

Multilon® TN-7000

TEIJIN LIMITED - Polycarbonate + ABS

General Information

Product Description

PC/ABS polymer alloy, Non-halogen type flame resistant series

General

Properties	• Flame Retardant	• Halogen Free
Uses	• Business Equipment	• Office Automation Equipment
Forms	• Pellets	
Processing Method	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.18	g/cm ³	ISO 1183
Molding Shrinkage			Internal Method
Across Flow : 4.00 mm	0.50 to 0.70	%	
Flow : 4.00 mm	0.50 to 0.70	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2600	MPa	ISO 527-1/1
Tensile Stress (Yield, 23°C)	63.0	MPa	ISO 527-2/50
Tensile Stress (Break, 23°C)	48.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	3.0	%	ISO 527-2/50
Tensile Strain (Break, 23°C)	80	%	ISO 527-2/50
Flexural Modulus ² (23°C)	2600	MPa	ISO 178
Flexural Stress ² (23°C)	95.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	15	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/B
0.45 MPa, Unannealed	94.0	°C	
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	84.0	°C	
Vicat Softening Temperature	97.0	°C	ISO 306/B50
Ball Pressure Test (75°C)	Pass		IEC 60695-10-2
CLTE - Flow	8.0E-5	cm/cm/°C	ISO 11359-2
CLTE - Transverse	8.0E-5	cm/cm/°C	ISO 11359-2
RTI Elec (1.0 mm)	85.0	°C	UL 746B
RTI Imp (1.0 mm)	85.0	°C	UL 746B
RTI Str (1.0 mm)	85.0	°C	UL 746B
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+16	ohms	IEC 60093
Comparative Tracking Index (CTI)	PLC 2		UL 746A

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Electrical	Nominal Value	Unit	Test Method
High Amp Arc Ignition (HAI)			UL 746A
1.2 mm	PLC 3		
1.5 mm	PLC 3		
2.0 mm	PLC 2		
3.0 mm	PLC 2		
Hot-wire Ignition (HWI)			UL 746A
1.2 mm	PLC 3		
1.5 mm	PLC 3		
2.0 mm	PLC 3		
3.0 mm	PLC 2		
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.70 mm	V-2		
1.2 mm	V-1		
1.5 mm	V-0		
2.0 mm	5VB		

Processing Information		
Injection	Nominal Value	Unit
Drying Temperature	80	°C
Drying Time	5.0 to 8.0	hr
Processing (Melt) Temp	230 to 270	°C
Mold Temperature	50 to 70	°C

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 mm/min