

Flexible Insulation

Polyester Film

GENERAL INFORMATION:

Polyester film is translucent (milky), flexible, has high tensile strength, tear resistance and shear strength. It is insensitive to oils, greases and solvents, does not contain plasticisers and in normal conditions is unaffected by ageing. In addition it has high dielectric properties.

THERMAL PROPERTIES:

Polyester film retains all its outstanding properties, namely mechanical strength, flexibility dielectric over a temperature range from -60°C to +150°C.

APPLICATIONS:

Polyester film is used in a wide range of industrial applications, such as;

- electrical insulation of motors
- generators, transformers
- bobbins and cables
- thermal and physical barriers
- release agent
- membrane switch substrate
- substrate for laminations, thus obtaining composite materials

PHYSICAL & ELECTRICAL PROPERTIES

| Property | Typical Value | Property | Typical Value |
|------------------------------------|--------------------------|--|------------------------|
| Mechanical (Typical) | | | |
| Ultimate Tensile Strength | 1750 kg/cm | Tear Strength - Propagating (Elmendorf) | 750 g/mm |
| Stress to produce 3°, 0 elongation | 950 cm/kg ² | Tear Strength -Initial (Graves) | 300 kg/cm |
| Stress to produce 5% elongation | 1050 cm/kg ² | Bursting Strength - (Mullen) | 4.6 kg/cm |
| Ultimate Elongation | 150% | Density | 1.395 |
| Tensile Modulus | 38500 cm/kg ² | Coefficient of friction(kinetic) (film to film) | 0.45 |
| Impact Strength | 240kg/cm/mm | Refractive Index (Abbé) | 1.64 nD 25 |
| Folding Endurance (MIT) | 14 000 cycles | | |
| Electrical (Typical) | | | |
| Dielectric Strength 25°C | 280 KV/mm | Dissipation Factor | 0.0025 |
| Dielectric Strength 150°C | 200 KV/mm | Volume Resistivity | 1x10 ¹⁶ Ohm |
| Dielectric Constant | 3.40 | Surface Resistivity | 1x10 ¹² Ohm |



- NON-ASBESTOS Gasket Jointing • Rubber Insertion • Neoprene • Synthetic Rubber •
- Oil Jointing • Cork • Blue Max Boiler Gaskets • Nitrile Viton EPDM 'O'Rings •
- Pump and Valve Gland Packings • Die Formed Rings • Spiral Wound Gaskets • Graphite Sheet • Teflon • Plastic Shim • Felt •

ABRASIVE WATERJET CUTTING FACILITY – MOST MATERIALS – ANY SHAPE