Panlite®

GM−9330N

Technical Data

Teijin Chemicals Ltd. Plastics Technical Center

1. Material Properties

Category		Testing Conditions	Test Method	Units	GM-9330N
Specific Gravity		—	JIS K7112	—	1.52
Tensile	Strength (at Yield)	—	ASTM D638	kgf/cm^2 (MPa)	—
	Strength (at Break)	—	ASTM D638	kgf/cm^2 (MPa)	1,050 (103)
	Elongation (at Break)	—	ASTM D638	%	2
Flexural	Strength	—	ASTM D790	kgf/cm^2 (MPa)	1,550 (152)
	Modulus	—	ASTM D790	kgf/cm^2 (MPa)	68,100 (6,680)
Izod Notch Test of Impact Strength		3.2mm thickness	ASTM D256	kgfcm/cm (J/m)	7 (69)
		6.4mm thickness	ASTM D256	kgfcm/cm (J/m)	6 (59)
Heat Deformation Temperature		Load: 18.5kgf/cm^2	JIS K7207	℃	140
Mold Shrinkage		Flow direction (4mm thickness)	In-house Method	%	0.20 ～ 0.40
		Traverse direction (4mm thickness)	In-house Method	%	0.30 ～ 0.50
Flame Resistance		—	UL-94	—	1.5mm V-0 (all)

Notes: The figures given above are representative, but are not intended as guarantees of actual results.

2. Molding Conditions

(1) Recommended Pre-drying and Molding Conditions

① Pre-drying

When predrying Panlite® GM-9330N using a box-type dryer, pellet layer thickness should be no more than 3cm, and the dryer should be run for 4~8 hours, maintaining a temperature of 120℃.

In the case of a hopper dryer being used, dryer capacity should allow for at least 4 hours of continuos molding. Temperature inside the dryer should be maintained between 120℃, taking care that the pellets are not exposed to moisture, and that the entire drying procedure should not exceed 8hrs..

② Injection Molding

It is recommended that the shot capacity of the molding equipment be 1.5~3 times the weight of the molded article. It is also recommended that the molding temperature be 240~280℃, the die temperature 70~90℃, and the injection pressure 600~1200 kgf/cm^2 (59～118MPa)

The following chart illustrates typical recommended molding conditions.

Panlite® GM－9330N Standard Molding Conditions

Category	Units	Molding Conditions
Predrying Temp. 〃 Time	℃ Hrs.	120 4 ～ 8
Molding Temperature	℃	240 ～ 280
Die Temperature	℃	70 ～ 90
Injection Pressure	Kgf/cm^2 (MPa)	600 ～ 1200 (59 ～ 118)