



ChangZhou Yi Yi International Trading Co., Ltd.

PC 1248

Product description

Material designation	>PC<
Colour	Natural colour
UL file number	E41613
Purpose	General purpose
Material properties	Improved impact resistance, food contact compliance, medium viscosity
Material shape	Granular
Processing method	Injection molding

Physical property	Condition	Test standard	Data	unit
Density		ISO 1183	1.20	g/cm ³
Mold shrinkage	MD2.0mm	ISO 294-4	0.75	%
Mold shrinkage	TD2.0mm	ISO 294-4	0.80	%
Water absorption	(23°C, 24 hr)	ISO 62	0.40	%
Water absorption	(23°C, 50RH)	ISO 62	0.12	%
Melt flow index	300°C1.2Kg	ISO 1133	7.00	cm ³ /10min

Hardness	Condition	Test standard	Data	unit
Ball pressure hardness		ISO 2039-1	108	MPa

Mechanical properties	Condition	Test standard	Data	unit
Tensile strength	23°C	ISO 527-2	61.0	MPa
Elongation at break	23°C	ISO 527-2	>50	%
Tensile modulus	23°C	ISO 527-2	2250	MPa
Bending strength	23°C	ISO 178	88.0	MPa
Flexural modulus	23°C	ISO 178	2250	MPa
Notched izod impact strength	23°C	ISO 179/1eA	70	kJ/m ²
Notched izod impact strength	23°C	ISO 180/1A	80	kJ/m ²

Optical performance	Condition	Test standard	Data	unit
Refractive index		ISO 489	1.59	
Transmissivity	1000µm	ISO 13468-2	89.0	%

Thermal	Condition	Test standard	Data	unit
Heat deflection temperature	0.45MPa No annealing	ISO 75-2/Bf	139	°C
Heat deflection temperature	1.80MPa No annealing	ISO 75-2/Af	125	°C
Vst		ISO 306/B50	146	°C
Glass transition temperature		ISO 11357-2	148	°C
Linear expansion coefficient	MD	ISO 11359-2	7.0E-5	cm/cm/°C
Linear expansion coefficient	TD	ISO 11359-2	7.0E-5	cm/cm/°C

Electrical properties	Condition	Test standard	Data	Company
Volume resistivity		IEC 60093	1.0E+16	Ω.cm
Surface resistivity		IEC 60093	1.0E+16	Ω.cm
Insulation strength		IEC 60243-1	34	KV/mm
Dielectric constant		IEC 60250	3.00	1 MHz
Dissipation factor		IEC 60250	1.2E-3	1 kHz
Dissipation factor		IEC 60250	0.012	1 MHz
Comparative Tracking Index		IEC 60112	225	V
Flammability	Condition	Test standard	Data	Company
Fire protection grade		UL-94	1.50 mm	HB
Oxygen index		ISO 4589-2	30	%
Glow wire ignition temperature	0.75mm	IEC 60695-2-12	850	°C
Glow wire ignition temperature	1.5mm	IEC 60695-2-12	850	°C
Glow wire ignition temperature	3.0mm	IEC 60695-2-12	900	°C
The relative temperature of glow wire	0.75mm	IEC 60695-2-13	800	°C
The relative temperature of glow wire	1.5mm	IEC 60695-2-13	875	°C
The relative temperature of glow wire	3.0mm	IEC 60695-2-13	875	°C