Arnite® AV2 390 XT

Envalior - *Polyethylene Terephthalate*

General Information

Product Description	
50% Glass Fiber Reinforced, Applications with extremely narrow tolerances Design Challenge Narrow Tolerances	
General	
Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Automotive Specifications	• GM GMW15702-020912-PET-GF50
Processing Method	• Injection Molding
Resin ID	• PET-GF50

Properties [1]

Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.81	g/cm³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.80	%	
Flow	0.45	%	
Water Absorption (Saturation, 73°F)	0.30	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.12	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2.68E+6	psi	ISO 527-1
Tensile Stress (Break)	29700	psi	ISO 527-2
Tensile Strain (Break)	1.7	%	ISO 527-2
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.0	ft·lb/in²	
73°F	4.0	ft·lb/in²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	29	ft·lb/in²	
73°F	31	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)	450	°F	ISO 75-2/A
Melting Temperature [2]	491	°F	ISO 11357-3
CLTE - Flow	7.2E-6	in/in/°F	ISO 11359-2
CLTE - Transverse	2.7E-5	in/in/°F	ISO 11359-2
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	3.80		
1 MHz	3.50		
Dissipation Factor			IEC 62631-2-1
100 Hz	2.0E-3		
1 MHz	0.011		