Fortron® 1140L0 FC

Celanese Corporation - Polyphenylene Sulfide

Tuesday, November 5, 2019

General Information

Product Description

Fortron 1140L0 FC is a 40% glass-reinforced extrusion grade for food contact applications. It exhibits excellent heat and chemical resistance, good electrical properties and is inherently flame-retardant. The high hardness and rigidity at elevated temperatures allows for good load bearing performance. This product has good weldability due to the modest filler level. 1140L0 is used to produce rods and slabs.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Europe	• Latin America • North America	
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight		
Features	• Chemical Resistant • Flame Retardant	• Food Contact Acceptable • Good Electrical Properties	• High Heat Resistance
Uses	• Non-specific Food Applications		
RoHS Compliance	• Contact Manufacturer		
Processing Method	• Extrusion		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.65	g/cm³	ISO 1183
Water Absorption (Saturation, 73°F)	0.020	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress (Break)	26800	psi	ISO 527-2/1A/5
Tensile Strain (Break)	1.9	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	2.03E+6	psi	ISO 178
Flexural Stress [2]	40600	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.8	ft·lb/in²	
73°F	4.8	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature [3]	194	°F	ISO 11357-2
Melting Temperature [3]	536	°F	ISO 11357-3
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.015 in	V-0		
0.06 in	V-0		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	266 to 284	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Hopper Temperature	68 to 86	°F
Rear Temperature	554 to 572	°F

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Injection	Nominal Value	Unit
Middle Temperature	590 to 608	°F
Front Temperature	626 to 644	°F
Nozzle Temperature	590 to 626	°F
Processing (Melt) Temp	626 to 644	°F
Mold Temperature	284 to 320	°F
Injection Pressure	7250 to 14500	psi
Injection Rate	Fast	
Holding Pressure	4350 to 10200	psi
Back Pressure	0.00 to 435	psi

Injection Notes

Manifold Temperature: 330 to 340°C
Zone 4 Temperature: 330 to 340°C
Feed Temperature: 60 to 80°C

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] Break

[3] 10°C/min