Arnite® TV4 261/A HR

Envalior - *Polybutylene Terephthalate*

General Information

Product Description			
30% Glass Fiber Reinforced, Hydrolysis Stabilized			
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	• Hydrolysis Resistant	• Hydrolytically Stable	
Processing Method	• Injection Molding		
Resin ID	• PBT-GF30		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.52	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	16	g/10 min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.2	%	
Flow	0.33	%	
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			ISO 527-1
--	1.34E+6	psi	
248°F	537000	psi	
Tensile Stress (Break)	18900	psi	ISO 527-2
Tensile Strain (Break)	3.0	%	ISO 527-2
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.8	ft·lb/in²	
73°F	3.8	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	21	ft·lb/in²	
73°F	29	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)	401	°F	ISO 75-2/A
Melting Temperature [2]	437	°F	ISO 11357-3
CLTE - Flow	1.5E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.6E-5	in/in/°F	ISO 11359-2
Effective Thermal Diffusivity	1.28E-4	in²/s	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Electric Strength	760	V/mil	IEC 60243-1
Relative Permittivity			IEC 62631-2-1
100 Hz	3.90		
1 MHz	3.70		
Dissipation Factor			IEC 62631-2-1

100 Hz	2.5E-3		
1 MHz	0.017		
Comparative Tracking Index (CTI)	PLC 1		UL 746A
Comparative Tracking Index	400	V	IEC 60112
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Melt Density	1.22	g/cm³	
Melt Specific Heat	0.442	Btu/lb/°F	
Melt Thermal Conductivity	1.3	Btu·in/hr/ft²/°F	ASTM E1461

Notes

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

[2] 10°C/min