

Melinex®

The industry standard for facestock and overlamination



Melinex[®] PET films

**The industry standard
for durable label
facestock and over
lamination films**

The Melinex[®] range of films offers enhanced durability, chemical resistance, thermal stability and stiffness making it the ideal choice of facestock films for diverse markets such as automotive, electronics and pharmaceuticals.



Why DuPont Teijin Films?

Melinex® and Mylar® PET films from DuPont Teijin Films are the industry standard facestock substrates for durable labels in applications such as automotive, electronics and pharmaceuticals.

From the invention and commercialisation of biaxially orientated PET films by our company in the 1950s, the unique properties of Melinex® and Mylar® have proved their worth to the labelling industry in countless applications and are now helping to address new global challenges such as the transition to electric vehicles or the adoption of circular economy principles.

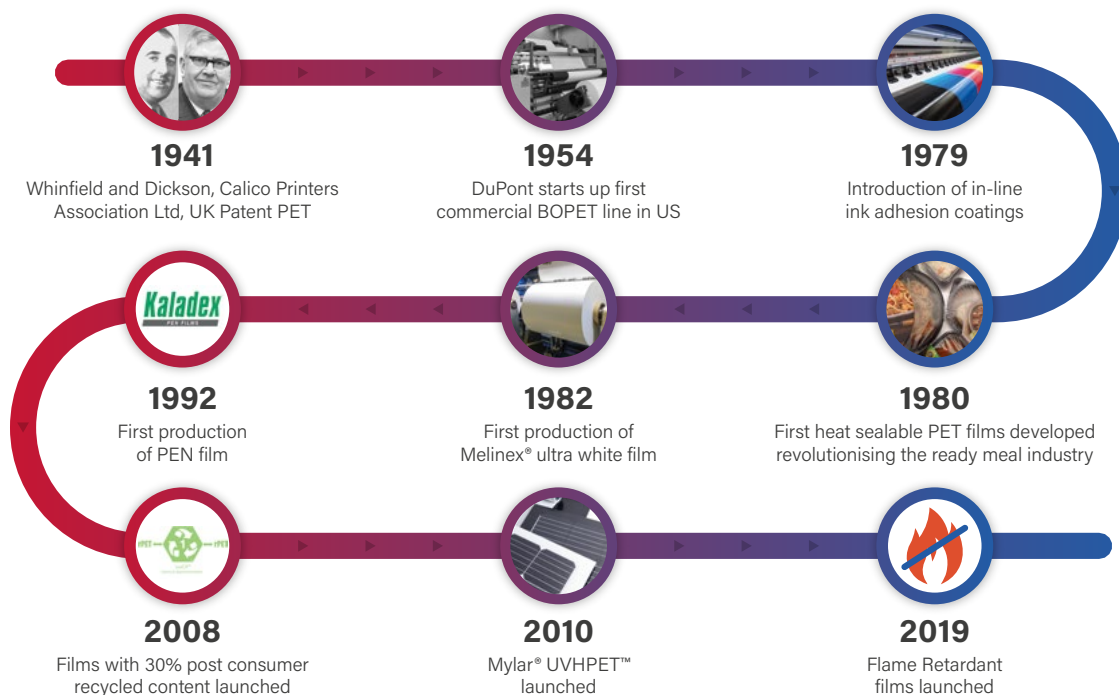
We are committed to the global label industry and pride ourselves on our global reach with manufacturing sites in Europe, US and Asia. This is combined with our regional responsiveness, focus on short leadtimes and low minimum order quantities.

As the world's leading supplier of differentiated PET films we draw on our experience in a diverse range of industries to continually enhance our product offering to the labels industry, whether it is enhanced weatherability based on our experience in the solar industry, decades of experience supplying demanding markets such as electrical insulation and automotive, or world leading levels of product stewardship demanded by medical and packaging markets.

