

**Arnite® TV4 264 SN**
*Envalior - Polybutylene Terephthalate*
**General Information**
**Product Description**

30% Glass Fiber Reinforced, Flame Retardant

**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
Processing Method	• Injection Molding
Resin ID	• PBT-GF30 FR(17)

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density	1.70	g/cm <sup>3</sup>	ISO 1183
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	1.67E+6	psi	ISO 527-1
Tensile Stress (Break)	20300	psi	ISO 527-2
Tensile Strain (Break)	1.8	%	ISO 527-2
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	3.8	ft·lb/in <sup>2</sup>	
73°F	3.0	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	21	ft·lb/in <sup>2</sup>	
73°F	21	ft·lb/in <sup>2</sup>	
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
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 <sup>2</sup>	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 (0.030 in)	230	°F	UL 746B
RTI Str			UL 746B
0.030 in	248	°F	
0.12 in	284	°F	
Effective Thermal Diffusivity	9.49E-5	in <sup>2</sup> /s	
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Relative Permittivity			IEC 62631-2-1
100 Hz	3.70		
1 MHz	3.50		
Dissipation Factor			IEC 62631-2-1
100 Hz	2.0E-3		
1 MHz	0.016		
Comparative Tracking Index (CTI)	PLC 3		UL 746A
Comparative Tracking Index	200 V		IEC 60112



<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
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
0.030 in	1760	°F	
0.06 in	1760	°F	
<b>Fill Analysis</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Melt Density	1.44	g/cm <sup>3</sup>	
Melt Specific Heat	0.416	Btu/lb/°F	
Melt Thermal Conductivity	1.1	Btu·in/hr/ft <sup>2</sup> /°F	ASTM E1461

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 10°C/min

