Arnitel® Care L263E

Envalior - *Thermoplastic Copolyester Elastomer*

General Information

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

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.24	g/cm³	ISO 1183
Apparent (Bulk) Density	0.77	g/cm³	ISO 60
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	28	cm³/10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	2.0	%	
Flow	1.8	%	
Water Absorption (Saturation, 73°F)	0.60	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.20	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	43500	psi	ISO 527-1
Tensile Stress			ISO 527-2
Break	5080	psi	
Across Flow : Break	6240	psi	
Tensile Stress			ISO 527-2
5.0% Strain	1740	psi	
10% Strain	2470	psi	
50% Strain	2610	psi	
100% Strain	2610	psi	
300% Strain	2900	psi	
Tensile Strain			ISO 527-2
Break	> 300	%	
Across Flow : Break	740	%	
Nominal Tensile Strain at Break	490	%	ISO 527-2
Flexural Modulus	47900	psi	ISO 178
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tear Strength [2]			ISO 34-1
Across Flow	931	lbf/in	
Flow	919	lbf/in	
Compression Set (158°F)	43	%	ISO 815
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.7	ft·lb/in²	
73°F	No Break		

Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Notched Izod Impact Strength (73°F)	No Break		ISO 180/1A
Tensile Impact Strength [3] (73°F)	111	ft·lb/in²	ISO 8256/1
Hardness	**Nominal Value**	**Unit**	**Test Method**
Shore Hardness (Shore D, 3 sec)	59		ISO 868
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	239	°F	ISO 75-2/B
Glass Transition Temperature [4]	-76.0	°F	ISO 11357-2
Vicat Softening Temperature	257	°F	ISO 306/B50
Melting Temperature [4]	414	°F	ISO 11357-3
CLTE - Flow	1.0E-4	in/in/°F	ISO 11359-2
CLTE - Transverse	1.0E-4	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	560	V/mil	IEC 60243-1
Relative Permittivity			IEC 62631-2-1
100 Hz	3.80		
1 MHz	3.40		
Dissipation Factor			IEC 62631-2-1
100 Hz	0.011		
1 MHz	0.034		
Comparative Tracking Index	600	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	HB		UL 94
Flammability Classification (0.06 in)	HB		IEC 60695-11-10, -20

Notes

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

[2] Method B, Angle

[3] notched

[4] 10°C/min