

Vectra® B Liquid Crystal Polyester/amide Rod

Formula: Vectra® B

Diameter: 3mm

Length: 1000mm

UOM Code: 016-485-26

SKU: 1000002014-group

Product Code: ES32-RD-000103

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
Ketones	Good

Electrical Properties

Element	Value
Dielectric constant @ 1MHz	3.1
Dissipation factor @ 1MHz	0.01
Dielectric strength(kV mm ²)	37@1.5mm
Volume resistivity(Ohmcm)	10 ¹²

Physical Properties

Element	Value
Flammability	V0 @ 0.4mm
Radiation resistance	Good
Resistance to Ultra-violet	Good
Limiting oxygen index(%)	50
Water absorption - equilibrium(%)	0.1

Element	Value
Water absorption - over 24 hours(%)	0.03
Density(gcm ³)	1.4

Mechanical Properties

Element	Value
Hardness - Rockwell	M100
Elongation at break(%)	1.3
Tensile modulus(GPa)	2.5-20
Izod impact strength(J m ²)	415
Tensile strength(MPa)	87-188

Thermal Properties

Element	Value
Heat-deflection temperature - 1.8MPa(C)	200
Specific heat(J K ⁻¹ kg ⁻¹)	1000
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.18@23°C
Coefficient of thermal expansion(x10 ⁻⁶ K ⁻¹)	-45

Pultrusions

Element	Value
Compressive strength(MPa)	84