

PELPRENE™ P-280BFS

TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

General Information

Product Description

Special Grade

General

Material Status	• Commercial: Active		
Features	• Flame Retardant	• Halogen Free	• High Hardness
Uses	• Automotive Applications • Automotive Interior Parts	• General Purpose • Industrial Applications	• Sporting Goods
Forms	• Pellets		
Processing Method	• Extrusion		
Part Marking Code (ISO 11469)	• >TPC-ET-FR(51)<		
Revision Date	• 9/4/2025		

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density	1.33	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.4	g/10 min	ISO 1133
Molding Shrinkage ¹			Internal Method
Flow : 2.00 mm	1.2	%	
Across Flow : 2.00 mm	1.1	%	
Water Absorption ² (Equilibrium, 23°C, 50% RH)	0.25	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	547	MPa	ISO 527
Tensile Stress			
Yield	24.0	MPa	ISO 37
Break	28.2	MPa	ISO 37
50% Strain	17.6	MPa	ISO 527
Tensile Elongation (Break)	460	%	ISO 37
Flexural Modulus	640	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	7.0	kJ/m²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 48-4
Shore A, 15 sec	99		
Shore D, 15 sec	66		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2
0.45 MPa, Unannealed	109	°C	
Brittleness Temperature	-27.0	°C	ISO 974
Melting Temperature	209	°C	Internal Method
CLTE			ISO 11359-2
Flow	1.1E-4	cm/cm/°C	
Transverse	9.3E-5	cm/cm/°C	



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Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	2.6E+15	ohms	IEC 62631-3-2
Volume Resistivity	4.4E+15	ohms·cm	IEC 62631-3-1
Flammability	Nominal Value	Unit	Test Method
Oxygen Index ^{3, 4} (4.0 mm)	36	%	JIS K7201

Processing Information			
Extrusion	Nominal Value	Unit	
Drying Temperature	100 to 120	°C	
Drying Time	> 4.0	hr	

Notes

¹ 100×100×2mmt, film gate
² 192hr
³ Procedure A
⁴ JIS K7201-2 Compliant

