

Innovative roll-up and sunroof shades for sunlight management.

Maximizing efficiency in applications with blackout adhesive TPU Films.

Thermoplastic polyurethanes (TPU) are high-tech materials with a unique combination of versatile properties

TPU bridges the gap between hard thermoplastics and rubber. It can be deformed under tensile load, yet still return to its original shape. Thanks to its molecular structure, TPU can be stretched when heated, then melted and molded repeatedly.

These soft and elastic films are easily laminated to fabric, manage light, save weight, and decrease volume. The portfolio of Covestro includes a variety of Dureflex® and Platilon® TPU Film grades. With our multilayer blown film capability, we can combine the attributes of different types of TPU with other polymer films.



Automotive

Adhesive film solutions for convertible roofs, blinds, seat covers and further interior applications



Buildings

Adhesive film solutions add value for different types of blinds, awnings and curtains



Textiles

Adhesive film solutions for sun and light protection, such as beach flags

Shading films for blinds, awnings and curtains

Covestro provides a range of TPU Film solutions for shading applications, designed to meet specific requirements. These films offer excellent lamination properties and can be used to bond different textiles, enhancing surface properties.



- Achieves darkening and dim-out effects with customized shading layers
- Available in both flame-retardant and non-flame-retardant options
- Enhances surface properties with soft and elastic films
- Supports weight and volume reduction designs







Roll-up shades for sunroofs

Our Dureflex® and Platilon® TPU Films are ideal for textile laminates used in sun protection for <u>automotive sunroofs</u> and moonroofs. These films provide effective sun blockage and are easily integrated into compact spaces.

Key benefits

- Highly flexible for roll-up blackout applications in panoramic roofs
- Lightweight for large-surface sunshades
- Available in both flame-retardant and non-flame-retardant options



Covestro shading films portfolio

TPU Films for blinds, awnings and curtains

Grade	Film Type	Thickness	TMA Softening Temperature	Color	Key Facts	Processability
Platilon® BO 9045	TPU ester	90 µm	150 °C	white/black	blackout, no color deviation of textile	thermo lamination
Platilon® BO 9090X	TPU ester	80 µm	135 °C	white/black/white	blackout, no color deviation of textile	thermo lamination
Platilon® U 2152 AUX	TPU ester	40 μm	150 °C	white	ambient lighting, dim out effect	adhesive and thermo lamination
Platilon® U 2182 AKX	TPU ester	40 µm	150 °C	black	dim out effect	adhesive and thermo lamination

TPU Films for roll-up shades

Grade	Film Type	Thickness	TMA Softening Temperature	Color	Key Facts	Processability
Dureflex® PS 8010	TPU ester	25-75 μm	142 °C	black	dim out to blackout	adhesive and thermo lamination
Platilon® U 4180 DK	TPU ester	25–75 μm	155 °C	black	dim out to blackout	adhesive and thermo lamination
Platilon® BO 9029	TPU ester	50 μm	150 °C	black/grey black/white	black out, top layer	adhesive lamination

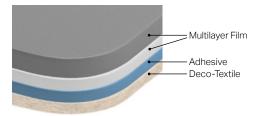
TPU Films with flame-retardant properties/additives for roll-up shades

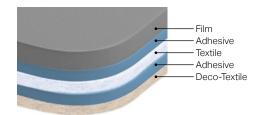
Grade	Film Type	Thickness	TMA Softening Temperature	Color	Key Facts	Processability
Platilon® U 4281 AF	TPU ether	45 μm	155 °C	black	matt finish, dim out effect	adhesive lamination
Platilon [®] BO 9141-T	TPU ester	50 μm	125°C	black/grey	soft, flexible, faster lamination	thermo lamination at lower temperature possible
Platilon® U 2182 AFX 1-T	TPU ester	25 μm	150-175°C	black	thin, dim out effect, fexible	thermo and adhesive lamination

Customized solutions for your purposes

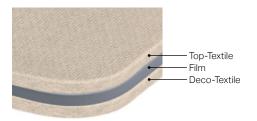
At Covestro, we offer customized solutions for your specific applications, including <u>blackout films for the automotive and construction sectors</u>. We provide tailor-made, flame-retardant TPU Films based on your requirements. With our flexible and innovative approach, we collaborate to deliver high-value, customized film solutions.

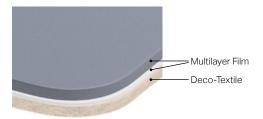
Adhesive lamination





Thermo lamination









Scan to learn more about advanced blackout films for sunroofs & moonroofs



Covestro Deutschland AG Kaiser-Wilhelm-Allee 60 51373 Leverkusen Germany

films.covestro.com
films@covestro.com

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