

## Sufoner® PPS Properties Data Sheet

### ① Raw material description

<b>Standard Grade:</b>	Extrusion grade	<b>Appearance color:</b>	---
<b>Application:</b>	Processing materials, sheet, rod, electronic components, pump and valve, axle sleeve and bushing		
<b>Remarks:</b>	Characters: outstanding for high temperature resistance, good dimensional stability, electrical property, chemical resistance, inflaming retarding, arc resistance		

### ② Raw material technical datasheet

Property item	Test conditions	Testing method	Testing data	Unit
<b>I. Physical property</b>				
Density	23°C	ISO 1183	1.35	g/cm <sup>3</sup>
Shrinkage	---	ISO 2577	1.5	%
Water absorption	24h dipping (23°C)	ISO 62	0.04	%
Flammability class	1.6/3.2MM	UL94	V-0	Class
<b>II. Mechanical property</b>				
Tensile strength	---	ISO 527-1.2	90	MPa
Breaking strength	---	ISO 527-2	75	Mpa
Elongation at break	---	ISO 527-2	4	%
Flexural strength	---	ISO 178	140	MPa
Flexural modulus	---	ISO 178	3700	MPa
Hardness-Rockwell	---	ISO2039-2	95	M (Scale)
Jane stent impact strength	---	ISO 179/1eA	25	kJ/m <sup>2</sup>
Jane stent impact strength (chipped)	---	ISO 179/2eA	3.3	kJ/m <sup>2</sup>
<b>III. Thermal property</b>				
Thermal deformation temperature	1.80MPa	ISO 75-1,2	110	°C
Max. working temperature (short time)	2h	UL746B	260	°C
Max. working temperature (long time)	---	UL746B	220	°C
Melting temperature	---	ISO 11357-3	280	°C
Coefficient linear thermal expansion	23°-150°C	ISO 11359	50	x10 <sup>-6</sup> /K
<b>IV. Electrical property</b>				
Dielectric constant	1MHz	IEC 60250	3.6	---
Dielectric loss angle tangent	1MHz	IEC 60250	0.004	---
Dielectric strength	---	IEC 60243	17	kV/mm
Volume resistivity	---	IEC 60093	10 <sup>13</sup>	(Ω) * cm

Surface resistivity	---	IEC 60093	$10^{15}$	( $\Omega$ )
Electric arc resistance	---	IEC 61621	115	sec
<b>NOTE:</b> $1 \text{ g/cm}^3 = 1,000 \text{ kg/m}^3$ , $1 \text{ Mpa} = 1 \text{ N/mm}^2$ , $1 \text{ kV/mm} = 1 \text{ MV/m}$				
<b>Statement:</b>				
<b>NOTE:</b> 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.				