

PELPRENE™ P-180BD03

TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

General Information

Product Description

Special Grade

General

Material Status	• Commercial: Active		
Features	• High Hardness	• High Viscosity	
Uses	• Automotive Applications • Automotive Interior Parts	• General Purpose • Industrial Applications	• Sporting Goods
Forms	• Pellets		
Processing Method	• Extrusion		
Part Marking Code (ISO 11469)	• >TPC-ET<		
Revision Date	• 8/26/2025		

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density	1.25	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	4.2	g/10 min	ISO 1133
Molding Shrinkage ¹			Internal Method
Flow : 2.00 mm	1.7	%	
Across Flow : 2.00 mm	1.6	%	
Water Absorption ² (Equilibrium, 23°C, 50% RH)	0.21	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	460	MPa	ISO 527
Tensile Stress			
Yield	26.0	MPa	ISO 37
50% Strain	21.6	MPa	ISO 527
Tensile Strength (Break)	47.6	MPa	ISO 37
Tensile Elongation (Break)	560	%	ISO 37
Flexural Modulus	410	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	99		
Shore D, 15 sec	62		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2
0.45 MPa, Unannealed	103	°C	
Brittleness Temperature	< -65.0	°C	ISO 974
Melting Temperature	213	°C	Internal Method
CLTE			ISO 11359-2
Flow	1.3E-4	cm/cm/°C	
Transverse	1.3E-4	cm/cm/°C	



PELPRENE™ P-180BD03
TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	9.7E+16	ohms	IEC 62631-3-2
Volume Resistivity	3.7E+13	ohms·cm	IEC 62631-3-1

Processing Information

Injection	Unit
Drying Temperature	100 to 120 °C
Drying Time	> 4.0 hr

Notes

- ¹ 100×100×2mmt, film gate
- ² 192hr

