

Arnite® AV2 390 XL

Envalior - Polyethylene Terephthalate

General Information

Product Description

50% Glass Fiber Reinforced, Low Outgassing

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features	• Low to No Outgassing
Automotive Specifications	• GM GMW15702-020911-PET-GF50
Processing Method	• Injection Molding
Resin ID	• PET-GF50

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.78	g/cm ³	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	2.63E+6	psi	ISO 527-1
Tensile Stress (Break)	30500	psi	ISO 527-2
Tensile Strain (Break)	2.0	%	ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	4.3	ft·lb/in ²	
73°F	4.3	ft·lb/in ²	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	31	ft·lb/in ²	
73°F	31	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	486	°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	1.1E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	1.9E-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		
Comparative Tracking Index	250	V	IEC 60112

