

# PSU Rod

**Formula:** PSu

**Diameter:** 30mm

**Length:** 500mm

**Colour:** Natural

**CAS Number:** 25135-51-7

**UOM Code:** 102-118-14

**SKU:** 1000015589-group

**Product Code:** SU34-RD-000130

## Material Properties for Polymers

### Chemical Resistance

<b>Element</b>	<b>Value</b>
Acids - concentrated	Fair
Acids - dilute	Good
Alcohols	Good
Alkalis	Good
Aromatic hydrocarbons	Fair
Greases and Oils	Good
Halogens	Good
Ketones	Poor

### Electrical Properties

<b>Element</b>	<b>Value</b>
Dielectric constant @ 1kHz	3.14
Dielectric constant @ 1MHz	3.1
Dissipation factor @ 1kHz	0.0013
Dissipation factor @ 1MHz	0.005
Dielectric strength( kV mm <sup>21</sup> )	17
Volume resistivity( Ohmcm )	5x10 <sup>12</sup>

### Physical Properties

<b>Element</b>	<b>Value</b>
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Flammability	HB
Radiation resistance	Good
Resistance to Ultra-violet	Poor
Limiting oxygen index( % )	30
Water absorption( % )	0.4
Water absorption - equilibrium( % )	0.85
Density( gcm <sup>3</sup> )	1.24

## **Mechanical Properties**

<b>Element</b>	<b>Value</b>
Hardness - Rockwell	M91
Elongation at break( % )	50-100
Tensile modulus( GPa )	2.48
Izod impact strength( J m <sup>2</sup> )	69
Tensile strength( MPa )	70

## **Thermal Properties**

<b>Element</b>	<b>Value</b>
Heat-deflection temperature - 1.8MPa( C )	174
Upper working temperature( C )	150-180
Thermal conductivity( W m <sup>-1</sup> K <sup>-1</sup> )	0.26
Coefficient of thermal expansion( x10 <sup>-6</sup> K <sup>-1</sup> )	56