

PELPRENE™ S-6002FR2

TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

General Information

Product Description

Special Grade

General

Material Status	• Commercial: Active		
Features	• Flame Retardant	• Heat Aging Resistant	• High Hardness
Uses	• Automotive Applications • Automotive Interior Parts	• Cable Jacketing • General Purpose	• Industrial Applications
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	
Part Marking Code (ISO 11469)	• >TPC-ES-FR(17)<		
Revision Date	• 8/26/2025		

ASTM & ISO Properties

Physical	Nominal Value	Unit	Test Method
Density	1.39	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	14	g/10 min	ISO 1133
Molding Shrinkage ¹			Internal Method
Flow : 2.00 mm	1.6	%	
Across Flow : 2.00 mm	1.5	%	
Water Absorption ² (Equilibrium, 23°C, 50% RH)	0.15	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	691	MPa	ISO 527
Tensile Stress			
Yield	36.9	MPa	ISO 37
50% Strain	23.4	MPa	ISO 527
Tensile Strength (Break)	29.7	MPa	ISO 37
Tensile Elongation (Break)	410	%	ISO 37
Flexural Modulus	820	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	10	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	70		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2
0.45 MPa, Unannealed	94.0	°C	
Brittleness Temperature	-39.0	°C	ISO 974
Melting Temperature	219	°C	Internal Method
CLTE			ISO 11359-2
Flow	8.7E-5	cm/cm/°C	
Transverse	1.1E-4	cm/cm/°C	



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Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	3.9E+16	ohms	IEC 62631-3-2
Volume Resistivity	1.3E+12	ohms·m	IEC 62631-3-1
Flammability	Nominal Value	Unit	Test Method
Oxygen Index ^{3, 4} (4.0 mm)	28	%	JIS K7201

Processing Information		
Injection		Unit
Drying Temperature	100 to 120	°C
Drying Time	> 4.0	hr
Rear Temperature	220 to 240	°C
Middle Temperature	230 to 250	°C
Front Temperature	230 to 250	°C
Mold Temperature	20 to 40	°C

Notes

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

