

PC Properties Data Sheet

①Raw material description				
Standard Grade :	Extrusion grade	Appearance color :	----	
Application:	High stressed components,processin materials,sheet,board,tube,rod;Mainly used in optical materials,illumination materials, medical equipments,semiconductor mechanical parts, shorc resistance parts.			
Remarks :	Charators:With excellent impact resistance property,superior optics definition,solid and stiffness,easy for processing.			
②Raw material technical data sheet				
Property item	Test conditions	Testing method	Testing data	Unit
I.Physical property				
Density	23°C	ISO 1183	1.2	g/cm ³
Shrinkage	-----	ISO 2577	0.5	%
Water absorption	24h dipping (23°C)	ISO 62	0.15	%
Flammability class	-----	UL94	V-0	Class
II .Mechanical property				
Tensile strength	23°C	ISO 527-1.2	56~66	MPa
Tensile modulus	-----	ISO 527-1.2	2300	MPa
Yield stress	-----	ISO 527-1.2	62	MPa
Yield strain	-----	ISO 527-1.2	6	%
Elongation at break	-----	ISO 527-2	100	%
Flexural strength	-----	ISO 178	101	MPa
Flexural modulus	-----	ISO 178	2300	MPa
Hardness-Rockwell	-----	ISO2039-2	73	M (Scale)
Hardness-Shore D	-----	ISO 868	84	D
charpy Impact Strength,Unnotched	23°C	ISO 179-1eU	N	kJ/m ²
charpy Impact Strength,Notched	23°C,3mm	b.o.ISO 179-1eA	80	kJ/m ²
Coefficient of friction	-----	ISO 9352	0.55	-----
III.Thermal property				
Thermal deformation temperature	1.82MPa	ISO 75-1,2	130~135	°C
Max. working temperature(long time)	-----	UL764B	120	°C
Melting temperature	-----	ISO 11357-3	220~230	°C
Brittle temperature	-----	ISO 974	-130	°C
Thermal conductivity	23°C	DIN 11359	0.2	W/(m*K)
Coefficient of linear thermal expansion	-----	ISO 11359	7.2	10 ⁻⁵ K ⁻¹
IV.Electrical property				
Dielectric constant	1MHz	IEC 60250	2.9	10 ⁶ Hz
Dielectric loss angle tangent	1MHz	IEC 60250	0.009	10 ⁶ Hz
Dielectric strength	-----	IEC 60243-1	18	kV/mm
Volume resistivity	-----	IEC 60093	≥10 ¹⁵	(Ω) * cm
Surface resistivity	-----	IEC 60093	≥10 ¹⁵	(Ω)
Dielectric strength	2MM	IEC 60243-1	24	MV/m
	3MM	IEC 60243-1	17	MV/m
Electric arc resistance	3.1mm	IEC 61621	120	sec
NOTE: 1 g/cm ³ = 1,000 kg/m ³ , 1 Mpa = 1 N/mm ² , 1kV/mm = 1 MV/m				
Statement:				
NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Muovia will not provide any legally binding guarantee of certain properties, or any suitability.				