

30% Glass Fiber Reinforced PBT Rod

Formula: PBT 30% GFR

Diameter: 40mm

Length: 1000mm

UOM Code: 154-965-77

SKU: 1000052956-group

Product Code: ES35-RD-000140

Material Properties for Polymers

Chemical Resistance

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

Electrical Properties

Element	Value
Dielectric constant @ 1MHz	4
Dissipation factor @ 1kHz	0.002
Dielectric strength(kV mm ²)	20
Volume resistivity(Ohmcm)	2x10 ¹²

Physical Properties

Element	Value
Flammability	HB
Limiting oxygen index(%)	23
Water absorption - over 24 hours(%)	0.15-0.35

Element	Value
Density(gcm ³)	1.63

Mechanical Properties

Element	Value
Hardness - Rockwell	M93
Elongation at break(%)	2
Tensile modulus(GPa)	12
Izod impact strength(J m ²)	70
Tensile strength(MPa)	185

Thermal Properties

Element	Value
Heat-deflection temperature - 0.45MPa(C)	220
Heat-deflection temperature - 1.8MPa(C)	200
Upper working temperature(C)	120-200
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.24@23°C
Coefficient of thermal expansion(x10 ⁻⁴ K ⁻¹)	20-70