

ABS Rod

Formula: ABS

Diameter: 10mm

Length: 100mm

Colour: Natural

CAS Number: 9003-56-9

UOM Code: 245-324-44

SKU: 1000001325-group

Product Code: AB30-RD-000110

Material Properties for Polymers

Chemical Resistance

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

Mechanical Properties

Element	Value
Coefficient of friction	0.5
Hardness - Rockwell	R100-110
Poisson's ratio	0.35
Elongation at break(%)	45
Tensile modulus(GPa)	2.1-2.4
Izod impact strength(J m ²)	200-400
Tensile strength(MPa)	41-45

Electrical Properties

Element	Value
Dielectric constant @ 1MHz	3.2-3.3
Dissipation factor @ 1MHz	0.02
Dielectric strength(kV mm ⁻¹)	20-25
Volume resistivity(Ohmcm)	>10 ¹²

Physical Properties

Element	Value
Flammability	HB @ 1.5mm
Radiation resistance	Fair
Resistance to Ultra-violet	Poor
Limiting oxygen index(%)	19
Water absorption - over 24 hours(%)	0.3-0.7
Density(gcm ⁻³)	1.05

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	98
Heat-deflection temperature - 1.8MPa(C)	89
Upper working temperature(C)	70-100
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.17@23°C
Coefficient of thermal expansion(x10 ⁻⁵ K ⁻¹)	80