# PTFE Coated | Film

## ENERGY COMPOSITES FOOD FORM-FILL-SEAL MOULD RELEASE LAMINATION SURGICAL AUTOMOTIVE WINDOWS AVIATION ELECTRONICS AUTOMOTIVE BEARING PADS POLYFILM CONSTRUCTION BLISTER PACK PHARMA PACKAGING GUIDE RAILS ELECTRONICS TEXTILES HEAT SHRINK TUNNEL MEDICAL IMPULSE SEAL





### **High Tolerances for Extreme Environments**

Green Belting Industries tapes serve a wide range of manufacturing and end-use purposes. From protective barriers on packaging heat-seal elements, to anti-squeak tapes in high-end automobiles, the key performance characteristics of these tapes in harsh environments improves process efficiency and output quality while reducing production cost. As a proven and trusted leader in the innovation and production of high-quality process materials, Green Belting Industries provides coated glass and film tapes that are engineered, tested, and proven in manufacturing and packaging plants around the world. Our experienced field representatives and product specialists are committed to helping you find the best tape product for your processing needs.





Green Belting Industries PTFE Tapes are used in a variety of packaging methods, including heat shrink film, blister pack, and form, fill & seal where they serve four important functions:

- 1. Allow rapid transfer of heat from the thermal element surface through the tape to form the seal,
- 2. Protect the heat element from damage due to build-up of molten packaging material,
- 3. Protect the package surface from damage.
- 4. Depending on the texture of the tape, apply either a smooth or textured finish to the product seal.

For heat seal machinery, we recommend 100-35, 100-55, or 100-65 Tapes. For impulse sealing, we recommend 100-3, 100-5, or 100-6 Zone Tapes. For increased surface texture, use 100-85 SW PR, 100-105.



Materials used to line composite moulding tools, referred to as mould release, mould liners, or release liners, protect the mould from the resins used while enabling quick and clean release of the composite product from the mould tool. PTFE coated Fiberglass tapes serve as our standard line of mould release materials. GR6 is our premium mould release offering exceptional durability and smooth surface. With pressure-sensitive adhesive, our mould release solutions conform to the mould surface and can remain securely in place for multiple mould cycles.

For effective mould release and mould protection, we recommend 100-35, 100-55, and 100-65 tapes. For best multi-cycle durability and a smoother finish we recommend GR6 Mould Release.

#### **PVC Window Manufacture**

The manufacture of PVC Windows generally involves sections of PVC frame material which are heated and welded together to form the finished window frame. PTFE Glass Tape or Fabric, applied to the weld plates, allows rapid heat transfer from the heat plate to the PVC sections, while preventing melted PVC from sticking to the plate surface. This results in a clean weld, a clean surface on the weld plate, and faster, uninterrupted window production.

For PVC window welding, we recommend DXL-5S, DXL-6S, 100-5S, 100-6S, 100-10S, or GR6.



#### **Heat Seal Packaging**

PTFE Coated Fiberglass Tapes, when applied as a cover on the L-Bar heat sealing element and silicone or sponge rubber padding, serves as a non-stick, thermal-conductive protective barrier. The thermal conductivity of the tape allows heat to transfer rapidly through the tape to the packaging film. The L-Bar sealer then melts (heat seals) the layers of poly film together without marking or damaging the film. The non-stick tape also prevents molten film residue from adhering to the heat element.

For L-Bar protection, we recommend 100-3S or 100-5S Tapes.



#### Anti-Squeak Tape

To help keep cars squeak free, our UHMW film tapes provide an 'invisible' solution between contact points where friction between two components would otherwise cause squeaks or rattles. Due to its strength, abrasion resistance, low coefficient of friction, and non-stick surface, UHMW Polyolefin is a type of plastic that mimics many properties of PTFE and is an ideal squeak supressor.

For anti-squeak applications, we recommend: 130-5A, or 130-10A UHMW Film Tape with acrylic adhesive.



