

Polyaramid Fiber (Polymetaphenylene isophthalamide)

Formula: Polymetaphenylene isophthalamide

Length: 1000m

Filament Diameter: 0.01mm

Number Of Filaments: 100

Tex Number: 22

UOM Code: 439-769-20

SKU: 1000029644-group

Product Code: AR31-FB-000122

Material Properties for Polymers

Chemical Resistance

Element	Value
Acids - concentrated	Poor
Acids - dilute	Good-Fair
Alcohols	Good
Alkalis	Good-Poor
Aromatic hydrocarbons	Good
Greases and Oils	Good
Halogenated Hydrocarbons	Good
Ketones	Good

Electrical Properties

Element	Value
Dielectric constant @1kHz	2.3
Dielectric strength(kV mm ²)	32
Volume resistivity(Ohmcm)	6x10 ¹²

Physical Properties

Element	Value
Radiation resistance	Good

Element	Value
Limiting oxygen index(%)	29
Water absorption - equilibrium(%)	9
Water absorption - over 24 hours(%)	0.08
Density(gcm ³)	1.38

Mechanical Properties

Element	Value
Elongation at break(%)	9
Izod impact strength(J m ⁻¹)	533unnotched
Tensile strength(MPa)	1800-3900

Thermal Properties

Element	Value
Heat-deflection temperature - 1.8MPa(C)	149
Upper working temperature(C)	200-300
Specific heat(J K ⁻¹ kg ⁻¹)	1200
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.13@23°C
Coefficient of thermal expansion(x10 ⁻⁴ K ⁻¹)	20