

Nylon 46 Fiber

Formula: PA 4,6
Length: 500m
Filament Diameter: 0.027mm
Number Of Filaments: 36
Tex Number: 24
Tenacity: High Tenacity
CAS Number: 50327-22-5
UOM Code: 019-135-09
SKU: 1000002297-group
Product Code: AM34-FB-000124

Material Properties for Polymers

Electrical Properties

Element	Value
Dielectric constant @ 1MHz	3.8-4.3
Dissipation factor @ 1kHz	0.35
Dielectric strength(kV mm ⁻¹)	20
Surface resistivity(Ohm/sq)	10 ¹² -10 ¹⁴
Volume resistivity(Ohmcm)	10 ¹³ -10 ¹⁵

Physical Properties

Element	Value
Flammability	V2 @ 0.8mm
Radiation resistance	Fair
Limiting oxygen index(%)	24
Water absorption - equilibrium(%)	3.7
Water absorption - over 24 hours(%)	1.3
Density(gcm ⁻³)	1.18

Mechanical Properties

Element	Value
Hardness - Rockwell	M92

Element	Value
Tensile modulus(GPa)	3.1-3.3
Izod impact strength(J m ⁻¹)	80
Tensile strength(MPa)	55-100

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	220
Heat-deflection temperature - 1.8MPa(C)	160
Lower working temperature(C)	-40
Upper working temperature(C)	100-200
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.3@23°C
Coefficient of thermal expansion(x10 ⁻⁵ K ⁻¹)	80-90