Rich Heritage of Innovation

For over 60 years DuPont Teijin Films has provided leading edge innovative film solutions for a diverse range of industries.

Continuously developing products which change the way we live and looking for new ways to meet the demands of a changing world.



The Benefits of Mylar® and Melinex® Facestock films

Durability

- PET is resistant to a wide range of chemicals making it excellent for highly demanding applications.
- High levels of thermal and dimensional stability enabling use at elevated temperatures.
- Building on our experience in the solar industry, the UVHPET™ range offers a viable alternative to PVC in outdoor applications.

Ease of processing

- Excellent stiffness lending itself to reliable high speed labelling processes.
- Biaxial orientation gives good tensile properties and tear resistance.

Performance

- Electrical properties make PET ideal for the new challenges in batteries and electric vehicles VTM-0 and VTM-2 options available for the most demanding applications.
- Excellent printability and appearance of finished label – clear, white, black, matte, gloss options available.

Sustainability

- PET is the most recycled plastic on the planet, and DuPont Teijin Films were the pioneers in the use of recycled content in our film range.
- Halogen free enabling safe and effective end of life outcomes.

A Focus on Sustainability



PET - A Sustainable Building Block

- Low carbon footprint and water usage compared to alternative materials
- Commercially available with high quality post consumer recycled content
- Most recycled plastic globally through best in class high yield recycling processes
- Excellent performance/weight ratio minimising plastic use
- Halogen free with zero hazardous waste products

Improving the sustainability of our operations and the products we supply is one of our core values and forms an integral part of our company vision. Working with our customers and other stakeholders we aim to develop solutions which reduce overall emissions and enhance the circularity of the end markets we serve.

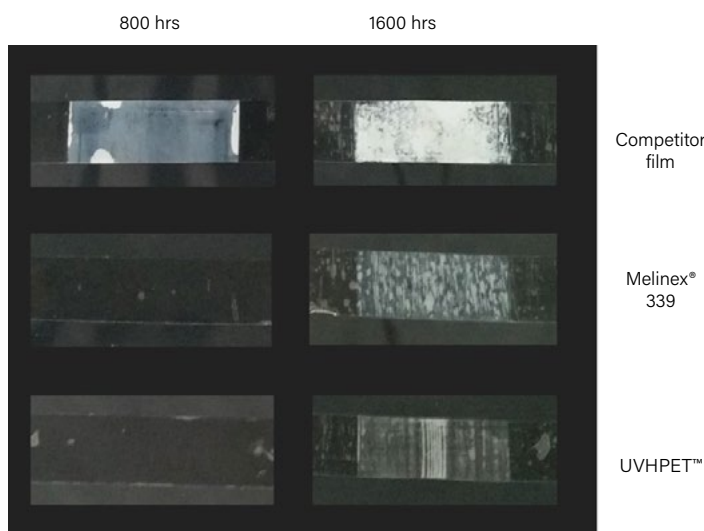
Sustainability starts at our manufacturing plants, and we are proud that our ongoing commitment to sustainability has been recognized with a gold rating from EcoVadis, ranking us in the top 6% of comparable companies in our industry. Our environmental policies form an integral part of our ISO 14001 accreditation, and we are signatories to Operation Clean Sweep™ which confirms our commitment to eliminate the leakage of plastic from our manufacturing sites.

DuPont Teijin Films were the pioneer of the use of recycled content in polyester films, with well over a decade of experience of supplying rPET films into industries as diverse as packaging and photovoltaics.

We have a range of label facestock films available with high levels of post consumer recycled content, and are actively involved in a number of research products proving the viability of future recycling processes for liner, matrix and facestock material.

We are also developing bio based options with films available with 30% non-oil content and ongoing developments in the pipeline to develop 100% bio derived products.

Durability in Outdoor Applications



PET films are widely used in the labels industry, but when it comes to durability not all films offer the same level of performance as Melinex®.

