

PELPRENE™ P-280B

TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

General Information

Product Description

General Grade

General

Material Status	• Commercial: Active		
Features	• High Hardness		
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	1.25	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (235°C/2.16 kg)	16	g/10 min	ISO 1133
Molding Shrinkage ¹			Internal Method
Flow : 2.00 mm	1.7	%	
Across Flow : 2.00 mm	1.8	%	
Water Absorption ² (Equilibrium, 23°C, 50% RH)	0.21	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	571	MPa	ISO 527
Tensile Stress			
Yield	27.7	MPa	ISO 37
50% Strain	21.9	MPa	ISO 527
Tensile Strength (Break)	47.5	MPa	ISO 37
Tensile Elongation (Break)	580	%	ISO 37
Flexural Modulus	669	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	27	kJ/m ²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 48-4
Shore A, 15 sec	99		
Shore D, 15 sec	63		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2
0.45 MPa, Unannealed	98.0	°C	
Brittleness Temperature	< -65.0	°C	ISO 974
Melting Temperature	222	°C	Internal Method
CLTE			ISO 11359-2
Flow	6.8E-5	cm/cm/°C	
Transverse	1.2E-5	cm/cm/°C	



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Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	3.3E+16	ohms	IEC 62631-3-2
Volume Resistivity	3.6E+11	ohms·m	IEC 62631-3-1

Processing Information		
Injection		Unit
Drying Temperature	100 to 120	°C
Drying Time	> 4.0	hr
Rear Temperature	200 to 230	°C
Middle Temperature	220 to 240	°C
Front Temperature	220 to 240	°C
Mold Temperature	20 to 40	°C

Notes

- ¹ 100×100×2mmt, film gate
- ² 192hr

