+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

Panlite® L-1225Z 100

TEIJIN LIMITED - Polycarbonate

General Information

Product Description			
Weather Resistant grade			
General			
Properties	• Good Mold Release	• Good Weather Resistance	• Low Viscosity
Uses	• Automotive Applications	• General Purpose	• LEDs
Appearance	• Clear/Transparent		
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)	12	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 (23°C)	2400	MPa	ISO 527-1/1
Tensile Stress (Yield, 23°C)	61.0	MPa	ISO 527-2/50
Tensile Strain (Yield, 23°C)	6.0	%	ISO 527-2/50
Nominal Tensile Strain at Break (23°C)	> 50	%	ISO 527-2/50
Flexural Modulus [2] (23°C)	2400	MPa	ISO 178
Flexural Stress [2] (23°C)	94.0	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	71	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (M-Scale)	77		ASTM D785
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	128	°C	
Vicat Softening Temperature	148	°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 (0.75 mm)	125	°C	UL 746B
RTI Imp (0.75 mm)	115	°C	UL 746B
RTI Str (0.75 mm)	125	°C	UL 746B

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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]	30	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
100 Hz	3.10		
1 MHz	3.00		
Dissipation Factor			IEC 60250
100 Hz	1.0E-3		
1 MHz	9.0E-3		
Comparative Tracking Index	250	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating			UL 94
1.9 mm	HB		
0.40 mm	V-2		
Glow Wire Flammability Index			IEC 60695-2-12
1.5 mm	825	°C	
3.2 mm	875	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
1.5 mm	850	°C	
3.2 mm	875	°C	
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index	1.585		ASTM D542
Light Transmittance (3000 µm)	88.0	%	ASTM D1003

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	120	°C
Drying Time	> 5.0	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

[3] short time test