

Nylon 12 Rod

Formula: PA 12

Diameter: 60mm

Length: 1000mm

CAS Number: 24937-16-4

UOM Code: 032-999-46

SKU: 1000004244-group

Product Code: AM37-RD-000160

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

Electrical Properties

Element	Value
Dielectric constant @ 1MHz	3.5@100KHz
Dissipation factor @ 1kHz	0.06
Dielectric strength(kV mm ²)	26-30@1mm
Surface resistivity(Ohm/sq)	10 ¹³
Volume resistivity(Ohmcm)	10 ¹² -10 ¹⁴

Physical Properties

Element	Value
Flammability	HB-V2

Element	Value
Radiation resistance	Fair
Resistance to Ultra-violet	Fair?
Limiting oxygen index(%)	21
Water absorption - equilibrium(%)	1.6
Density(gcm ³)	1.02

Mechanical Properties

Element	Value
Hardness - Rockwell	R84-107
Elongation at break(%)	290-300
Tensile strength(MPa)	50-55

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	130-135
Heat-deflection temperature - 1.8MPa(C)	48-55
Coefficient of thermal expansion($\times 10^{-4} \text{ K}^{-1}$)	100-120