

PELPRENE™ EN-500

TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

General Information

Product Description

Special Grade

General

Material Status	• Commercial: Active		
Features	• Chemical Resistant • Good Dimensional Stability	• Hydrolysis Resistant • Low Hardness	• Oil Resistant
Uses	• Automotive Applications • Automotive Interior Parts	• General Purpose • Industrial Applications	• Sporting Goods
Forms	• Pellets		
Processing Method	• Injection Molding		
Part Marking Code (ISO 11469)	• >TPC-ET<		
Revision Date	• 8/27/2025		

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density	1.15	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	19	g/10 min	ISO 1133
Molding Shrinkage ¹			Internal Method
Flow : 2.00 mm	0.90	%	
Across Flow : 2.00 mm	0.80	%	
Water Absorption ² (Equilibrium, 23°C, 50% RH)	0.28	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	78.0	MPa	ISO 527
Tensile Stress			
Yield	7.50	MPa	ISO 37
Break	22.1	MPa	ISO 37
50% Strain	5.90	MPa	ISO 527
Tensile Elongation (Break)	810	%	ISO 37
Flexural Modulus	50.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	No Break		ISO 179
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 48-4
Shore A, 15 sec	93		
Shore D, 15 sec	35		



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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 0.45 MPa, Unannealed	47.0	°C	ISO 75-2
Brittleness Temperature	< -65.0	°C	ISO 974
Melting Temperature	189	°C	Internal Method
CLTE			ISO 11359-2
Flow	1.3E-4	cm/cm/°C	
Transverse	1.4E-4	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	2.6E+15	ohms	IEC 62631-3-2
Volume Resistivity	5.7E+13	ohms·m	IEC 62631-3-1

Notes

¹ 100×100×2mmt, film gate

² 192hr

