



Fortron® FX4382T1

Celanese Corporation - Polyphenylene Sulfide

Tuesday, November 5, 2019

General Information

Product Description

Fortron FX4382T1 is an impact-modified, unreinforced, extrusion grade offering high tensile elongation.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Additive	• Impact Modifier		
Features	• High Elongation	• Impact Modified	
RoHS Compliance	• Contact Manufacturer		
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	0.70 to 1.4	%	
Flow	0.90 to 1.4	%	
Water Absorption (Saturation, 73°F)	0.035	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	334000	psi	ISO 527-2/1A
Tensile Stress (Break)	7250	psi	ISO 527-2/1A/5
Tensile Strain (Break)	25	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	348000	psi	ISO 178
Compressive Modulus	328000	psi	ISO 604
Compressive Stress			ISO 604
1% Strain	3190	psi	
6% Strain	10100	psi	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.3	ft·lb/in ²	
73°F	14	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
CLTE - Flow	3.3E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	4.3E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	5.0E+16	ohms·cm	IEC 60093
Comparative Tracking Index	150	V	IEC 60112

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	194 to 212	°F

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Injection	Nominal Value	Unit
Drying Time	3.0 to 4.0	hr
Hopper Temperature	68 to 86	°F
Rear Temperature	554 to 572	°F
Middle Temperature	572 to 590	°F
Front Temperature	590 to 608	°F
Nozzle Temperature	572 to 590	°F
Processing (Melt) Temp	590 to 608	°F
Mold Temperature	284 to 320	°F
Injection Rate	Fast	
Back Pressure	< 435	psi

Injection Notes

Feeding zone temperature: 60 to 80°C
Zone4 temperature: 310 to 320°C
Hot runner temperature: 310 to 320°C

Notes

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