



Fortron® FX55T1

Celanese Corporation - Polyphenylene Sulfide

Tuesday, November 5, 2019

General Information

Product Description

Fortron® FX55T1 is an unreinforced, impact-modified poly(phenylene sulfide) with high melt viscosity suitable for extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Impact Modifier		
Features	• High Viscosity	• Impact Modified	
Processing Method	• Extrusion		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.25	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	1.6	%	
Flow	1.5	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	334000	psi	ISO 527-2/1A
Tensile Stress (Yield)	7980	psi	ISO 527-2/1A/50
Tensile Stress (Break)	7250	psi	ISO 527-2/1A/50
Tensile Strain (Yield)	6.0	%	ISO 527-2/1A/50
Tensile Strain (Break)	40	%	ISO 527-2/1A/50
Flexural Modulus (73°F)	331000	psi	ISO 178
Flexural Stress (3.5% Strain)	10200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	17	ft-lb/in ²	
73°F	29	ft-lb/in ²	
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (264 psi, Unannealed)	212	°F	ISO 75-2/A
Vicat Softening Temperature			
--	518	°F	ISO 306/A50
--	320	°F	ISO 306/B50
Melting Temperature ²	536	°F	ISO 11357-3
CLTE - Flow	4.4E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	5.3E-5	in/in/°F	ISO 11359-2

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	194	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.050	%

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Injection	Nominal Value	Unit
Hopper Temperature	68 to 86	°F
Rear Temperature	554 to 572	°F
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
Back Pressure	< 435	psi

Injection Notes

Feeding zone temperature: 60 to 80°C

Zone4 temperature: 330 to 340°C

Hot runner temperature: 330 to 340°C

Notes

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

² 10°C/min