

# PC 1603-03

## Description

It is designed for compounding or profile extrusion with high impact strength and special processing property.

## Application

Compound, Sheet/Flim, Multiwall Sheet

## Key Features

Good Mold Release, High Impact Resistance, High Transparency, Weather Resistance

Properties	Method	Unit	PC 1603-03
<b>Physical</b>			
Melt Flow Rate (300 °C /1.2 kg)	ASTM D1238	g/10min	3
Density	ASTM D792	kg/m <sup>3</sup>	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
<b>Optical</b>			
Refractive Index, nD	ASTM D542		1.586
Light Transmittance	ASTM D1003	%	89
Haze	ASTM D1003	%	0.7~1.5
<b>Thermal</b>			
Deflection Temperature Under Load (DTUL) @ 4 mm 66 psi (0.45 MPa), annealed	ASTM D648	°C	146
Deflection Temperature Under Load (DTUL) @ 4 mm 264 psi (1.8 MPa), annealed	ASTM D648	°C	143
Deflection Temperature Under Load (DTUL) @ 4 mm 264 psi (1.8 MPa), unannealed	ASTM D648	°C	132
Vicat Softening Point, 50°C /hr, 50N Load	ASTM D1525	°C	151
Coefficient of Linear Thermal Expansion, @ -40 to 82°C	ASTM D696	mm/mm/°C	68 x 10 <sup>-6</sup>
<b>Mechanical</b>			
Tensile Yield Strength	ASTM D638	MPa	60
Ultimate Tensile Strength	ASTM D638	MPa	72
Elongation at Yield	ASTM D638	%	6
Elongation at Break	ASTM D638	%	150
Tensile Modulus	ASTM D638	MPa	2410
Flexural Strength	ASTM D790	MPa	96
Flexural Modulus	ASTM D790	MPa	2410
Notched Izod Impact @ 23 °C	ASTM D256	J/m	950
Unnotched Izod Impact @ 23 °C	ASTM D256		No break
<b>Electrical</b>			
GWFI @ 1.5 mm	IEC 695-2-1	°C	850

## Note

1. The addition of an UV stabilizer to a resin does not completely eliminate the effects of UV exposure but to slow down the rate at which the effects occur. These effects may include color shift, decreased mechanical properties, and/or optical properties. Actual results may vary depending on application and other factors such as resin color, transparency and additives. Therefore, actual end-use testing is recommended.
2. Typical properties; not to be constructed as specifications.
3. 0.125 in; 10 mil notch (3.2 mm; 0.25 mm notch).

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※ 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.