

Panlite® MN-3705

TEIJIN LIMITED - Polycarbonate Alloy

General Information

Product Description

PC alloy grade

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bromine Free	• Flame Retardant	• High Flow
Uses	• Battery Cases	• Electrical Parts	
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (280°C/2.16 kg)	27	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow : 4.00 mm	0.50 to 0.70	%	
Flow : 4.00 mm	0.50 to 0.70	%	
Water Absorption (24 hr, 23°C)	0.22	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2450	MPa	ISO 527-2/1
Tensile Stress (Yield)	60.0	MPa	ISO 527-2/50
Tensile Stress (Break)	50.0	MPa	ISO 527-2/50
Tensile Strain (Yield)	7.0	%	ISO 527-2/50
Tensile Strain (Break)	110	%	ISO 527-2/50
Flexural Modulus ²	2300	MPa	ISO 178
Flexural Stress ²	95.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	50	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (0.45 MPa, Unannealed)	108	°C	ISO 75-2/B
Heat Deflection Temperature (1.8 MPa, Unannealed)	95.0	°C	ISO 75-2/A
CLTE - Flow	7.0E-5	cm/cm/°C	ISO 11359-2
CLTE - Transverse	7.0E-5	cm/cm/°C	ISO 11359-2
RTI Elec (1.5 mm)	80.0	°C	UL 746
RTI Imp (1.5 mm)	80.0	°C	UL 746
RTI Str (1.5 mm)	80.0	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.40 mm		V-2	
0.8 mm		V-0	
Glow Wire Flammability Index (2.0 mm)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (2.0 mm)	825	°C	IEC 60695-2-13

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 2.0 mm/min