+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
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Panlite® ML-6500ZAL

TEIJIN LIMITED - Polycarbonate

General Information

Product Description			
Injection Molding grade, Light diffusion grade, Weather resistance, Flame resistance			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Flame Retardant	• Good Light Diffusion	• Good Weather Resistance
Uses	• LEDs	• Lighting Applications	• Lighting Diffusers
Appearance	• Milky White		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.20	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (300°C/1.2 kg)	4.0	cm³/10min	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
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	2400	MPa	ISO 527-1/1
Tensile Stress (Yield)	64.0	MPa	ISO 527-2/50
Tensile Stress (Break)	30.0	MPa	ISO 527-2/50
Tensile Strain (Yield)	6.0	%	ISO 527-2/50
Nominal Tensile Strain at Break	50	%	ISO 527-2/50
Flexural Modulus [2]	2210	MPa	ISO 178
Flexural Stress [2]	98.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	12	kJ/m²	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/A
1.8 MPa, Unannealed	125	°C	
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)	130	°C	UL 746B
RTI Imp (1.5 mm)	125	°C	UL 746B
RTI Str (1.5 mm)	130	°C	UL 746B
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	> 1.0E+15	ohms	IEC 60093

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Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
0.8 mm	V-0		
1.0 mm	V-0		
2.0 mm	5VB		
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	
Optical	**Nominal Value**	**Unit**	**Test Method**
Light Transmittance (3000 µm)	47.0	%	ASTM D1003

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	120	°C
Drying Time	5.0 to 8.0	hr
Processing (Melt) Temp	270 to 320	°C
Mold Temperature	80 to 120	°C

Notes

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

[2] 2.0 mm/min