

PPSU Rod

Formula: PPSu

Diameter: 20mm

Length: 1000mm

Colour: Black

UOM Code: 073-043-41

SKU: 1000010305-group

Product Code: SU33-RD-000120

Material Properties for Polymers

Electrical Properties

Element	Value
Dielectric constant @ 1kHz	3.45
Dissipation factor @ 1kHz	0.0009
Dissipation factor @ 1MHz	0.005
Dielectric strength(kV mm ¹)	14.1
Surface resistivity(Ohm/sq)	>10 ¹³
Volume resistivity(Ohmcm)	>10 ¹⁷

Physical Properties

Element	Value
Flammability	V-0
Limiting oxygen index(%)	44
Water absorption(%)	1.2
Water absorption - equilibrium(%)	0.6
Water absorption - over 24 hours(%)	0.35
Density(gcm ³)	1.29

Mechanical Properties

Element	Value
Hardness - Rockwell	M80/R122
Elongation at break(%)	30
Compressive modulus(GPa)	1.7

Element	Value
Tensile modulus(GPa)	2.5
Izod impact strength(J m ⁻¹)	700
Tensile strength(MPa)	76

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	210
Heat-deflection temperature - 1.8MPa(C)	200
Upper working temperature(C)	180-210
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.35
Coefficient of thermal expansion(x10 ⁻⁵ K ⁻¹)	55

Pultrusions

Element	Value
Compressive strength(MPa)	99