

**Arnitel® Care L155E**
*Envalior - Thermoplastic Copolyester Elastomer*
**General Information**
**Product Description**

55 Shore D, Medium Viscosity, Medical grade, Food Contact Quality

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Food Contact Acceptable	• Medium Viscosity	
Uses	• Medical/Healthcare Applications		
Agency Ratings	• USP Class VI		
Processing Method	• Extrusion	• Injection Molding	
Resin ID	• TPC-ET		

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

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	9.0	cm <sup>3</sup> /10min	ISO 1133
Water Absorption (Saturation, 73°F)	0.65	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	25400	psi	ISO 527-1
Tensile Stress (Yield)	2030	psi	ISO 527-2
Tensile Stress - Across Flow (Break)	5950	psi	ISO 527-2
Tensile Stress			ISO 527-2
5.0% Strain	1020	psi	
10% Strain	1600	psi	
50% Strain	2030	psi	
100% Strain	2030	psi	
Tensile Strain (Yield)	20	%	ISO 527-2
Tensile Strain			ISO 527-2
Break	> 300	%	
Across Flow : Break	820	%	
Nominal Tensile Strain at Break	420	%	ISO 527-2
Flexural Modulus	26100	psi	ISO 178
Elastomers	Nominal Value	Unit	Test Method
Tear Strength <sup>2</sup>			ISO 34-1
Across Flow	714	lbf/in	
Flow	765	lbf/in	
Compression Set (158°F)	40	%	ISO 815
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	12	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		
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 3 sec)	52		ISO 868



<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Vicat Softening Temperature	194	°F	ISO 306/B50
Melting Temperature <sup>3</sup>	405	°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
RTI Elec (0.06 in)	122	°F	UL 746B
RTI Imp (0.06 in)	122	°F	UL 746B
RTI Str (0.06 in)	122	°F	UL 746B
<b>Electrical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	1.0E+11	ohms·m	IEC 62631-3-1
Electric Strength	530	V/mil	IEC 60243-1
Relative Permittivity			IEC 62631-2-1
100 Hz	4.40		
1 MHz	4.00		
Dissipation Factor (1 MHz)	0.040		IEC 62631-2-1
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.06 in)	HB		UL 94
Flammability Classification (0.06 in)	HB		IEC 60695-11-10, -20

#### 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

