

PELPRENE™ S-3001

TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

General Information

Product Description

Special Grade

General

Material Status	• Commercial: Active	
Features	• Heat Aging Resistant	• Medium Hardness
Uses	• Automotive Applications	• General Purpose
	• Automotive Interior Parts	• Industrial Applications
Forms	• Pellets	
Processing Method	• Injection Molding	
Part Marking Code (ISO 11469)	• >TPC-ES<	
Revision Date	• 4/7/2025	

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)	13	g/10 min	ISO 1133
Molding Shrinkage ¹			Internal Method
Flow : 2.00 mm	1.6	%	
Across Flow : 2.00 mm	1.6	%	
Water Absorption ² (Equilibrium, 23°C, 50% RH)	0.19	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	392	MPa	ISO 527
Tensile Stress			
Yield	19.9	MPa	ISO 37
50% Strain	17.8	MPa	ISO 527
Tensile Strength (Break)	39.3	MPa	ISO 37
Tensile Elongation (Break)	600	%	ISO 37
Flexural Modulus	302	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	53		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2
0.45 MPa, Unannealed	90.0	°C	
Brittleness Temperature	< -65.0	°C	ISO 974
Melting Temperature	220	°C	Internal Method
CLTE			ISO 11359-2
Flow	1.3E-4	cm/cm/°C	
Transverse	1.7E-4	cm/cm/°C	



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Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	5.9E+14	ohms	IEC 62631-3-2
Volume Resistivity	9.7E+9	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

