

Fluorofab® & Silicone Fabrics

ENERGY COMPOSITES FOOD PACKAGING FLAT BREADS LAMINATION SURGICAL AUTOMOTIVE PHARMA
WELDING AVIATION TORTILLAS MEDICAL BLEEDER CLOTH BAKING PEEL-PLY THERMAL SPRAY POLYFILM
ABRASIVES CONSTRUCTION WOOD PRODUCTS FORM-FILL-SEAL SOLAR PANELS ELECTRONICS TEXTILES



PTFE GROUP OF COMPANIES



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High Tolerances for Demanding Environments

When coated high-performance fabrics are needed for your machinery, process, or product, you can depend on PTFE Group of Companies for our complete line of Fluorofab® Fabrics. Constructed with the finest quality materials and technology, all Fluorofab® Fabrics offer exceptional release properties (non-stick), strength, dimensional stability, and resistance to extreme temperatures, chemical bonding, abrasion and compression. All offer industry-leading durability, multi-cycle re-usability, and many are FDA compliant. We offer a wide range of thicknesses, surface textures, weaves, porosities, and dielectric properties for optimal performance across a wide range of end-use applications.

Some common end-use applications...



Packaging - Whether it's for the packaging of food, toys, pharma, or surgical products, or if the process involves form/fill/seal, heat-shrink, or blister pack machinery, Fluorofab® Fabrics offer protective coverings for heat-sealing elements. They allow rapid transfer of heat while protecting the heat elements from build-up of melted packaging material.

Depending on the type of machinery and process, a variety of performance fabrics may be used. Some of the more common applications use Fluorofab® 100-3, and DXL 3.



Baking and Grilling - Fluorofab® baking tray liners offer a safe way to improve baking efficiency, both in commercial and household settings. The non-stick liners allow clean and easy removal of cooked products while preventing adhesion and build-up of baking ingredients. The result is faster turnover time and reduced clean-up. The PTFE coating withstands the high temperatures of baking ovens (up to 287°C / 550°F).

Different product applications, ingredients, abrasiveness, temperatures, as well as expectations for longevity, and turnaround time call for different thicknesses and grades of Fluorofab® fabric, from 100-3, to 100-10.



Composites/Peel-Ply - Fluorofab® Fabrics fill a number of roles within the composite industry, from use as peel-ply and porous cloth, to release film. For peel-ply, thinner (Porous and Mechanical) grades are generally preferred for their conformability, breath-ability, texture, and strength. The porous nature of the thinner fabrics allows gasses to escape during the curing process. Different surface textures, from smooth to coarse, can be selected to control the desired surface texture on the finished product. Due to the use of high-strength substrates, even thinner Fluorofab® peel-ply fabrics can be removed easily, and in one piece, once the composite product has cured.

Fabrics typically used in peel/ply and release applications include Fluorofab® 100-3, 100-8 SW PR, and 100-10.



Flat-bread Belt and Platen Cover - The baking of tortillas, and flat breads often involves abrasive flour and grain ingredients, oils, high heat, and pressure. The belts and platen covers used in this machinery must therefore be able to resist these elements and forces. FDA compliant Fluorofab® belts and press platen covers endure the high baking temperatures abrasiveness while allowing clean release and removal of finished products and debris. Fluorofab® fabrics also resist penetration of cooking oils and resist bonding of other ingredients.

Fluorofab® 100-10 and DXL 10 PTFE Coated Glass Fabrics perform well in these environments.



Lamination Sheet and Belts - Heat transfer and release properties of Fluorofab® fabrics make them well-suited for use in lamination equipment where high heat and pressure is used to bond lamination layers. For example, solar panel manufacturing involves laminating solar cells between EVA (ethylene vinyl acetate), tempered glass and PV (polyvinyl). PTFE coated fabrics are used both as belting, and as protective coverings for the lamination press surfaces.

Combinations of Fluorofab® DXL 4, DXL 5, 100-5, 100-6, or 100-10 are commonly used as belts and coverings.

Fluorofab® PTFE/Glass Fabrics offer a slippery-smooth surface texture that ranges in texture from extremely smooth to coarse weave. There are 10 different Fluorofab® fabric categories, and fabric thickness range from 3 mil to 27 mil.

