



# Typical Properties Data Sheet

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

## Qunsail®Antistatic POM Technical Property data sheet

### ①raw material description

<b>Standard grade:</b>	Extrusion grade	<b>Appearance color:</b>	Beige ,black
<b>Application:</b>	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.		
<b>Characteristics:</b>	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
<b>I.Physical properties</b>				
Density	---	ASTM D792	1.32~1.37	g/cm <sup>3</sup>
Shrinkage	---	ASTM D955	1.8-2.2	%
Equilibrium water absorption	23°C 60%RH	ASTM D570	0.26	%
Flammability class	---	UL94	HB	Class
<b>II.Mechanical properties</b>				
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	---
<b>III.Thermal properties</b>				
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 <sup>-5</sup> K <sup>-1</sup>
<b>IV.Electrical properties</b>				
Dielectric constant	---	ASTM D150	3.7	(Ω) * cm
Dielectric dissipation factor	---	ASTM D150	0.005	(Ω) * cm

<b>Dielectric strength</b>	---	ASTM D149	40	kV/mm
<b>Volume resistivity</b>	---	ASTM D257	$10^6 \sim 10^9$	( $\Omega$ ) * cm
<b>Surface resistivity</b>	---	ASTM D257	$10^6 \sim 10^9$	( $\Omega$ )
<b>Arc resistant</b>	3.1mm	ASTM D495	220	sec

**NOTE:**  $1 \text{ g/cm}^3 = 1,000 \text{ kg/m}^3$ ,  $1 \text{ Mpa} = 1 \text{ N/mm}^2$ ,  $1 \text{ kV/mm} = 1 \text{ MV/m}$

**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.