SolutionPartner

LG Chem

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		ASTM D638		
@ Break	5mm/min		MPa	190
Tensile Elongation, 3.2mm		ASTM D638		
@ Break	5mm/min		%	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		ASTM D256		
(Notched)	23℃		J/m	75
Thermal				
Melting Temperature		ASTM D3418	℃	310
Heat Deflection Temperature, 6.4mm		ASTM D648		
(Unannealed)	18.6kg		℃	265
Coefficient of Linear Thermal Expansion		ASTM D696		
Flow			10^{-5} m/m℃	-
Cross-flow			10^{-5} m/m℃	-
Electrical				
Comparative Tracking Index(CTI)	Solution A	IEC 60112	Volts	
Volume Resistivity	23℃	ASTM D257	Ohm·m	1.0E+14
Arc Resistance	23℃	ASTM D495	sec	
Dielectric Strength, 1mm	23℃	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℃, 50% relative humidty.

Updated : 1-May-16

SolutionPartner

LUSEP FC5400

Injection Molding, PPS+GF40%

Description

High temperature, Low halogen, Fast cycle time

Application

Automotive,E&E Part

Processing Guide (Injection Molding)

Processing Parameters		Unit	Value
Drying Temperature		℃	100 ~ 120
Drying Time		hrs	4 ~ 5
Moisture Content		%	0.06 - 0.1
Melt Temperature		℃	310 ~ 320
Cylinder Temperature	Rear	℃	300 ~ 320
	Middle	℃	310 ~ 330
	Front	℃	310 ~ 330
Nozzle Temperature		℃	320 ~ 340
Mold Temperature		℃	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.

Updated : 1-May-16