

Arnitel® PM580
Envalior - Thermoplastic Copolyester Elastomer
General Information

Product Description			
Extrusion Grade			
General			
Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Processing Method	<ul style="list-style-type: none"> Extrusion 		
Resin ID	<ul style="list-style-type: none"> TPC-ET 		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.24	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	4.0	cm ³ /10min	ISO 1133
Water Absorption (Saturation, 73°F)	2.5	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.40	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	31900	psi	ISO 527-1
Tensile Stress			ISO 527-2
Break	3480	psi	
Across Flow : Break	6240	psi	
Tensile Stress			ISO 527-2
5.0% Strain	1380	psi	
10% Strain	2030	psi	
50% Strain	2610	psi	
100% Strain	2900	psi	
Tensile Strain - Across Flow (Break)	710	%	ISO 527-2
Nominal Tensile Strain at Break	170	%	ISO 527-2
Flexural Modulus	34800	psi	ISO 178
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ²			ISO 34-1
Across Flow	805	lbf/in	
Flow	851	lbf/in	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	7.6	ft·lb/in ²	
73°F	No Break		
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Notched Izod Impact Strength			ISO 180/1A
-22°F	12	ft·lb/in ²	
73°F	No Break		
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 3 sec)	53		ISO 868
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	212	°F	ISO 75-2/A
Vicat Softening Temperature			



--	176 °F	ISO 306/B50
--	399 °F	ISO 306/A50
Melting Temperature ³	424 °F	ISO 11357-3
CLTE - Flow	6.1E-5 in/in/°F	ISO 11359-2
CLTE - Transverse	6.1E-5 in/in/°F	ISO 11359-2

Notes

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

² Method B, Angle

³ 10°C/min

