

PEN Laminate Coil

Formula: PEN

Thickness: 0.05mm

Coil Width: 500mm

Length: 1m

Backing Material: 0.025mm Aluminium

Adhesive: Epoxy

Polymer Thickness: 0.012mm

CAS Number: 24968-11-4

UOM Code: 042-529-35

SKU: 1000005840-group

Product Code: ES36-LM-000121

Material Properties for Polymers

Chemical Resistance

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

Mechanical Properties

Element	Value
Coefficient of friction	0.27- biax film
Elongation at break(%)	60- biax film
Tensile modulus(GPa)	5-5.5- biax film
Tensile strength(MPa)	200- biax film

Electrical Properties

Element	Value
Dielectric constant @1MHz	3.2@10KHz
Dissipation factor @ 1kHz	0.005
Dissipation factor @ 1MHz	0.0048@10KHz
Dielectric strength(kV mm ⁻¹)	160@0.075mm
Surface resistivity(Ohm/sq)	10 ¹²
Volume resistivity(Ohmcm)	10 ¹²

Physical Properties

Element	Value
Flammability	VTM-2 - UL94, 0.075mm
Resistance to Ultra-violet	Fair
Optical transmission(%)	84@0.075mm
Water absorption(%)	0.4
Density(gcm ⁻³)	1.36

Thermal Properties

Element	Value
Upper working temperature(C)	155
Thermal conductivity(W m ⁻¹ K ⁻¹)	0.15@23°C
Coefficient of thermal expansion(x10 ⁻⁶ K ⁻¹)	20-21- biax film