

Arnitel® EL250*Envalior - Thermoplastic Copolyester Elastomer***General Information****Product Description**

Injection Molding, Food Contact Quality

Design Challenge

Haptics & Aesthetics | Haptics

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.08	g/cm ³	ISO 1183
Apparent (Bulk) Density	0.65	g/cm ³	ISO 60
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	48	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.0	%	
Flow	1.0	%	
Water Absorption (Saturation, 73°F)	0.80	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	3630	psi	ISO 527-1
Tensile Stress (Break)	2180	psi	ISO 527-2
Tensile Stress			ISO 527-2
5.0% Strain	189	psi	
10% Strain	305	psi	
50% Strain	653	psi	
100% Strain	740	psi	
Tensile Strain (Break)	> 300	%	ISO 527-2
Nominal Tensile Strain at Break	900	%	ISO 527-2
Flexural Modulus	2900	psi	ISO 178
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			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Notched Izod Impact Strength			ISO 180/1A
-4°F	No Break		
73°F	No Break		
Tensile Impact Strength ² (73°F)	No Break		ISO 8256/1
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 3 sec	85		
Shore D, 3 sec	25		



Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature			
-- ³	-112	°F	ISO 11357-2
-- ⁴	-101	°F	ASTM D5026/D7028
Melting Temperature ³	356	°F	ISO 11357-3
CLTE - Flow	1.2E-4	in/in/°F	ISO 11359-2
CLTE - Transverse	1.2E-4	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
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	5.0E+12	ohms·m	IEC 62631-3-1
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
Fill Analysis	Nominal Value	Unit	Test Method
Melt Density	0.905	g/cm ³	

Notes

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

² notched

³ 10°C/min

⁴ from DMTA (tan d)

