



Typical Properties Data Sheet

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

Qunsail® POM(Food Grade) Technical Property Data Sheet

①raw materials description

Standard grade:	Extrusion grade	Appearance colors:	White
Application:	High stress parts, processing material, plates, strips, tubes; used in mechanical transmission parts, precision machinery parts, water resistance components, electrical and electronic parts.		
Characteristics:	Good mechanical strength and dimensional stability, machinability, good surface self-lubricating properties, high surface hardness.		

②raw materials technical data:

Property item	Test conditions (status)	Test methods	Test data	Unit
I.Physical properties				
Density	23°C	ASTM D792	1.43	g/cm ³
Shrinkage	23°C 60%RH	ASTM D955	1.8-2.2	%
Equilibrium water absorption	24 hours dipping (23°C)	ASTM D570	0.22	%
Flammability calss	---	UL94	HB	Class
Toxic free and safe	---	EEC 90/128 FDA	nothing	---
II .Mechanical properties				
Impact strength	---	ASTM D256	74	J/m
Tensile strength	23°C	ASTM D638	60	Mpa
Elongation at break	---	ASTM D638	30	%
Flexural strength	23°C	ASTM D790	100	MPa
Flexural modulus	23°C	ASTM D790	2800	MPa
Hardness-Rockwell	---	ASTM D785	80	M (Scale)
Hardness-Shore D	---	ASTM D2240	85	D
Dynamic friction coefficient	---	ASTM D1894	0.35	---
III.Thermal properties				
Heat deflection temperature-HDT/A	1.80MPa	ASTM D648	130	°C
Max.working temperature-short time	---	UL746B	150	°C
Max.working temperature-long time	---	UL746B	100	°C
Melting point	---	ASTM D2133	165	°C
Brittle temperature	---	ASTM D746	-40	°C
Thermal conductivity	23°C	ASTM C177	0.31	W/(m*K)
Coefficient of linear thermal expansion	---	ASTM D696	13	10 ⁻⁵ K ⁻¹
IV.Electrical properties				
Dielectric constant	---	ASTM D149	3.7	(Ω) * cm
Dielectric dissipation factor	---	ASTM D150	0.007	---
Dielectric strength	---	ASTM D150	19	kV/mm
Volume resistivity	---	ASTM D257	10 ¹⁴	(Ω) * cm

Surface resistivity	---	ASTM D257	10^{16}	(Ω)
Arc resistant	3.1mm	ASTM D495	220	sec
<p>NOTE: 1 g/cm³ = 1,000 kg/m³, 1 Mpa = 1 N/mm², 1kV/mm = 1 MV/m</p> <p>STATEMENT:</p> <p>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.</p>				