

PELPRENE™ S-6001
TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

General Information			
Product Description			
Special Grade			
General			
Material Status	• Commercial: Active		
Features	• Heat Aging Resistant	• High Hardness	
Uses	• Automotive Applications • Automotive Interior Parts	• General Purpose • 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	1.27	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	12	g/10 min	ISO 1133
Molding Shrinkage ¹			Internal Method
Flow : 2.00 mm	1.5	%	
Across Flow : 2.00 mm	1.5	%	
Water Absorption ² (Equilibrium, 23°C, 50% RH)	0.18	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	603	MPa	ISO 527
Tensile Stress			
Yield	27.6	MPa	ISO 37
50% Strain	21.2	MPa	ISO 527
Tensile Strength (Break)	43.8	MPa	ISO 37
Tensile Elongation (Break)	480	%	ISO 37
Flexural Modulus	448	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	20	kJ/m²	ISO 179
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 48-4
Shore A, 15 sec	99		
Shore D, 15 sec	61		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2
0.45 MPa, Unannealed	98.0	°C	
Brittleness Temperature	< -65.0	°C	ISO 974
Melting Temperature	222	°C	Internal Method
CLTE			ISO 11359-2
Flow	1.2E-4	cm/cm/°C	
Transverse	1.4E-4	cm/cm/°C	



PELPRENE™ S-6001
TOYOBO MC Corporation - Thermoplastic Copolyester Elastomer

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.1E+16	ohms	IEC 62631-3-2
Volume Resistivity	8.2E+10	ohms·m	IEC 62631-3-1

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