#### Electronics

PTFE Tapes are used in the electronics industry in one of two ways, either for insulation of wiring (for dry cell transformers, AC/DC electric motors, or AC/DC electric diesel engines) or to mask semiconductors against arc spray thermal spray coatings.

For wiring insulation applications we recommend any PTFE coated tape. For semiconductors, we typically recommend 100-5S or 160-5S HT.



#### **Physical Properties**

Product	Max Width		Nom. Thickness		Min Adhesion to Steel		Operating Temp.	
	(in)	(mm)	(mil)	(mm)	(oz/in,w)	(N/cm,w)	(°F)	(°C)
100 Series PTFE Coated Glass Tape								
100-35	40	1000	3	0.08	30	3.3	-100 to 500	-73 to 260
100-35 PR	40	1000	3	0.08	30	3.3	-100 to 500	-73 to 260
100-55	40	1000	5	0.13	55	6.0	-100 to 500	-73 to 260
100-65	40	1000	6	0.15	40	4.4	-100 to 500	-73 to 260
100-65 PR	40	1000	6	0.15	40	4.4	-100 to 500	-73 to 260
100-85 SW PR	40	1000	8	0.20	40	4.4	-100 to 500	-73 to 260
100-105	40	1000	10	0.25	55	6.0	-100 to 500	-73 to 260
100-3A	40	1000	3	0.08	50+	5.5+	-40 to 275	-40 to 135
100-5A	40	1000	5	0.13	50+	5.5+	-40 to 275	-40 to 135
100-6A	40	1000	6	0.15	50+	5.5+	-40 to 275	-40 to 135
100-10A	40	1000	10	0.25	50+	5.5+	-40 to 275	-40 to 135
Premium Silicone and Acrylic Grades also available								
DXL and GR6 Reinforced PTFE Coated Glass Tape								
DXL-5S	40	1000	5	0.13	40+	4.4+	-100 to 500	-73 to 260
DXL-6S	40	1000	6	0.15	40+	4.4+	-100 to 500	-73 to 260
GR6	40	1000	7	0.17	40+	4.4+	-100 to 500	-73 to 260
100 Series - PTFE Zone Tapes								
100-3 Zone	18	457	3	0.08	50	5.5	-40 to 300	-40 to 149
100-5 Zone	18	457	5	0.13	40	4.4	-40 to 300	-40 to 149
100-6 Zone	18	457	6	0.15	40	4.4	-40 to 300	-40 to 149
130 Series UHMW Polyolefin Tapes								
130-5A	30	762	5	0.13	30+	3.3+	-40 to +225	-40 to 107
130-10A	30	762	10	0.25	50+	5.5+	-40 to +225	-40 to 107
Fiberglass Cloth Tapes								
160-5S HT	48	1219	7.5	0.19	30	3.3	-100 to 500	-73 to 260
Product data is subject to change without notice. Contact your representative for more details.								
, , , , , , , , , , , , , , , , , , ,								

#### **Tapes for Improved Performance & Efficiency**

Green Belting Industries Tapes are engineered for a wide range of manufacturing and end-use purposes. Chemically inert and FDA-compliant, all are designed to withstand extreme temperatures, abrasion, and compression while resisting chemical bonding. Talk to your Green Belting Industries representative to identify the best tape for your process.



#### **PTFE 100 Series Tapes**

Standard PTFE / Glass tapes offer a range of surface textures depending on the size and thickness of the tape and weave. Standard coating is sufficient for most uses. *Silicone or Acrylic Adhesive*.

#### **DXL** Tapes

PTFE / Glass tapes with reinforced engineered coating offer excellent abrasion resistance. *Silicone Adhesive*.





Reinforced PTFE coated Fiberglass offers exceptional release, high, multi-cycle re-usability, and 40% less post mould processing. *Silicone Adhesive*.

#### PTFE Zone Tapes

**GR6 Mould Release** 

Designed for use on impulse sealers, PTFE Zone Tapes feature an adhesive-free PTFE fabric center zone that covers the heat element. The adhesive on the outside edges is *Acrylic*.

