

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

Extrusion Grade, Heat Stabilized

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Additive	• Heat Stabilizer
Features	• Heat Stabilized
Processing Method	• Extrusion
Resin ID	• TPC-ET

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.23	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	3.0	cm ³ /10min	ISO 1133
Water Absorption (24 hr, 73°F)	0.48	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	0.16	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	37700	psi	ISO 527-1
Tensile Stress (Break)	4500	psi	ISO 527-2
Tensile Stress			ISO 527-2
5.0% Strain	1650	psi	
10% Strain	2390	psi	
50% Strain	3030	psi	
100% Strain	3210	psi	
Nominal Tensile Strain at Break	• > 50 % • 250		ISO 527-2
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ²	845	lbf/in	ISO 34-1
Compression Set (158°F)	29	%	ISO 815
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.2	ft·lb/in ²	
73°F	10	ft·lb/in ²	
Notched Izod Impact Strength			ISO 180/1A
-22°F	4.8	ft·lb/in ²	
73°F	10	ft·lb/in ²	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 3 sec	98		
Shore A, 15 sec	98		
Shore D, 3 sec	57		
Shore D, 15 sec	57		
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature ³	-22.0	°F	ASTM D5026/D7028
Vicat Softening Temperature	--	230 °F	ISO 306/B50



--	392 °F	ISO 306/A50
Melting Temperature ⁴	414 °F	ISO 11357-3

Notes

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

² Method B, Angle

³ from DMTA (E)

⁴ 10°C/min

