



**Engineering
Plastics**

QUANDA
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Typical Properties Data Sheet

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

Sufoner® PI Properties Data Sheet

① Raw material description

Standard Grade:	Extrusion grade	Appearance color:	---
Applications:	Processing material, rod, sheet. Used for high-tec precision parts, electronic and semiconductor, aircraft components, compressor impeller, bearing lantern ring, Jet engines for combustion system components.		
Remarks:	Charactor: High hardness, high insulation, radiation resistance, corrosion resistance, wear resistance and friction properties, uvioresistant, self-lubricating, small coefficient of thermal expansion, inherent low flammability.		

② Raw material technical datasheet

Property item	Test conditions	Testing method	Testing data	Unit
I. Physical property				
Density	23°C	ASTM D792	1.43	g/cm ³
Shrinkage	---	ASTM D955	0.5~1	%
Absorption	---	ASTM D570	0.3	%
Flammability class	---	UL94	non-ignitable	---
II. Mechanical property				
Tensile strength	---	ASTM D638	90	MPa
Elongation at break	---	ASTM D638	6~8	%
Flexural Strength	---	ASTM D790	98	MPa
Compression strength	---	ASTM D790	166	MPa
Hardness-Rockwell	---	ASTM D785	199	M (Scale)
Impact Strength	---	ASTM D256	53	KJ/m ²
Impact Strength(notched)	23°C	ASTM D256	4	KJ/m ²
Coefficient of friction	---	ASTM D1894	0.35	---
III. Thermal property				
Thermal deformation temperature	1.82MPa	ASTM D648	360	°C
Max. working temperature(short time)	---	UL746B	360	°C
Max. working temperature(long time)	---	UL746B	260	°C
Brittle temperature	---	ASTM D746	>-269	°C
Thermal conductivity	23°C	ASTM C177	0.32	W/(m*K)
Coefficient of linear thermal expansion	---	ASTM D696	1~5	10 ⁻⁵ K ⁻¹
IV. Electrical property				
Dielectric constant	---	IEC 60250	3.4	10 ³ Hz
Dielectric loss angle tangent	---	IEC 60250	>1	10 ³ Hz
Dielectric strength	---	IEC 60243	110~120	kV/mm

Volume resistivity	---	IEC 60093	10^{17}	$\Omega \cdot \text{cm}$
Surface resistivity	---	IEC 60093	10^{14}	Ω
Electric arc resistance	---	IEC 61621	230	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.