

**Arnitel® EM631**
*Envalior - Thermoplastic Copolyester Elastomer*
**General Information**
**Product Description**

Extrusion Grade

**General**

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

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

Physical	Nominal Value	Unit	Test Method
Density	1.24	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	6.5	cm <sup>3</sup> /10min	ISO 1133
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	45000	psi	ISO 527-1
Tensile Stress (Yield)	2900	psi	ISO 527-2
Tensile Stress (Break)	5080	psi	ISO 527-2
Tensile Stress			ISO 527-2
10% Strain	2310	psi	
100% Strain	2290	psi	
300% Strain	2900	psi	
Tensile Strain (Yield)	29	%	ISO 527-2
Tensile Strain (Break)	> 300	%	ISO 527-2
Nominal Tensile Strain at Break	> 50	%	ISO 527-2
Elastomers	Nominal Value	Unit	Test Method
Tear Strength <sup>2</sup>	914	lbf/in	ISO 34-1
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.7	ft·lb/in <sup>2</sup>	
73°F	No Break		
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 3 sec)	61		ISO 868
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	257	°F	ISO 306/B50
Melting Temperature <sup>3</sup>	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

### 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

