

**Arnite® T06 202**

Envalior - Polybutylene Terephthalate

## General Information

**Product Description**

Medium Viscosity, Injection Molding, Food Contact Quality

**General**

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Features	• Food Contact Acceptable • Medium Viscosity
Processing Method	• Injection Molding
Resin ID	• PBT

 Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	1.30	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	24	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.0	%	
Flow	2.0	%	
Water Absorption (Saturation, 73°F)	0.45	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.18	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			ISO 527-1
--	377000	psi	
-40°F	450000	psi	
212°F	58000	psi	
248°F	50800	psi	
320°F	31900	psi	
356°F	26100	psi	
Tensile Stress			ISO 527-2
Yield	8700	psi	
Yield, -40°F	14500	psi	
Yield, 212°F	3630	psi	
Tensile Strain			ISO 527-2
Yield	3.5	%	
Yield, -40°F	7.0	%	
Nominal Tensile Strain at Break	> 50	%	ISO 527-2
Flexural Modulus			ISO 178
--	377000	psi	
248°F	50800	psi	
320°F	36300	psi	
Flexural Stress			ISO 178
--	13100	psi	
248°F	2900	psi	
320°F	1450	psi	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	1.7	ft·lb/in <sup>2</sup>	
73°F	1.9	ft·lb/in <sup>2</sup>	



Charpy Unnotched Impact Strength		ISO 179/1eU
-22°F	No Break	
73°F	No Break	
<b>Thermal</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	329 °F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	131 °F	ISO 75-2/A
Melting Temperature <sup>2</sup>	437 °F	ISO 11357-3
CLTE - Flow	5.0E-5 in/in/°F	ISO 11359-2
CLTE - Transverse	5.0E-5 in/in/°F	ISO 11359-2
RTI Elec (0.030 in)	266 °F	UL 746B
RTI Imp		UL 746B
0.030 in	203 °F	
0.06 in	230 °F	
RTI Str		UL 746B
0.030 in	257 °F	
0.06 in	266 °F	
Effective Thermal Diffusivity	7.21E-5 in <sup>2</sup> /s	
<b>Electrical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Volume Resistivity	> 1.0E+13 ohms·m	IEC 62631-3-1
Electric Strength	690 V/mil	IEC 60243-1
Relative Permittivity		IEC 62631-2-1
100 Hz	3.50	
1 MHz	3.20	
Dissipation Factor		IEC 62631-2-1
100 Hz	2.0E-3	
1 MHz	0.020	
Comparative Tracking Index (CTI)	PLC 0	UL 746A
Comparative Tracking Index	600 V	IEC 60112
<b>Flammability</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Flame Rating		UL 94
0.06 in	HB	
0.12 in	HB	
Flammability Classification		IEC 60695-11-10, -20
0.030 in	HB	
0.06 in	HB	
0.12 in	HB	
Glow Wire Flammability Index		IEC 60695-2-12
0.06 in	1560 °F	
0.12 in	1560 °F	
Glow Wire Ignition Temperature		IEC 60695-2-13
0.06 in	1650 °F	
0.12 in	1560 °F	
<b>Fill Analysis</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Melt Density	1.04 g/cm <sup>3</sup>	
Melt Specific Heat	0.540 Btu/lb/°F	
Melt Thermal Conductivity	0.76 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

