

Nylon 11 Rod

Formula: PA 11

Diameter: 15mm

Length: 100mm

Colour: Black

CAS Number: 25035-04-5

UOM Code: 255-239-95

SKU: 1000028578-group

Product Code: AM33-RD-000113

Material Properties for Polymers

Chemical Resistance

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

Mechanical Properties

Element	Value
Coefficient of friction	0.2-0.3
Hardness - Rockwell	M60
Elongation at break(%)	320
Tensile modulus(GPa)	1.5
Izod impact strength(J m ²¹)	96
Tensile strength(MPa)	44

Electrical Properties

Element	Value
Dielectric constant @1MHz	3
Dissipation factor @ 1kHz	0.05
Dielectric strength(kV mm ⁻¹)	20
Surface resistivity(Ohm/sq)	10 ¹²
Volume resistivity(Ohmcm)	10 ¹²

Physical Properties

Element	Value
Flammability	V2
Radiation resistance	Fair
Resistance to Ultra-violet	Fair?
Limiting oxygen index(%)	22
Water absorption - equilibrium(%)	2.5
Water absorption - over 24 hours(%)	0.8
Density(gcm ⁻³)	1.04

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	150
Heat-deflection temperature - 1.8MPa(C)	55
Lower working temperature(C)	-50
Upper working temperature(C)	70-130
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.3@23°C
Coefficient of thermal expansion(x10 ⁻⁵ K ⁻¹)	125