

Arnite® TV4 491
Envalior - Polybutylene Terephthalate + PET
General Information
Product Description

50% Glass Fiber Reinforced

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • Asia Pacific • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Processing Method	• Injection Molding
Resin ID	• (PBT+PET)-GF50

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.72	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	0.90	%	
Flow	0.30	%	
Water Absorption (Saturation, 73°F)	0.30	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.15	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2.39E+6	psi	ISO 527-1
Tensile Stress (Break)	22500	psi	ISO 527-2
Tensile Strain (Break)	1.6	%	ISO 527-2
Flexural Modulus	2.18E+6	psi	ISO 178
Flexural Stress	28300	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.5	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	29	ft·lb/in ²	
73°F	26	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	437	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	401	°F	ISO 75-2/A
Melting Temperature ²	437	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1

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

² 10°C/min
