

Arnitel® ECO L400
Envalior - Thermoplastic Copolyester Elastomer
General Information
Product Description

>50% Renewable Content, Food Contact Quality

Design Challenge

Haptics & Aesthetics | Stain and scratch resistance

Life cycle assessment

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.10	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	45	cm ³ /10min	ISO 1133
Molding Shrinkage			ISO 294-4
Across Flow	1.2	%	
Flow	1.2	%	
Water Absorption (24 hr, 73°F)	0.14	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.040	%	ISO 62
Biobased Carbon Content	50	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	5800	psi	ISO 527-1
Tensile Stress (Break)	1310	psi	ISO 527-2
Tensile Stress			ISO 527-2
5.0% Strain	392	psi	
10% Strain	653	psi	
50% Strain	1120	psi	
100% Strain	1200	psi	
Nominal Tensile Strain at Break	200	%	ISO 527-2
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ²	428	lbf/in	ISO 34-1
Compression Set (158°F)	47	%	ISO 815
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 3 sec)	34		ISO 868
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature ³	-31.0	°F	ISO 11357-2
Melting Temperature ³	316	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 62631-3-2
Volume Resistivity	> 1.0E+13	ohms·m	IEC 62631-3-1
Electric Strength	510	V/mil	IEC 60243-1
Additional Information	Nominal Value	Unit	Test Method
Sustainability	Bio-based		

