

30% Glass Fiber Reinforced PPO (modified) Rod

Formula: PPO 30% GFR

Diameter: 10mm

Length: 10mm

Colour: Yellow-Brown

UOM Code: 262-442-85

SKU: 1000111517-group

Product Code: PH31-RD-000110

Material Properties for Polymers

Chemical Resistance

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

Electrical Properties

Element	Value
Dielectric constant @ 1MHz	3.1
Dissipation factor @ 1kHz	0.01
Dielectric strength(kV mm ²¹)	15
Volume resistivity(Ohmcm)	10 ^{1?}

Physical Properties

Element	Value
Flammability	HB
Limiting oxygen index(%)	26

Element	Value
Water absorption - over 24 hours(%)	0.06-0.33
Density(gcm ³)	1.29

Mechanical Properties

Element	Value
Hardness - Rockwell	L108
Poisson's ratio	0.27
Elongation at break(%)	02-Mar
Tensile modulus(GPa)	08-Sep
Izod impact strength(J m ¹)	80
Abrasive resistance - ASTM D1044(mg/1000 cycles)	35
Tensile strength(MPa)	100-120

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	165
Heat-deflection temperature - 1.8MPa(C)	135
Upper working temperature(C)	90-160
Thermal conductivity(W m ¹ K ¹)	0.28@23°C
Coefficient of thermal expansion(x10 ^{??} K ¹)	25-30