Silicone/Glass Fabrics offer more flexibility, resist creasing, and have a rubbery non-stick surface. Silicone fabrics can be coated on one or both sides. Fabric thicknesses range from 7 mil to 35 mil.

PTFE/Aramid Fabrics offer a surface texture similar to that of Fluorofab® PTFE/Glass, but with an aramid substrate that is stronger and more dimensionally stable than fiberglass. It is also more resistant to degradation from moisture exposure. There are 3 thicknesses of PTFE/Aramid fabric ranging from 5 mil to 17 mil.

Fabric Categories



Standard - High strength PTFE/Glass offers excellent release properties for use in a wide range of applications from cooking and baking to composites/peel-ply .



Black - Ideal for high-heat environments, offers enhanced thermal-conductive coating for greater heat transfer, and a protective surface coating that increases its resistance to ultra-violet exposure from UV drying processes.



Premium - Ultra smooth PTFE/glass fabric offers exceptional release properties with superior strength and excellent heat conductivity. This fabric is used for lamination belting, rubber extrusion, and more.



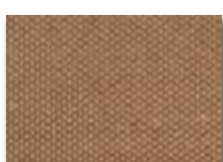
Fluorofab DXL™ - Specially reinforced PTFE increases resistance to abrasion and wear. DXL is ideal for high temperatures and abrasive uses such as window frame welding, heat-sealing, and pressing/ conveying of grainy food products.



Mechanical - Lighter PTFE coating results in a more textured surface, revealing the geometry of the fiberglass substrate. These fabrics are often used as peel-ply in composites where more surface texture is desired.



Porous - Strong for their thickness, the gas permeable nature of these fabrics make them ideal for use as 'peel-ply' in the manufacture of composites. High tensile strength and excellent release properties allow for easy, one-piece removal.



Tear-Resistant - Due to their high resistance to abrasion and tearing, these fabrics are commonly used in a wide range of belting applications.



Specialty - Favoured for sealing applications, these fabrics have a very smooth surface texture and enhanced release properties.



Antistatic Black - The anti-static/conductive properties of this fabric also make it ideal for powder coating, electronics applications, and lamination belting.



PTFE/Aramid - Our strongest PTFE coated fabric (stronger than steel by weight) offers greater resistance to cuts, flex fatigue, and shrinkage, and is better suited for more demanding, high-moisture applications.



Silicone/Glass - Tough, non-stick silicone coating and high-strength fiberglass, results in a fabric that performs well in a number of demanding environments, from cooking / baking to thermal spray masking. Available in white or red.

