

Arnite® TV4 261 /A
Envalior - Polybutylene Terephthalate
General Information
Product Description

30% Glass Fiber Reinforced

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.52	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	11	cm ³ /10min	ISO 1133
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	1.45E+6	psi	ISO 527-1
Tensile Stress (Break)	20300	psi	ISO 527-2
Tensile Strain (Break)	2.9	%	ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.2	ft·lb/in ²	
73°F	4.3	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	29	ft·lb/in ²	
73°F	31	ft·lb/in ²	
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	1.9E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.9E-5	in/in/°F	ISO 11359-2
Effective Thermal Diffusivity	1.28E-4	in ² /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/cm ³	



Melt Specific Heat	0.442 Btu/lb/°F	
Melt Thermal Conductivity	1.3 Btu·in/hr/ft ² /°F	ASTM E1461

Notes

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

² 10°C/min

