

FEP Copolymer Rod

Formula: FEP

Diameter: 9.5mm

Length: 100mm

CAS Number: 25067-11-2

UOM Code: 030-841-28

SKU: 1000003906-group

Product Code: FP34-RD-000110

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
Halogenated Hydrocarbons	Good
Halogens	Good
Ketones	Good

Mechanical Properties

Element	Value
Coefficient of friction	0.27-0.67
Hardness - Rockwell	R25-45, 60 Shore D
Poisson's ratio	0.48
Elongation at break(%)	150-300
Tensile modulus(GPa)	0.5-0.6
Izod impact strength(J m ²)	999999No Break
Tensile strength(MPa)	14-30

Electrical Properties

Element	Value
Dielectric constant @1MHz	2.1
Dissipation factor @ 1MHz	0.0007
Dielectric strength(kV mm ⁻¹)	20@3.2mm
Surface resistivity(Ohm/sq)	10 ¹²
Volume resistivity(Ohmcm)	10 ¹²

Physical Properties

Element	Value
Flammability	V0
Radiation resistance	Poor
Refractive index	1.344
Resistance to Ultra-violet	Excellent
Limiting oxygen index(%)	95
Water absorption(%)	0.01
Density(gcm ⁻³)	2.15

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	50
Heat-deflection temperature - 1.8MPa(C)	70
Lower working temperature(C)	-250
Upper working temperature(C)	150-200
Specific heat(J K ⁻¹ kg ⁻¹)	1100
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.19-0.24@23°C
Coefficient of thermal expansion(x10 ⁻⁴ K ⁻¹)	83-104