FEP Copolymer Disk

FEP copolymer disk provides low dielectric loss, chemical resistance, and dimensional stability for sealing, insulation, and microwave components. **SKU:** 1000024455-group
Product Code: FP34-FM-000175

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?¹)	No Break
Tensile strength(MPa)	14-30

Electrical Properties

Element	Value
Dielectric constant @1MHz	2.1
Dissipation factor @ 1MHz	0.0007

Element	Value
Dielectric strength(kV mm?¹)	20@3.2mm
Surface resistivity(Ohm/sq)	10¹?
Volume resistivity(Ohmcm)	10¹?

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?? K?¹)	83-104