



**Engineering
Plastics**

QUANDA

Shenzhen Quanda Plastic Co.,Ltd.
Web: www.quandaplastic.com
Email: info@quandaplastic.com
Tel:0086-755-28113160



Typical Properties Data Sheet

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

Qunsail® POM Properties Data Sheet

① Raw material description

Standard Grade:	Extrusion grade	Appearance color:	---
Application:	High stress parts, processing material, plates, strips, tubes; Used for hand plate, palm oil lubrication gear, bushings, slider, coil skeleton, Machine Tool, plumbing parts, sprayer parts, precision instrument parts, gears, automobile tail gate resistance, handle, audio, video tape recorders shaft, pipe fittings, faucets etc..		
Remarks:	Good mechanical strength and dimensional stability, machinability, good surface self-lubricating properties, high surface hardness.		

② Raw material technical datasheet

Property item	Test conditions	Testing method	Testing data	Unit
I. Physical property				
Density	23°C	ASTM D792	1.41	g/cm ³
Shrinkage	---	ASTM D955	1.8-2.2	%
Water absorption	24h dipping (23°C)	ASTM D570	0.25-0.3	%
Flammability class	---	UL94	HB	Class
II. Mechanical property				
Impact strength	---	ASTM D256	≥6.1	kJ/m ²
Tensile strength	23°C	ASTM D638	62	MPa
Tensile strength at break	23°C	ASTM D638	≥57	Mpa
Elongation at break	---	ASTM D638	≥35	%
Flexural strength	23°C	ASTM D790	≥87	MPa
Flexural modulus	23°C	ASTM D790	≥2350	MPa
Hardness-Rockwell	---	ASTM D785	80	M (Scale)
Hardness-Shore D	---	ASTM D2240	83	D
Jane stent impact strength (No chipped)	---	ASTM D6110	20	kJ/m ²
Jane stent impact strength (chipped)	---	ASTM D6110	6	kJ/m ²
Coefficient of dynamic friction	surface press0.06MPa, 15cm/s	ASTM D1894	0.37	---
III. Thermal property				
Thermal deformation temperature	1.80MPa	ASTM D648	≥105	°C
Max. working temperature(short time)	---	UL746B	140	°C
Max. working temperature(long time)	---	UL746B	100	°C
Melting temperature	---	ASTM D2133	≥162	°C
Brittle temperature	---	ASTM D746	-40	°C
Thermal conductivity	23°C	ASTM C177	0.31	W/(m*K)
Coefficient of linear thermal expansion	23°-55°C	ASTM D696	1.2	10 ⁻⁵ /K ⁻¹

IV. Electrical property				
Dielectric constant	50%RH, 23°C, 10 ⁶ Hz	ASTM D150	3.7	(Ω) * cm
Dielectric loss angle tangent	50%RH, 23°C, 10 ⁶ Hz	ASTM D150	0.005	(Ω) * cm
Dielectric strength	---	ASTM D149	40	kV/mm
Volume resistivity	---	ASTM D257	10 ¹⁴	(Ω) * cm
Surface resistivity	---	ASTM D257	10 ¹⁶	(Ω)
Electric arc resistance	3.1mm	ASTM D495	220	sec
NOTE: 1 g/cm ³ = 1,000 kg/m ³ , 1 Mpa = 1 N/mm ² , 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.				