

Arnite® TV4 260 SXF
Envalior - Polybutylene Terephthalate
General Information
Product Description

30% Glass Fiber Reinforced, Flame Retardant, High Flow

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Features	• Flame Retardant • High Flow
Processing Method	• Injection Molding
Resin ID	• PBT-GF30 FR(17)

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.68	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	1.4	%	
Flow	0.50	%	
Water Absorption (Saturation, 73°F)	0.30	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.15	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.60E+6	psi	ISO 527-1
Tensile Stress (Break)	19600	psi	ISO 527-2
Tensile Strain (Break)	2.3	%	ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	3.3	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	24	ft·lb/in ²	ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	428	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	410	°F	ISO 75-2/A
Melting Temperature ²	437	°F	ISO 11357-3
CLTE - Flow	1.9E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.9E-5	in/in/°F	ISO 11359-2
RTI Elec			UL 746B
0.016 in	266	°F	
0.030 in	284	°F	
RTI Imp (0.030 in)	302	°F	UL 746B
RTI Str (0.030 in)	284	°F	UL 746B
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Electric Strength	710	V/mil	IEC 60243-1
Relative Permittivity			IEC 62631-2-1
100 Hz	4.00		
1 MHz	3.80		
Dissipation Factor			IEC 62631-2-1
100 Hz	2.5E-3		
1 MHz	0.014		
Comparative Tracking Index (CTI)	PLC 2		UL 746A



Comparative Tracking Index	275 V	IEC 60112
Flammability	Nominal Value	Unit
Flame Rating		UL 94
0.06 in	V-0	
0.12 in	V-0	
Flammability Classification		IEC 60695-11-10, -20
0.030 in	V-0	
0.06 in	V-0	
0.12 in	V-0	
Glow Wire Flammability Index		IEC 60695-2-12
0.016 in	1760 °F	
0.06 in	1760 °F	
Glow Wire Ignition Temperature		IEC 60695-2-13
0.04 in	1380 °F	
0.06 in	1340 °F	

Notes

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

² 10°C/min

