

Heraflex® E 3918 1000 NT

Radici Group High Performance Polymers - *Thermoplastic Copolyester Elastomer*

General Information

Product Description

TPC-ET Thermoplastic Elastomer. Lowest Modulus, Nominal Shore D/15s 35. Natural colour

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Low Stiffness		
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• TPC-ET		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.10	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	33	g/10 min	ISO 1133
Water Absorption (Saturation, 73°F, 0.0394 in)	0.73	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	5080	psi	ISO 527-1/1A/1
Tensile Stress			ISO 527-2/1A/50
10% Strain	580	psi	
100% Strain	1160	psi	
300% Strain	1310	psi	
Nominal Tensile Strain at Break	> 800	%	ISO 527-2/1A/50
Flexural Modulus ²	7980	psi	ISO 178
Flexural Stress ²	725	psi	ISO 178
Abrasion Resistance	26.0	mm ³	ISO 4649
Tear Strength	650	lbf/in	ISO 34-1
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F)	No Break		ISO 179/1eA
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			
Shore D, Instant	39		ISO 868
Shore D, Instant	39		ISO 48-4
Shore D, 15 sec	35		ISO 868
Shore D, 15 sec	35		ISO 48-4
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	149	°F	ISO 75-2/Bf
Vicat Softening Temperature	266	°F	ISO 306/B50
Melting Temperature ³	351	°F	ISO 11357-3
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	ohms·m	IEC 62631-3-1

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	230	°F



Drying Time - Desiccant Dryer	2.0 to 4.0 hr
Dew Point - Desiccant Dryer	< -22 °F
Suggested Max Moisture	0.050 %
Processing (Melt) Temp	374 to 392 °F
Mold Temperature	86 to 122 °F
Injection Rate	Moderate

Notes

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

² 0.079 in/min

³ 10°C/min

