Arnite® T08 200

Envalior - *Polybutylene Terephthalate*

General Information

Product Description			
High Viscosity, Injection Molding, Extrusion, Food Contact Quality			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Food Contact Acceptable	• High Viscosity	
Processing Method	• Extrusion	• Injection Molding	
Resin ID	• PBT		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.30	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	10	cm³/10min	ISO 1133
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	370000	psi	ISO 527-1
Tensile Stress (Yield)	7980	psi	ISO 527-2
Tensile Strain (Yield)	3.5	%	ISO 527-2
Nominal Tensile Strain at Break	> 50	%	ISO 527-2
Flexural Modulus	334000	psi	ISO 178
Flexural Stress	12300	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in²	
73°F	2.9	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	338	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	131	°F	ISO 75-2/A
Melting Temperature [2]	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	in²/s	
Electrical	**Nominal Value**	**Unit**	**Test Method**
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
Flammability	**Nominal Value**	**Unit**	**Test Method**
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		
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**
Melt Density	1.04	g/cm³	
Melt Specific Heat	0.540	Btu/lb/°F	
Melt Thermal Conductivity	0.76	Btu·in/hr/ft²/°F	ASTM E1461

Notes

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

[2] 10°C/min