Arnite® TV4 260 SN

Envalior - *Polybutylene Terephthalate*

General Information

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

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.67	g/cm³	ISO 1183
Water Absorption (Saturation, 73°F)	0.60	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.60E+6	psi	ISO 527-1
Tensile Stress (Break)	20300	psi	ISO 527-2
Tensile Strain (Break)	2.5	%	ISO 527-2
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	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	24	ft·lb/in²	
73°F	24	ft·lb/in²	
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 (0.030 in)	284	°F	UL 746B
RTI Imp			UL 746B
0.030 in	266	°F	
0.12 in	284	°F	
RTI Str (0.030 in)	284	°F	UL 746B
Effective Thermal Diffusivity	9.49E-5	in²/s	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Relative Permittivity			IEC 62631-2-1
100 Hz	3.40		
1 MHz	3.40		
Dissipation Factor			IEC 62631-2-1
100 Hz	1.0E-3		
1 MHz	0.015		

Comparative Tracking Index (CTI)	PLC 2		UL 746A
Comparative Tracking Index	275	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.06 in	V-0		
0.12 in	V-0		
Flammability Classification			IEC 60695-11-10, -20
0.06 in	V-0		
0.12 in	V-0		
0.030 in	V-2		
Glow Wire Flammability Index			IEC 60695-2-12
0.030 in	1760	°F	
0.06 in	1760	°F	
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Melt Density	1.44	g/cm³	
Melt Specific Heat	0.416	Btu/lb/°F	
Melt Thermal Conductivity	1.1	Btu·in/hr/ft²/°F	ASTM E1461

Notes

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

[2] 10°C/min