#### 130 Series UHMW Polyolefin

High abrasion resistance, low friction, non-stick surface, and an aggressive adhesive, makes UHMW tapes ideal for a wide range of low-heat applications. *Acrylic Adhesive*.



#### **160 Fiberglass**

Engineered for thermal spray, this uncoated Fiberglass tape is well-suited for electrical insulation and a wide range of uses where a very strong tape is needed. *Silicone Adhesive.* 

#### The Green Belting Advantage

At Green Belting Industries, our approach to producing quality performance materials contemplates the vast range of unique applications and possibilities, from routine to complex, and from harsh to extreme. Our line of PTFE, Silicone, and Aramid fabrics meets a diverse range of barrier, release, belting, gasket, and other specialized demands. Customers experience a dramatic increase in performance and process efficiency while reducing turnaround time. Our ever-increasing Knowledge Base of resources offers tips, techniques, and examples to provide support to our customers and end users.











#### **GREEN BELTING INDUSTRIES**

#### Green Belting Industries Ltd. Biscor Ltd. **Corporate Headquarters**

381 Ambassador Drive Mississauga, ON L5T 2J3 Canada T: 905.564.6712 F: 905.564.6709 E: ca-mis-info-gb@ammega.com E: dl-ca-biscor-sales@ammega.com

Unit 1, Broadfield Business Park Pilsworth Road, Heywood OL10 2TA UK T:+44.1706.396690



www.greenbelting.com

As an ISO 9001 Quality Registered Company, our ongoing procedure for quality assurance starts with thorough inspection of all raw materials to ensure compliance with our required specifications. All manufacturing processes are closely monitored, and finished product is tested against our high internal standards and customer specifications. This assures that we always deliver consistently high quality products.

#### Strength and Performance - Fabrics, Belts, Tapes, and more...

Green Belting Industries offers the highest quality PTFE and Silicone coated fabrics, tapes, belts, and compounds for a multitude of applications ranging from baking sheets to thermal spray masking for jet engine turbine blades. Kev performance attributes:

- Resistance to extreme temperatures and abrasion
- Non-stick surfaces resist adhesion and chemical bonding
- Excellent strength and dimensional stability
- Engineered adhesives provide exceptional grip and easy, clean release (leave no residue)
- Excellent heat transfer and dielectric properties (depending on material)
- Food-contact approved (chemically inert, nontoxic).

#### **Research and Testing**

Our goal is to provide the fabric, tape, or belt you need, when you need it. Our R & D teams are constantly testing the performance of existing products and researching new and different substrates, coating resins and manufacturing technologies in response to new and emerging applications. We are always striving to get better at what we do. Whether it's helping you find a resolution to a tough technical problem or simply getting your order out on time, Green Belting Industries is committed to providing you the most costeffective, best performing and widest choice of engineered performance materials in the marketplace.

#### Manufacturing Excellence

As an ISO 9001 Quality Registered company, Green Belting Industries strives for continuous improvement and is committed to providing products and service of the highest guality. We draw from over 50 years of manufacturing excellence to design and build our own specialized equipment that delivers the highest quality engineered fabrics, tapes, & belts to the marketplace. This emphasis on quality and performance enables our customers to benefit from enhanced production efficiencies, higher output quality, and time and cost savings.

#### **Friendly Expert Service**

We know that we can only be as good as our people so Green Belting Industries thrives on individual initiative, teamwork, and superior service to our customers. Our knowledgeable Customer Service teams regularly receive hands-on, cross-departmental training which includes assembling product in one of the fabrication facilities. This approach has made our associates among the most industry-savvy in the business. With Customer Service teams based in all of our operating countries (Canada and the UK), beginning with your initial contact Green Belting Industries is with you every step of the way.

#### **Efficient Global Distribution**

With two plant and office locations in Canada and the UK, Green Belting Industries customers benefit from quick and efficient global distribution. Bringing the resources of these locations together translates to distinct advantages for our customers, including manufacturing and fabricating efficiencies and improved inventory management, delivery, and customer service. All facilities are within major population centers, assuring that the majority of our customers will experience fast product delivery.

www.greenbelting.com