Arnite® T06 200 SNF

Envalior - *Polybutylene Terephthalate*

General Information

Product Description			
Flame Retardant, High Flow			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Flame Retardant	• High Flow	
Processing Method	• Injection Molding		
Resin ID	• PBT FR(17)		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.40	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	4.0	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	5.0	cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.0	%	
Flow	2.3	%	
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	493000	psi	
212°F	65300	psi	
248°F	50800	psi	
320°F	22500	psi	
356°F	22500	psi	
Tensile Stress			ISO 527-2
Yield	7250	psi	
Yield, -40°F	13100	psi	
Tensile Stress			ISO 527-2
Break	6530	psi	
Break, -40°F	13100	psi	
Break, 212°F	3630	psi	
Break, 248°F	2900	psi	
Tensile Strain			ISO 527-2
Yield	4.5	%	
Yield, -40°F	7.0	%	
Tensile Strain			ISO 527-2
Break	13	%	
Break, -40°F	10	%	
Break, 248°F	130	%	
Flexural Modulus			ISO 178
--	348000	psi	
248°F	55100	psi	
320°F	23200	psi	

Flexural Stress			ISO 178
--	10900	psi	
248°F	2470	psi	
320°F	1160	psi	
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in²	
73°F	4.3	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	71	ft·lb/in²	
73°F	No Break		
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	284	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	140	°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)	284	°F	UL 746B
RTI Imp (0.030 in)	230	°F	UL 746B
RTI Str (0.030 in)	266	°F	UL 746B
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Relative Permittivity			IEC 62631-2-1
100 Hz	3.40		
1 MHz	3.20		
Dissipation Factor			IEC 62631-2-1
100 Hz	3.0E-3		
1 MHz	0.022		
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	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	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.030 in	1650	°F	
0.06 in	1250	°F	

Notes

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

[2] 10°C/min