

Arnitel® PB420-B
Envalior - Thermoplastic Copolyester Elastomer
General Information
Product Description

Blow Molding Grade

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Processing Method	• Blow Molding		
Resin ID	• TPC-ET		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.18	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/10.0 kg)	11	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.3	%	
Flow	1.5	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	10200	psi	ISO 527-1
Tensile Stress			ISO 527-2
Break	2540	psi	
Across Flow : Break	3920	psi	
Tensile Stress			ISO 527-2
5.0% Strain	508	psi	
Across Flow : 5.0% Strain	580	psi	
10% Strain	870	psi	
Across Flow : 10% Strain	899	psi	
Flow : 10% Strain	798	psi	
Flow : 10% Strain, 212°F	435	psi	
50% Strain	1740	psi	
Across Flow : 50% Strain	1350	psi	
100% Strain	2320	psi	
Across Flow : 100% Strain	1510	psi	
Tensile Strain - Across Flow (Break)	760	%	ISO 527-2
Nominal Tensile Strain at Break	160	%	ISO 527-2
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ²			ISO 34-1
Across Flow	594	lbf/in	
Flow	520	lbf/in	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	No Break		
73°F	No Break		
Charpy Unnotched Impact Strength (-22°F)	No Break		ISO 179/1eU
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)	37	ISO 868
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	149 °F	ISO 75-2/B
Glass Transition Temperature ³	-76.0 °F	ISO 11357-2
Melting Temperature ³	414 °F	ISO 11357-3

Notes

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

² Method B, Angle

³ 10°C/min

