTM D257	Ohm·m	1.0E+14
Arc Resistance	23°C	ASTM D495	sec	
Dielectric Strength, 1mm	23°C	ASTM D149	kV/mm	16

Note) Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection molulded specimens and after 48 hours storage at 23 °C, 50% relative humidity.

Updated : 1-May-16

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Processing Guide (Injection Molding)

Processing Parameters	Unit	Value
Drying Temperature	°C	100 ~ 120
Drying Time	hrs	4 ~ 5
Moisture Content	%	0.06 - 0.1
Melt Temperature	°C	310 ~ 320
Cylinder Temperature	°C	300 ~ 320
	°C	310 ~ 330
	°C	310 ~ 330
Nozzle Temperature	°C	320 ~ 340
Mold Temperature	°C	120 ~ 150
Back Pressure	kg/cm ²	-
Screw Speed	rpm	50~150

Note) Back Pressure & Screw Speed are only mentioned as general guidelines.

These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.

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