

TYPICAL PROPERTIES DATA SHEET

Hony Engineering Plastics Limited

HONYESD®Antistatic POM Technical Property Data Sheet

①raw material description

Standard grade:	Extrusion grade	Appearance color:	Beige ,black
Application:	High stress parts, processing material, plates, strips, tubes;; used in semiconductor test fixture, a semiconductor crystal manufacturing equipment parts, wafer processing fixture, sensitive electronic components, hard disk drive components, printed circuit boards, electronic equipment installation , fixtures, rails, trays, pads, bushings, linings, wheel rollers.		
Characteristics:	Good Wear resistance, good high rigidity, high hardness, mechanical property, good self-lubricating property, non-absorbent.		

②raw materials technical data

Property item	Test conditions (status)	Test method	Test data	Unit
I.Physical properties				
Density	---	ASTM D792	1.32~1.37	g/cm ³
Shrinkage	---	ASTM D955	1.8-2.2	%
Equilibrium water absorption	23°C 60%RH	ASTM D570	0.26	%
Flammability class	---	UL94	HB	Class
II.Mechanical properties				
Tensile strength	---	ASTM D-638	70	MPa
Elongation at break	---	ASTM D-638	22	%
Flexural strength	---	ASTM D-790	100	MPa
Flexural modulus	---	ASTM D-790	2800	MPa
Hardness- Shore D	---	ASTM D-2240	80	D
Charpy impact strength	---	ASTM D-256	50	J/M
Friction coefficient	---	ASTM D1884	0.18	---
III.Thermal properties				
Heat deflection temperature-HDT/A	---	ASTM D648	120	°C
Max.working temperature-short time	---	UL746B	130	°C
Max.working temperature-long time	---	UL746B	100	°C
Melting point	---	ASTM D2133	170	°C
Brittle transition temperature	---	ASTM D746	-40	°C
Thermal conductivity	---	ASTM C177	0.33	W/(m*K)
Coefficient of linear thermal	---	ASTM D696	13	10 ⁻⁵ K ⁻¹
IV.Electrical properties				
Dielectric constant	---	ASTM D150	3.7	(Ω) * cm
Dielectric dissipation factor	---	ASTM D150	0.005	(Ω) * cm
Dielectric strength	---	ASTM D149	40	kV/mm
Volume resistivity	---	ASTM D257	10 ⁶ ~10 ⁹	(Ω) * cm
Surface resistivity	---	ASTM D257	10 ⁸ ~10 ⁹	(Ω)
Arc resistant	3.1mm	ASTM D495	220	sec

NOTE: 1 g/cm³ = 1,000 kg/m³, 1 Mpa = 1 N/mm², 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. Honny will not provide any legally binding guarantee of certain properties, or any suitability.