

**Arnitel® CM620-S**
*Envalior - Thermoplastic Copolyester Elastomer*
**General Information**
**Product Description**

64 Shore D, Extrusion, Flame Retardant

**General**

Material Status	• Commercial: Active		
Availability	• Africa & Middle East	• Europe	• North America
	• Asia Pacific	• Latin America	
Features	• Flame Retardant		
Processing Method	• Extrusion		
Resin ID	• TPC-ES FR		

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

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density	1.33	g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	15	cm <sup>3</sup> /10min	ISO 1133
Water Absorption (24 hr, 73°F)	0.20	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.10	%	ISO 62
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Modulus	47900	psi	ISO 527-1
Tensile Stress			ISO 527-2
Break	5080	psi	
Across Flow : Break	4930	psi	
Tensile Stress			ISO 527-2
5.0% Strain	2180	psi	
Across Flow : 5.0% Strain	2030	psi	
10% Strain	2900	psi	
Across Flow : 10% Strain	2760	psi	
50% Strain	3340	psi	
Across Flow : 50% Strain	2900	psi	
100% Strain	2900	psi	
Across Flow : 100% Strain	2610	psi	
Tensile Strain			ISO 527-2
Break	> 300	%	
Across Flow : Break	530	%	
Nominal Tensile Strain at Break	440	%	ISO 527-2
<b>Elastomers</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tear Strength <sup>2</sup>			ISO 34-1
Across Flow	976	lbf/in	
Flow	1070	lbf/in	
Compression Set (158°F)	40	%	ISO 815
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.4	ft·lb/in <sup>2</sup>	
73°F	14	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength			ISO 179/1eU
-22°F	No Break		
73°F	No Break		
Notched Izod Impact Strength			ISO 180/1A



-22°F	2.1 ft·lb/in <sup>2</sup>	
73°F	11 ft·lb/in <sup>2</sup>	
<b>Hardness</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Shore Hardness		ISO 868
Shore D, 3 sec	64	
Shore D, 15 sec	61	
<b>Thermal</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Glass Transition Temperature <sup>3</sup>	14.0 °F	ISO 11357-2
Vicat Softening Temperature	203 °F	ISO 306/B50
Melting Temperature <sup>3</sup>	401 °F	ISO 11357-3
<b>Electrical</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Surface Resistivity	> 1.0E+15 ohms	IEC 62631-3-2
Volume Resistivity	> 1.0E+13 ohms·m	IEC 62631-3-1
Electric Strength	370 V/mil	IEC 60243-1
Relative Permittivity (100 Hz)	4.30	IEC 62631-2-1
Dissipation Factor (1 MHz)	0.050	IEC 62631-2-1
<b>Flammability</b>	<b>Nominal Value Unit</b>	<b>Test Method</b>
Flammability Classification (0.030 in)	V-2	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

