

PELPRENE™ C-2003FR2

TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

General Information

Product Description

Special Grade

General

Material Status	• Commercial: Active		
Features	• Flame Retardant	• Heat Aging Resistant	
Uses	• Automotive Applications • Automotive Interior Parts	• Cable Jacketing • General Purpose	• Industrial Applications
Appearance	• Black	• Natural Color	
Forms	• Pellets		
Processing Method	• Extrusion		
Part Marking Code (ISO 11469)	• >TPC-ES-FR(17)<		
Revision Date	• 9/4/2025		

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density	1.36	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	4.3	g/10 min	ASTM D1238
Molding Shrinkage ¹			Internal Method
Flow : 2.00 mm	1.1	%	
Across Flow : 2.00 mm	1.5	%	
Water Absorption (Equilibrium, 23°C, 50% RH)	0.13	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	484	MPa	ISO 527
Tensile Stress			
Yield	27.0	MPa	ISO 37
Break	37.8	MPa	ISO 37
50% Strain	18.3	MPa	ISO 527
Tensile Elongation (Break)	410	%	ISO 37
Flexural Modulus	490	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	98		
Shore D, 15 sec	64		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45 MPa, Annealed)	105	°C	ISO 75-2/B
Brittleness Temperature	< -65.0	°C	ISO 974
Melting Temperature	204	°C	Internal Method
CLTE			ISO 11359-2
Flow	9.8E-5	cm/cm/°C	
Transverse	1.3E-4	cm/cm/°C	



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Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	3.0E+17	ohms	IEC 62631-3-2
Volume Resistivity	6.6E+12	ohms·m	IEC 62631-3-1
Flammability	Nominal Value	Unit	Test Method
Oxygen Index ^{2, 3} (4.0 mm)	32	%	JIS K7201

Processing Information			
Extrusion	Nominal Value	Unit	
Cylinder Zone 1 Temp.	180 to 200	°C	
Cylinder Zone 2 Temp.	220 to 240	°C	
Cylinder Zone 3 Temp.	220 to 240	°C	
Die Temperature	220 to 240	°C	

Notes

¹ 100×100×2mmt, Film gate
² Procedure A
³ JIS K7201-2 Compliant

