

PCTFE Rod

Formula: PCTFE
Diameter: 7mm
Length: 100mm
Colour: Natural
CAS Number: 9002-83-9
UOM Code: 028-675-97
SKU: 1000003564-group
Product Code: FP35-RD-000107

Material Properties for Polymers

Chemical Resistance

Element	Value
Acids - concentrated	Good
Acids - dilute	Good
Alcohols	Good
Alkalis	Good
Aromatic hydrocarbons	Good
Greases and Oils	Good
Halogens	Good
Ketones	Good

Electrical Properties

Element	Value
Dielectric constant @ 1MHz	2.24-2.8
Dissipation factor @ 1kHz	0.023-0.027
Dissipation factor @ 1MHz	0.01
Dielectric strength(kV mm ⁻¹)	14
Surface resistivity(Ohm/sq)	10 ¹²
Volume resistivity(Ohmcm)	10 ¹²

Physical Properties

Element	Value
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Flammability	V-0
Refractive index	1.435
Water absorption(%)	0.01
Density(gcm ³)	2.1-2.14

Mechanical Properties

Element	Value
Hardness - Rockwell	D75-90 - Shore
Hardness - Rockwell	D75-90 - Shore -
Hardness - Rockwell	R75-112 - V-0
Hardness - Rockwell	R75-112
Elongation at break(%)	80-250
Tensile modulus(GPa)	1.3-1.8
Izod impact strength(J m ²)	267
Tensile strength(MPa)	31-41

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	126
Lower working temperature(C)	-240
Upper working temperature(C)	120-149
Specific heat(J K ⁻¹ kg ⁻¹)	900
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.13
Coefficient of thermal expansion(x10 ⁻⁵ K ⁻¹)	70

Pultrusions

Element	Value
Compressive strength(MPa)	09-Dec