Arnite® AV2 370 /B

Envalior - *Polyethylene Terephthalate*

General Information

Product Description	
35% Glass Fiber Reinforced, Brake Booster Body Valves Design Challenge Narrow Tolerances	
General	
Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Uses	• Valves/Valve Parts
Processing Method	• Injection Molding
Resin ID	• PET-GF35

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.63	g/cm³	ISO 1183
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	1.83E+6	psi	ISO 527-1
Tensile Stress (Break)	26800	psi	ISO 527-2
Tensile Strain (Break)	2.5	%	ISO 527-2
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.5	ft·lb/in²	
73°F	4.5	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	24	ft·lb/in²	
73°F	33	ft·lb/in²	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	482	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	455	°F	ISO 75-2/A
Melting Temperature [2]	491	°F	ISO 11357-3
CLTE - Flow	1.4E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	2.2E-5	in/in/°F	ISO 11359-2
Effective Thermal Diffusivity	1.34E-4	in²/s	
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Electric Strength	840	V/mil	IEC 60243-1
Relative Permittivity			IEC 62631-2-1
100 Hz	3.70		
1 MHz	3.50		
Dissipation Factor			IEC 62631-2-1
100 Hz	3.0E-3		
1 MHz	0.013		
Comparative Tracking Index	250	V	IEC 60112
Fill Analysis	**Nominal Value**	**Unit**	**Test Method**

Melt Density	1.35	g/cm³	
Melt Specific Heat	0.399	Btu/lb/°F	
Melt Thermal Conductivity	1.4	Btu·in/hr/ft²/°F	ASTM E1461

Notes

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

[2] 10°C/min