

Panlite® BS-8130R

TEIJIN LIMITED - Polycarbonate

General Information

Product Description

Carbon fiber reinforced grades-30% Carbon fiber, Frictional wear resistant grade

General

Filler / Reinforcement	• Carbon Fiber, 30% Filler by Weight
Properties	• Creep Resistant • High Rigidity • Wear Resistant
Uses	• Industrial Applications
Appearance	• Black
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.41	g/cm ³	ISO 1183
Molding Shrinkage			Internal Method
Across Flow : 4.00 mm	0.42 to 0.52	%	
Flow : 4.00 mm	0.010 to 0.11	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress (Break, 23°C)	120	MPa	ISO 527-2/5
Tensile Strain (Break, 23°C)	1.0	%	ISO 527-2/5
Flexural Modulus ² (23°C)	16000	MPa	ISO 178
Flexural Stress ² (23°C)	175	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	6.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	23	kJ/m ²	ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	146	°C	
RTI Elec (0.75 mm)	80.0	°C	UL 746B
RTI Imp (0.75 mm)	80.0	°C	UL 746B
RTI Str (0.75 mm)	80.0	°C	UL 746B
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.75 mm	V-2		
1.5 mm	V-1		

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