

# Infino TP-1002

Polycarbonate

Samsung, a division of Cheil Industries

## Technical Data

### General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• Technical Datasheet - ASTM (English) • Processing (English)
UL Yellow Card <sup>2</sup>	• E115797-219717
Search for UL Yellow Card	• Samsung, a division of Cheil Industries • Infino
Availability	• Africa & Middle East • Asia Pacific • Central America • Europe • Latin America • North America • South America

### Physical

	Nominal Value Unit	Test Method
Specific Gravity (Natural)	1.20 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/10.0 kg)	30 g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.20 mm)	0.50 to 0.70 %	ASTM D955

### Mechanical

	Nominal Value Unit	Test Method
Tensile Strength <sup>4</sup> (Yield)	59.0 MPa	ASTM D638
Flexural Modulus <sup>5</sup>	2300 MPa	ASTM D790
Flexural Strength <sup>5</sup>	88.0 MPa	ASTM D790

### Impact

	Nominal Value Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)	640 J/m	ASTM D256

### Hardness

	Nominal Value Unit	Test Method
Rockwell Hardness (R-Scale)	120	ASTM D785

### Thermal

	Nominal Value Unit	Test Method
Deflection Temperature Under Load 1.8 MPa, Unannealed	130 °C	ASTM D648
Vicat Softening Temperature	145 °C	ISO 306/B50

### Flammability

	Nominal Value Unit	Test Method
Flame Rating (3.00 mm)	V-0	UL 94

### Injection

	Nominal Value Unit
Drying Temperature	
—	120 °C
Desiccant Dryer	110 °C
Drying Time	
—	4.0 hr
Desiccant Dryer	4.0 hr
Suggested Max Moisture	0.020 to 0.030 %
Rear Temperature	240 to 250 °C
Middle Temperature	260 to 270 °C
Front Temperature	280 to 285 °C
Nozzle Temperature	290 °C
Mold Temperature	50.0 to 60.0 °C
Injection Pressure	68.6 to 206 MPa
Back Pressure	0.490 MPa
Screw Speed	30 rpm

### Injection Notes

Hot Runner Manifold Temperature: 280°C  
Hot Runner Valve Nozzle Temperature: 280°C