

Arnite® A04 900

Envalior - Polyethylene Terephthalate

General Information

Product Description

Medium Viscosity, Nucleated, Food Contact Quality

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Additive	• Nucleating Agent		
Features	• Food Contact Acceptable	• Medium Viscosity	• Nucleated
Processing Method	• Injection Molding		
Resin ID	• PET		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.37	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (290°C/5.0 kg)	30	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.7	%	
Flow	1.7	%	
Water Absorption (Saturation, 73°F)	0.50	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	406000	psi	ISO 527-1
Tensile Stress (Yield)	11600	psi	ISO 527-2
Tensile Strain (Yield)	4.0	%	ISO 527-2
Nominal Tensile Strain at Break	12	%	ISO 527-2
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	1.4	ft·lb/in ²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	No Break		ISO 179/1eU
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	194	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	176	°F	ISO 75-2/A
Melting Temperature ²	491	°F	ISO 11357-3
CLTE - Flow	3.9E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	3.9E-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	3.30		
1 MHz	3.20		
Dissipation Factor			IEC 62631-2-1
100 Hz	2.0E-3		
1 MHz	2.1E-3		
Comparative Tracking Index (CTI)	PLC 1		UL 746A
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in	HB		
0.12 in	HB		



Flammability Classification		IEC 60695-11-10, -20
0.030 in	HB	
0.06 in	HB	
0.12 in	HB	

Notes

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

² 10°C/min

