



Riteflex® 447

Celanese Corporation - Thermoplastic Polyester Elastomer

Tuesday, November 5, 2019

General Information

Product Description

Riteflex 447 is a nominal 47 Shore D thermoplastic polyester elastomer with a high melting point and excellent mechanical properties.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
RoHS Compliance	• Contact Manufacturer		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.15	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (240°C/2.16 kg)	15	g/10 min	ISO 1133
Molding Shrinkage - Flow	1.3 to 1.8	%	ISO 294-4
Water Absorption (Saturation, 73°F)	0.50	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	13800	psi	ISO 527-2/1A
Tensile Stress (Break)	3630	psi	ISO 527-2/1BA
Tensile Strain (Break)	800	%	ISO 527-2/1BA
Flexural Modulus (73°F)	13100	psi	ISO 178
Flexural Stress			ISO 178
3.5% Strain	580	psi	
73°F	870	psi	
Elastomers	Nominal Value	Unit	Test Method
Bayshore Resilience	59	%	ASTM D2632
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	21	ft-lb/in ²	
73°F	No Break		
Notched Izod Impact Strength			ISO 180/1A
-22°F	No Break		
73°F	No Break		
Unnotched Izod Impact Strength			ISO 180/1U
-22°F	No Break		
73°F	No Break		
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D, 15 sec)	45		ISO 868
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (66 psi, Unannealed)	140	°F	ISO 75-2/B
Melting Temperature ²	414	°F	ISO 11357-3
CLTE - Flow	1.2E-4	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	2.0E+15	ohms	IEC 60093
Volume Resistivity	4.0E+14	ohms·cm	IEC 60093

Riteflex® 447

Celanese Corporation - Thermoplastic Polyester Elastomer

Electrical	Nominal Value	Unit	Test Method
Electric Strength	330	V/mil	IEC 60243-1
Relative Permittivity (1 MHz)	4.70		IEC 60250
Dissipation Factor (1 MHz)	0.030		IEC 60250
Comparative Tracking Index	> 600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	225	°F
Drying Time	4.0	hr
Suggested Max Moisture	0.050	%

Notes

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

² 10°C/min