

PC 1080C-70

Description

It is designed for injection molding, compounding with ultra-high flowability and excellent coloring property.

Application

Compound, CD,DVD, E&E Others

Key Features

Coloring, High Transparency, Ultra High Flow

Properties	Method	Unit	PC 1080C-70
Physical			
Melt Flow Rate (300 °C /1.2 kg)	ASTM D1238	g/10min	70
Density	ASTM D792	kg/m ³	1200
Mold Shrinkage	ASTM D955	mm/mm	0.005~0.007
Water Absorption @ 24 hrs, 23°C	ASTM D570	%	0.15
Water Absorption @ equilibrium, 50%RH, 23°C	ASTM D570	%	0.32
Optical			
Refractive Index, nD	ASTM D542		1.583
Light Transmittance	ASTM D1003	%	91
Thermal			
Deflection Temperature Under Load (DTUL) @ 4 mm 66 psi (0.45 MPa), annealed	ASTM D648	°C	137
Deflection Temperature Under Load (DTUL) @ 4 mm 264 psi (1.8 MPa), unannealed	ASTM D648	°C	124
Vicat Softening Point, 50°C /hr, 50N Load	ASTM D1525	°C	147
Coefficient of Linear Thermal Expansion, @ -40 to 82°C	ASTM D696	mm/mm/°C	68 x 10 ⁻⁶
Mechanical			
Tensile Yield Strength	ASTM D638	MPa	60
Ultimate Tensile Strength	ASTM D638	MPa	48
Elongation at Yield	ASTM D638	%	6
Elongation at Break	ASTM D638	%	60
Tensile Modulus	ASTM D638	MPa	2300
Flexural Strength	ASTM D790	MPa	100
Flexural Modulus	ASTM D790	MPa	2500
Notched Izod Impact @ 23 °C	ASTM D256	J/m	270
Instrumented Dart Impact, Total Energy @ 23 °C	ASTM D3763	J	59
Rockwell Hardness @ R Scale	ASTM D785	R Scale	124
Rockwell Hardness @ M Scale	ASTM D785	M Scale	58

Note

1. Typical properties; not to be constructed as specifications
2. Tensile Test @ 23 °C; 50 mm/min.
3. 0.125 in; 10 mil notch (3.2 mm; 0.25 mm notch).
4. 0.125 in; 8000 ipm (3.2 mm; 203 m/min).

※ Typical values are only for material selection purpose, and variation within normal tolerances are for various colors.

Values given should not be interpreted as specification and not be used for part or tool design.

All properties, except melt flow rate are measured on injection molded specimens and after 48 hours storage at 23°C, 50% relative humidity.