Melinex® grades have been proven to significantly outperform competitive white grades in the UL 969 durability test, resulting in significantly less “chalking” as can be seen in Figure 1.

Even greater durability is possible with our UVHPET™ range, providing a halogen free alternative to PVC in outdoor applications with excellent UV barrier and hydrolysis resistance.

Clear tape placed on dark card to show residue removed from surface of film after UV exposure in weatherometer (0.5W/m² irradiance at 340nm, ISO 4892/2)

Extensive Range of Films for Labels Applications

DuPont Teijin Films are committed to the global label industry, and are proud to offer one of the most extensive grade ranges in the industry. Please contact us to learn more about variants of these products with high levels of recycled content or bio based alternatives.

| Film Type | Thickness (Micron) | Properties |
|----------------|--------------------|---|
| Melinex® 313 | 12-23 | Clear film, 1 side adhesion pretreat |
| Melinex® 329 | 36-175 | High opacity, high gloss, pearly white, untreated |
| Melinex® 329F | 36-125 | Variant of Melinex® 329 for low temperature food contact applications |
| Melinex® 339 | 36-250 | High opacity, high gloss, pearly white, 2 side adhesion pretreat |
| Melinex® 339F | 36-125 | Variant of Melinex® 339 for low temperature food contact applications |
| Melinex® 339LS | 50-125 | Variant of Melinex® 339 offering lower shrinkage properties than standard film. Ideal for high temperature applications |
| Melinex® 384 | 50 | Translucent matt film (c.40% gloss) for reverse metallisation to give aluminium effect labels |
| Melinex® 401 | 50-100 | High clarity film with a 1 side slip treatment for good handling properties |
| Melinex® 405 | 23-96 | High clarity film with very good handling properties, 1 side adhesion pretreat |
| Melinex® 406 | 23-96 | High clarity film with very good handling properties, 2 side adhesion pretreat |
| Melinex® 418UV | 23-50 | Clear film with enhanced UV block and outdoor durability. One side adhesion pretreat |
| Melinex® 427D | 50 | Glossy opaque black film, untreated |
| Melinex® 475 | 50 | Translucent white film, 2 side adhesion pretreat |
| Melinex® 506 | 75-175 | Optically clear film, 2 side adhesion pretreat |
| Melinex® 721 | 50 | Optically clear film, 1 side adhesion pretreat with superior adhesion to UV inks |
| Melinex® 723 | 36-50 | Optically clear film, 2 side adhesion pretreat with superior adhesion to UV inks |
| Melinex® FR241 | 12-50 | Clear film with VTM-0 Fire Retardance. One side adhesion pretreat |

www.dupontteijinfilms.com
europe.films@dupont.com / usa.films@dupont.com



United Kingdom
DuPont Teijin Films U.K. Ltd
The Wilton Centre
Redcar
TS10 4RF

Continental Europe
DuPont Teijin Films Luxembourg S.A.
BP-1681
L-1016
Luxembourg

United States
DuPont Teijin Films U.S.
Limited Partnership
3600 Discovery Drive
Chester, VA 23836 USA

DuPont Teijin Films China Limited
Room 702, 7th Floor, China Life Center,
Tower A, One Harbour Gate,
No. 18 Hung Luen Road, Hung Hom,
Kowloon Hong Kong

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentations. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge and experience becomes available. Since we cannot anticipate all variations in actual end-use conditions, DuPont Teijin Films makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent right. © 2023 DuPont Teijin Films. All rights reserved, all trademarks and service marks denoted with "™" or "®" are owned by DuPont Teijin Films or associated affiliates unless otherwise noted. Nothing contained herein shall be construed as a representation that any recommendations, use or resale of the product or process described herein is permitted and complies with the rules or regulations of any countries, regions, localities etc or does not infringe upon patents or other intellectual property rights of third parties. Melinex®, Mylar® and Kaladex® are registered trademarks of DuPont Teijin Films U.S. Limited Partnership.