

Industrial PTFE Coated Tape & Fabric Characteristics

Industrial Fabrics are engineered to retain the distinctive properties of PTFE; however, by adding a glass fabric to the matrix, Innotec is able to obtain the added benefits of dimensional stability, durability, excellent tensile strength and extremely low elongation (<1%). Industrial Fabrics have received USDA approval for food processing and handling, and are FDA compliant (21 CFR177.1550). In addition, the Industrial fabrics can operate in temperatures from -400°F (-240°C)

The Tapes with silicone adhesive operate over a wide temperature range, -100°F to 500°F (-73°C to 260°C), while tapes with acrylic adhesive operate over a narrower range of temperatures, -40°F to 350°F (-40°C to 177°C). Under static conditions and -100°F (-73°C) under dynamic conditions up to 550°F (288°C).

Typical Applications

Packaging:

- Poly bag manufacturing
- Impulse/L-Bar sealing
- Form fill and seal
- Over wrapping (Tray packing)
- Side and End sealing
- Blister tray covers
- Vacuum pack machines

Food Products:

- Non-stick baking, cooking and drying
- Food dehydration
- Smoking of meat and fish
- Flash-freezing meat, poultry and fish
- Oven and microwave liners for home and industrial kitchens

Printing and Textiles:

- Heat transfer presses
- Silkscreen table covers
- Fabric lamination
- Garment fusing

Polymer Processing:

- Vulcanizing presses
- Rubber curing presses
- Manufacture of filter media

Building Products:

- Manufacture of specialty wood-based products
- Vinyl window manufacturing

Chemical Processing:

- Tank seals and contaminant barriers
- Gaskets, membranes, seals & diaphragms
- Corrosion resistant chute, drum, and hopper liners
- Protective curtains and aprons

Aerospace, Communications & Military:

- Composite mold release/bonding
- Vacuum bagging

Other Applications:

- Insulation and protection
- Release sheets/separation materials
- Printed circuit board manufacturing
- Wire and cable insulation and protection
- Manufacture of metalized balloons

Additional applications exist. Contact Innotec of WI, Inc. for more specific information.

Fabric Styles Available

Nominal Thickness	Weight (lbs/sq yd)	Tensile Warp* (lbs/sq in)	Tensile Fill* (lbs/sq in)	Edge Tear Warp (grams)	Edge Tear Fill (grams)	Full Widths (inches)
.003"	0.27	56	32	380	250	40, 80
.004"	0.34	98	48	-	-	38*
.005"	0.48	100	112	800	700	40, 80*
.006"	0.54	100	112	800	700	40, 80*
.008"	0.70	200	160	1400	1100	40, 60*, 80*
.010"	0.94	200	160	1400	1100	40, 60, 80
.011"	1.00	200	160	1400	1100	40, 60*, 80*
.014"	1.25	320	232	3700	3200	40, 80
.019"	Proprietary	Proprietary	Proprietary	>6400	>6400	80*
.025"	1.50	520	472	>6400	>6400	38, 60
.028"	Proprietary	Proprietary	Proprietary	>6400	>6400	84, 141*
.033"	Proprietary	Proprietary	Proprietary	>6400	>6400	82, 141*
.038"	Proprietary	Proprietary	640	>6400	>6400	60*

Tape Styles Available

Adhesive System	Nominal Thickness (Substrate)	Nominal Thickness (Adhesive)	Adhesion (oz./in. of width)	Tensile Strength (lbs/sq in)	Maximum Operating Temperature	Full Width (in.)	Full Widths (inches)
Acrylic	0.003"	0.0020"	45	56	350°F (177°C)	39.5	10, 18, 36
Acrylic	0.005"	0.0020"	50	100	350°F (177°C)	39.5	18, 36
Acrylic	0.006"	0.0020"	50	100	350°F (177°C)	39.5	18, 36
Acrylic	0.010"	0.0025"	50	200	350°F (177°C)	39.5	18, 36
Acrylic	0.014"	0.0025"	50	320	350°F (177°C)	39.5	18, 36
Silicone	0.003"	0.0020"	40	56	500°F (260°C)	39.5	10, 18, 36
Silicone	0.005"	0.0025"	45	100	500°F (260°C)	39.5	18, 36
Silicone	0.006"	0.0025"	45	100	500°F (260°C)	39.5	18, 36
Silicone	0.007"	0.0025"	45	100	500°F (260°C)	39.5	18, 36
Silicone	0.010"	0.0025"	45	200	500°F (260°C)	39.5	18, 36
Silicone	0.014"	0.0025"	45	320	500°F (260°C)	39.5	18, 36

Please note: Additional thickness and styles available upon special order and lead times may vary for different styles and widths.

*Disclaimer: All figures provided in the above table are based upon ASTM D 4969-97, the Standard Specification for Polytetrafluoroethylene (PTFE) Coated Glass Fabric. The above tensile values are based upon the ASTM D828 test method and are not actual values of Innotecs' materials. The above tensile values are 80% of the figures provided in Table 6 of specification D579. Innotec of WI, Inc. states that its actual tensile will be greater than the above material specification and that actual tensile values will be provided upon request. Edge Tear values are based upon ASTM D1424 (Elmendorf Tearing Test) and are average values that can vary.