

Arnitel® VT3104
Envalior - Thermoplastic Copolyester Elastomer
General Information
Product Description

Film Extrusion, Food Contact Quality

 Design Challenge
 Barrier Properties & Permeation

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Food Contact Acceptable		
Processing Method	• Extrusion	• Film Extrusion	
Resin ID	• TPC-ET		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.16	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	14	cm ³ /10min	ISO 1133
Water Absorption (Saturation, 73°F)	7.0	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.40	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	8700	psi	ISO 527-1
Tensile Stress (Break)	1900	psi	ISO 527-2
Tensile Stress			ISO 527-2
10% Strain	638	psi	
50% Strain	1280	psi	
100% Strain	1580	psi	
Nominal Tensile Strain at Break	200	%	ISO 527-2
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ²	457	lbf/in	ISO 34-1
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	No Break		
73°F	No Break		
Notched Izod Impact Strength			ISO 180/1A
-22°F	No Break		
73°F	No Break		
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 3 sec)	32		ISO 868
Thermal	Nominal Value	Unit	Test Method
Melting Temperature ³	414	°F	ISO 11357-3
CLTE - Flow	8.3E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	8.3E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Electric Strength	510	V/mil	IEC 60243-1
Relative Permittivity			IEC 62631-2-1
100 Hz	4.70		



1 MHz	4.40	
Dissipation Factor		IEC 62631-2-1
100 Hz	0.031	
1 MHz	0.081	
Comparative Tracking Index	600 V	IEC 60112

Notes

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

² Method B, Angle

³ 10°C/min

