

Panlite® LD-1000RM

TEIJIN LIMITED - Polycarbonate

General Information

Product Description

High light reflection grade, Anti-environmental pollution type (Non-bromine/Non-phosphor type)

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Reflectivity		
Uses	• LEDs	• Lighting Applications	• Reflectors
Appearance	• White		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.28	g/cm ³	ISO 1183
Molding Shrinkage			Internal Method
Across Flow : 4.00 mm	0.40 to 0.60	%	
Flow : 4.00 mm	0.40 to 0.60	%	
Water Absorption (24 hr, 23°C)	0.20	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2600	MPa	ISO 527-2/1
Tensile Stress (Yield)	60.0	MPa	ISO 527-2/50
Tensile Stress (Break)	60.0	MPa	ISO 527-2/50
Tensile Strain (Yield)	6.0	%	ISO 527-2/50
Tensile Strain (Break)	110	%	ISO 527-2/50
Flexural Modulus ²	2400	MPa	ISO 178
Flexural Stress ²	95.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength	40	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	No Break		ISO 179
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (0.45 MPa, Unannealed)	137	°C	ISO 75-2/B
Heat Deflection Temperature (1.8 MPa, Unannealed)	128	°C	ISO 75-2/A
Vicat Softening Temperature	139	°C	ISO 306/B50
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)	125	°C	UL 746
RTI Imp (1.5 mm)	115	°C	UL 746
RTI Str (1.5 mm)	125	°C	UL 746

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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 ³	32	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	3.40		
1 MHz	3.40		
Dissipation Factor			IEC 60250
100 Hz	1.1E-3		
1 MHz	9.0E-3		
Comparative Tracking Index	250	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating ⁴ (0.44 mm)	V-2		UL 94

Notes

- ¹ Typical properties: these are not to be construed as specifications.
- ² 2.0 mm/min
- ³ short time test
- ⁴ white