

Panlite® LN-3520ZH

TEIJIN LIMITED - Polycarbonate

General Information

Product Description

Flame resistant grade, Non-bromine/non-phosphor type

General

Properties	- Bromine Free - Flame Retardant	- Low (to None) Phosphorus Content - UV Resistant
Uses	Electrical Housing	Electrical Parts
Appearance	Opaque	
Forms	Pellets	
Processing Method	Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	> 1.20	g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	11	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)	0.20	%	ISO 62
Outdoor Suitability	f1		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	2400	MPa	ISO 527-1/1
Tensile Stress (Yield, 23°C)	66.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	7.0	%	ISO 527-2/50
Tensile Strain (Break, 23°C)	> 50	%	ISO 527-2/50
Flexural Modulus ² (23°C)	2340	MPa	ISO 178
Flexural Stress ² (23°C)	97.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-40°C, 3.00 mm	10	kJ/m ²	
-40°C, 4.00 mm	9.0	kJ/m ²	
-30°C, 3.00 mm	13	kJ/m ²	
-30°C, 4.00 mm	10	kJ/m ²	
23°C, 3.00 mm	65	kJ/m ²	
23°C, 4.00 mm	15	kJ/m ²	
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	141	°C	
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	127	°C	
Vicat Softening Temperature	148	°C	ISO 306/B50

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Thermal	Nominal Value	Unit	Test Method
CLTE - Flow	7.0E-5	cm/cm/°C	ISO 11359-2
CLTE - Transverse	7.0E-5	cm/cm/°C	ISO 11359-2
RTI Elec (1.0 mm)	130	°C	UL 746B
RTI Imp (1.0 mm)	125	°C	UL 746B
RTI Str (1.0 mm)	130	°C	UL 746B
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Electric Strength	32	kV/mm	IEC 60243-1
Dielectric Constant			IEC 60250
100 Hz	3.10		
1 MHz	3.00		
Dissipation Factor			IEC 60250
100 Hz	9.0E-3		
1 MHz	9.0E-3		
Comparative Tracking Index	250	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.0 mm)	V-0		UL 94
Glow Wire Flammability Index			IEC 60695-2-12
1.0 mm	930	°C	
3.0 mm	960	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
1.0 mm	850	°C	
3.0 mm	850	°C	

Notes

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

² 2.0 mm/min