Panlite® B-8130R

TEIJIN LIMITED - Polycarbonate

General Information

Product Description			
Carbon fiber reinforced grades-30% Carbon fiber			
General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight		
Features	• Creep Resistant	• High Rigidity	
Uses	• Camera Applications	• Industrial Applications	
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.34	g/cm³	ISO 1183
Molding Shrinkage			Internal Method
Across Flow : 4.00 mm	0.30 to 0.50	%	
Flow : 4.00 mm	0.010 to 0.15	%	
Water Absorption (24 hr, 23°C)	0.12	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	18100	MPa	ISO 527-2/1
Tensile Stress (Break)	135	MPa	ISO 527-2/5
Tensile Strain (Break)	1.0	%	ISO 527-2/5
Flexural Modulus [2]	16000	MPa	ISO 178
Flexural Stress [2]	195	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength	6.0	kJ/m²	ISO 179
Charpy Unnotched Impact Strength	20	kJ/m²	ISO 179
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (0.45 MPa, Unannealed)	149	°C	ISO 75-2/B
Heat Deflection Temperature (1.8 MPa, Unannealed)	147	°C	ISO 75-2/A
Vicat Softening Temperature	153	°C	ISO 306/B50
CLTE - Flow	1.0E-5	cm/cm/°C	ISO 11359-2
CLTE - Transverse	5.0E-5	cm/cm/°C	ISO 11359-2
RTI Elec (1.5 mm)	80.0	°C	UL 746
RTI Imp (1.5 mm)	80.0	°C	UL 746
RTI Str (1.5 mm)	80.0	°C	UL 746
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity	1.0 to 10	ohms	IEC 60093
Volume Resistivity	1.0 to 1.0E+2	ohms·cm	IEC 60093

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Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.75 mm	V-2		
3.0 mm	V-1		

Notes

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

[2] 2.0 mm/min