

Arnitel® PM381
Envalior - Thermoplastic Copolyester Elastomer
General Information
Product Description

Film Extrusion, Food Contact Quality

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North 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)	4.7	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	6090	psi	ISO 527-1
Tensile Stress (Break)	1810	psi	ISO 527-2
Tensile Stress			ISO 527-2
5.0% Strain	319	psi	
10% Strain	580	psi	
50% Strain	1200	psi	
100% Strain	1580	psi	
Nominal Tensile Strain at Break	160	%	ISO 527-2
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ²	297	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
Deflection Temperature Under Load (66 psi, Unannealed)	111	°F	ISO 75-2/B
Vicat Softening Temperature			
--	248	°F	ISO 306/B50
--	261	°F	ISO 306/A50
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+12	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

