

POM Homopolymer Rod

Formula: Acetal - Homopolymer POMH

Diameter: 100mm

Length: 200mm

Colour: White

CAS Number: 9002-81-7

UOM Code: 057-550-91

SKU: 1000008115-group

Product Code: OX31-RD-000180

Material Properties for Polymers

Chemical Resistance

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

Mechanical Properties

Element	Value
Coefficient of friction	0.2-0.35
Hardness - Rockwell	M94
Poisson's ratio	0.35
Elongation at break(%)	40-75
Tensile modulus(GPa)	2.9-3.1
Izod impact strength(J m ²)	75-130
Tensile strength(MPa)	70

Electrical Properties

Element	Value
Dielectric constant @ 1MHz	3.7
Dissipation factor @ 1MHz	0.005
Dielectric strength(kV mm ⁻¹)	20
Surface resistivity(Ohm/sq)	10 ¹²
Volume resistivity(Ohmcm)	10 ¹²

Physical Properties

Element	Value
Flammability	HB
Radiation resistance	Poor
Resistance to Ultra-violet	Poor
Limiting oxygen index(%)	15
Water absorption - equilibrium(%)	0.6-0.9
Water absorption - over 24 hours(%)	0.25
Density(gcm ⁻³)	1.42

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	170
Heat-deflection temperature - 1.8MPa(C)	135
Upper working temperature(C)	80-120
Specific heat(J K ⁻¹ kg ⁻¹)	1500
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.22-0.24@23°C
Coefficient of thermal expansion(x10 ⁻⁵ K ⁻¹)	122