



**Engineering
Plastics**

QUANDA
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Typical Properties Data Sheet

The Supplier of Engineering Plastics
Rods, Sheets, Tubes, Profiles and Machining Parts

Qunsail® Imported Antistatic POM Technical Property Data sheet

① raw materials description

Standard grade:	Extrusion grade	Appearance color:	---
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.		

② raw materials technical data

Property item	Test conditions (status)	Test method	Test data	Unit
I. Physical properties				
Density	23°C	ASTM D792	1.37	g/cm ³
Shrinkage	---	ASTM D935	1.8-2.2	%
Water absorption	24 hours dipping (23°C)	ASTM D570	0.25-0.3	%
Flammability class	---	UL94	HB	Class
II. Mechanical properties				
Impact strength	---	ASTM D256	≥6.1	kJ/m ²
Tensile strength	speed test: 20mm/min the sample is dumbbell shape	ASTM D638	43	MPa
Elongation at tensile strength	23°C	ASTM D638	≥57	Mpa
Elongation at break	speed test: 20mm/min the sample is dumbbell shape	ASTM D638	21	%
Flexural strength	range: 66mm sample's size(mm): 80.12*10.10*4.10	ASTM D790	67.5	MPa
Flexural modulus	range: 66mm	ASTM D790	1850.6	MPa
Hardness-Rockwell	---	ASTM D785	80	M (Scale)
Hardness- Shore D	---	DIN 53505	77.5	D
Charpy impact strength (No notch)	sample's size (mm): 80.08*10.10*4.05 gap type: A	ASTM D256	3.283	kJ/m ²
Dynamic friction coefficient	Surface pressure: 0.06MPa, 15cm/s	DIN 53375	0.37	---
III. Thermal properties				
Heat deflection temperature-HDT/A	heating rate: 120°C/H sample's size (mm): 80.10*10.11*4.10 load: 1.8MPa	ASTM D648	89.8°C	°C
Max.working temperature-short time	---	---	140	°C
Max.working temperature-long time	---	---	100	°C
Melting point	---	ASTM D341	≥162	°C

Brittle transition temperature	---	ASTM D746	-40	°C
Thermal conductivity	23°C	ASTM C177	0.31	W/(m*K)
Coefficient of linear thermal expansion (-30°C~30°C)	23°C,50% relative humidity Adjusting at least 40 hours	ASTM D696	75.98×10 ⁻⁶	°C ⁻¹

IV. Electrical properties

Dielectric constant	50%RH, 23°C, 10 ⁶ Hz	IEC 60250	3.7	(Ω) * cm
Dielectric dissipation factor	50%RH, 23°C, 10 ⁶ Hz	IEC 60250	0.005	(Ω) * cm
Dielectric strength	---	IEC 1183	40	kV/mm
Volume resistivity	---	IEC 60093	10 ⁷ ~10 ⁹	Ω * cm
Surface resistivity		IEC 60093	10 ⁶ ~10 ⁹	Ω
Arc resistant	3.1mm	IEC 61621	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!. Quanda will not provide any legally binding guarantee of certain properties, or any suitability.