

**Arnitel® PB500-H**
*Envalior - Thermoplastic Copolyester Elastomer*
**General Information**
**Product Description**

Blow Molding Grade, Heat Stabilized

**General**

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

**Properties <sup>1</sup>**

Physical	Nominal Value	Unit	Test Method
Density	1.22	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/10.0 kg)	2.0	cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.8	%	
Flow	1.7	%	
Water Absorption (24 hr, 73°F)	2.2	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.50	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	25400	psi	ISO 527-1
Tensile Stress			ISO 527-2
Break	3920	psi	
Across Flow : Break	5220	psi	
Tensile Stress			ISO 527-2
5.0% Strain	1360	psi	
Across Flow : 5.0% Strain	1230	psi	
10% Strain	2030	psi	
Across Flow : 10% Strain	1600	psi	
Flow : 10% Strain	1310	psi	
Flow : 10% Strain, 212°F	667	psi	
50% Strain	3190	psi	
Across Flow : 50% Strain	2030	psi	
100% Strain	3770	psi	
Across Flow : 100% Strain	2180	psi	
Tensile Strain - Across Flow (Break)	640	%	ISO 527-2
Nominal Tensile Strain at Break	150	%	ISO 527-2
Flexural Modulus			ISO 178
--	28300	psi	
248°F	10200	psi	
Elastomers	Nominal Value	Unit	Test Method
Tear Strength <sup>2</sup>			ISO 34-1
Across Flow	662	lbf/in	
Flow	691	lbf/in	
Compression Set (158°F)	42	%	ISO 815

**Impact**
**Nominal Value Unit**
**Test Method**


Charpy Notched Impact Strength		ISO 179/1eA
-22°F	6.7 ft·lb/in <sup>2</sup>	
73°F	No Break	
Charpy Unnotched Impact Strength		ISO 179/1eU
-22°F	No Break	
73°F	No Break	
<b>Hardness</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Shore Hardness		ISO 868
Shore A, 3 sec	94	
Shore D, 3 sec	50	
<b>Thermal</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (66 psi, Unannealed)	145 °F	ISO 75-2/B
Glass Transition Temperature <sup>3</sup>	-70.6 °F	ISO 11357-2
Melting Temperature <sup>3</sup>	396 °F	ISO 11357-3

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Method B, Angle

<sup>3</sup> 10°C/min