Physical Properties

Product	Maximum Width		Nominal Thickness		Nominal Weight	
	(in)	(mm)	(mil)	(mm)	(oz/yd ²)	(g/m ²)
Standard						
100-3	60	1500	3	0.08	4	136
100-5	60	1500	5	0.13	8	258
100-6	60	1500	6	0.15	9	298
100-8	40	1000	8	0.20	12	417
100-8 SW	40	1000	8	0.20	10	332
100-10	60	1500	10	0.25	14	488
100-10 SW	89	2200	9	0.23	10	332
100-14	89	2200	14	0.36	17	576
100-20	38	950	20	0.51	27	902
100-27	50	1270	27	0.69	31	1058
100-27 SP50	89	2200	27	0.69	32	1085
Black						
100-3 BL	40	1000	3	0.08	4	136
100-5 BL	40	1000	5	0.13	8	258
100-6 BL	40	1000	6	0.15	9	298
Premium						
100-3 PR	60	1500	3	0.08	4	146
100-5 PR	60	1500	6	0.15	8	275
100-6 PR	60	1500	6	0.15	9	309
100-8 SW PR	40	1000	8	0.20	11	387
100-10 PR	60	1500	10	0.25	15	515
100-10 PR 128	89	2200	10	0.25	15	492
100-12 PR SP	89	2200	12	0.30	18	593
100-14 PR	89	2200	14	0.36	22	732
100-20 PR	60	1500	20	0.51	31	1051
100-27 SP50 PR	89	2200	27	0.69	38	1289
Fluorofab DXL™						
DXL 3	40	1000	3	0.08	4	136
DXL 4	40	1000	4	0.10	6	207
DXL 5	40	1000	5	0.13	8	258
DXL 6	40	1000	6	0.15	9	298
DXL 10	60	1500	10	0.25	15	522
DXL 12	38	954	12	0.30	18	610
Mechanical						
100-3 ME	40	1000	3	0.08	3	109
100-5 ME	40	1000	5	0.13	6	203
100-6 ME	40	1000	6	0.15	9	298
100-10 ME	60	1500	10	0.25	14	488
100-14 ME	89	2200	14	0.36	17	576
Porous						
100-3 POR	60	1500	3	0.08	2	61
100-5 POR	40	1000	5	0.13	3	109
100-8 POR	60	1500	8	0.20	8	254
100-10 POR	40	1000	8	0.20	7	237
100-22 POR	60	1500	22	0.56	22	729
Tear-Resistant						
100-3 TR	40	1000	3	0.08	4	139
100-4 TR	36	954	4	0.10	6	197
100-5 TR	40	1000	5	0.13	8	254
100-6 TR	40	1000	6	0.15	9	298
100-10 TR	89	2200	10	0.25	14	488
Specialty						
100-5 SP05	40	1000	5	0.13	5	153
100-5 SP85	40	1000	5	0.13	8	258
100-10 SP10	60	1500	10	0.25	14	488
Antistatic Black						
100-3 AS	40	1000	3	0.08	4	136
100-5 AS	40	1000	5	0.13	8	258
100-10 AS	89	2200	10	0.25	14	482
100-14 AS	89	2200	14	0.36	21	699
PTFE Coated Aramid Fabrics						
KEV 5 PR	50	1250	5	0.13	4	146
KEV 10	50	1250	10	0.25	12	404
KEV 17	63	1600	17	0.43	18	610
Silicone Coated Glass						
S/W-7 SP1	40	1000	7	0.18	9	288
S/W-10	40	1000	10	0.25	10	342
S/W-23 COSO*	38	954	23	0.58	20	675
S/R-23 COSO*	38	954	23	0.58	20	675
S/W-25	38	954	25	0.64	27	909
S/R-25	38	954	25	0.64	27	909
S/W-32 COSO*	38	954	32	0.81	30	1031
S/W-35	38	954	35	0.89	33	1131

Data is subject to change without notice. Contact your representative for more details
 Fluorofab DXL™ is a trademark of Green Belting Industries Limited
 *COSO = Coated One Side Only

The PTFE Group Advantage

At PTFE Group, 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 Fluorofab®, 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.



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

PTFE Group offers the highest quality PTFE and Silicone coated fabrics, tapes, belts, pre-cuts, and nested kits for a multitude of applications ranging from baking sheets to thermal spray masking for jet engine turbine blades.

Key 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, PTFE Group is committed to providing you the most cost-effective, best performing and widest choice of engineered performance materials in the marketplace.



Manufacturing Excellence

As an ISO 9001 Quality Registered company, PTFE Group strives for continuous improvement and is committed to providing products and service of the highest quality. 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 PTFE Group 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 four of our operating countries (Canada, USA, Italy, and the UK), beginning with your initial contact, PTFE Group is with you every step of the way.



Efficient Global Distribution

With four plant and office locations in Canada, USA, Italy, and the UK, PTFE Group customers benefit from quick and efficient global distribution. Bringing the resources of these four locations together translates to distinct advantages for our customers, including manufacturing and fabricating efficiencies and improved inventory management, delivery, and customer service. All four facilities are within major population centers, assuring that the majority of our customers will experience product delivery within three to four days from the time of shipping.

Canada

green belting industries

381 Ambassador Drive
Mississauga, ON L5T 2J3
Canada
T: 905-564-6712
F: 905-564-6709
E: custserv@greenbelting.com
www.greenbelting.com

Italy

mapelli

Via del Lavoro 43
20060 Vignate, MI
Italy
T: +39.02.90967258
F: +39.02.90967236
E: info@mapelli-ptfe.com
www.mapelli-ptfe.com

UK

biscor

Unit 1, Broadfield Business Park
Pilsworth Road,
Heywood OL10 2TA UK
T: 0800 240 4476
F: 01706 396691
E: info@biscor.com
www.biscor.com

USA

greenbelt industries

45 Comet Street
Buffalo, New York 14216
USA
T: 1-800-668-1114
F: 905-564-6709
E: custserv@greenbelting.com
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.