

TYPICAL PROPERTIES DATA SHEET

Hony Engineering Plastics Limited



HONY® Antistatic PC Technical Property Data Sheet

① Raw Material Data

Standard Grade:	Extrusion Grade	Appearance Color:	Transparent
Application:	High stress parts, processing material, plates, sheets, tubes, rods; mainly applied to the semiconductor industry, LCD industry, electronics equipment and microelectronics equipment industry, electronic and electrical, communications manufacturing, precision instruments, optical manufacturing, pharmaceutical industry and biological engineering etc.		
Characteristics:	Excellent impact, Good optical clarity, Rigid and hard, Easy to process		

② Raw Materials Technical Data

Property item	Test conditions	Test method	Test data	Unit
I. Physical properties				
Density	23°C	ISO 1183	1.2-1.23	g/cm ³
Shrinkage	---	ISO 2577	0.5	%
Water absorption	24 hours dipping (23°C)	ISO 62	0.35	%
Flammability class	1.5mm	UL94	HB	Class
II. Mechanical properties				
Tensile strength	50mm/min	ISO 527-1.2	60	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	50mm/min	ISO 527	9	%
Flexural strength	2mm/min	ISO 178	90	MPa
Flexural modulus	2mm/min	ISO 178	2500	MPa
Hardness-Rockwell	---	ISO2039-2	73	M (Scale)
Hardness-Shore D	---	ISO 868	84	D
Impact strength	23°C 3.2mm	ISO 180-1A	15	kJ/m ²
Charpy impact strength (Notch)	23°C, 3MM	b.o.ISO 179-1eA	80P	kJ/m ²
Friction coefficient	---	ISO 9352	0.55	---
III. Thermal properties				
Heat deflection temperature-HDT/A	1.82MPa	ISO 75-1,2	125	°C
Max.working temperature-long time	---	UL764B	116	°C
Melting point	---	ISO 11357-3	220~230	°C
Brittle transition temperature	---	ISO 974	-130	°C
Thermal conductivity	23°C	DIN 11359	0.2	W/(m*K)
Coefficient of linear thermal expansion	---	ISO 11359	6.5	10 ⁻⁵ K ⁻¹
IV. Electrical properties				
Dielectric constant	1MHz	IEC 60250	2.9	10 ⁶ Hz
Dielectric dissipation factor	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 ⁶ ~10 ⁹	(Ω)
Dielectric strength	2MM	IEC 60243-1	24	MV/m
	3MM	IEC 60243-1	17	MV/m
Arc resistant	3.1mm	IEC 61621	120	sec
V. Other				

NOTE: 1 g/cm³ = 1,000 kg/m³, 1 Mpa = 1 N/mm², 1kV/mm = 1 MV/m

The information contained here in are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. HONY will not provide any legally binding guarantee of certain properties, or any suitability.