



# Product Information Platilon® M

## Breathable Elastomer Films

### Typical Properties

Basic Material			Polyurethane			Polyether-Blockamide
Grade			2202 AC	2204 AC	U073	M2234
Property	Standard/Procedure	Unit				
Density	calculated	g/cm <sup>3</sup>	1,25 <sup>1)</sup>	1,26 <sup>1)</sup>	1,12 <sup>1)</sup>	1,05 <sup>1)</sup>
Softening range	TMA Onset – Endset internal method	°C	155 - 180	160 - 180	160 - 200	165 - 175
Hardness	DIN 7619-1, DIN EN ISO 868 or ASTM D2240	Shore A	82 <sup>2)</sup>	90 <sup>2)</sup>	87 <sup>2)</sup>	90 <sup>2)</sup>
Tensile stress at break	DIN EN ISO 527	MPa	25 <sup>3)</sup>	35 <sup>3)</sup>	55 <sup>3)</sup>	40 <sup>3)</sup>
Tensile strain at break	DIN EN ISO 527	%	650 <sup>3)</sup>	500 <sup>3)</sup>	600 <sup>3)</sup>	650 <sup>3)</sup>
Water vapour transmission rate	DIN 53122 38°C/90% r.H.	g/(m <sup>2</sup> *d)	5000 <sup>4)</sup>	3500 <sup>4)</sup>	2000 <sup>4)</sup>	5500 <sup>4)</sup>
Dry cleaning	empirical	-	yes	yes	yes	yes
Laundry stability	empirical	°C	≤ 95	≤ 95	≤ 95	≤ 60
Carrier Film (PE)			yes	yes <sup>5)</sup>	yes	no

These data are provided as general information only. They are approximate values and not intended for use in preparing specifications! Please contact us before writing specifications on this product.

- 1) calculated based on information by raw material suppliers and the film's composition
- 2) Based on data for the TPU resins provided by their suppliers and based on supplier's standard/procedure, not measured for film
- 3) Blown films may be orientated to a different degree depending on film thickness. The above mentioned values have been measured and averaged over a long period. The average values from single productions can vary up to 30 % subject to thickness, width and orientation.
- 4) Values were determined for 15 µm film. Average values for specific orders might vary from the data indications given above by +/- 20 %.
- 5) Thickness ≥ 25 µm available without PE-layer.

### Film Formats

Thickness	(µm)	15 - 25
Width	(mm)	1600 -2000 (other width upon request)
Colours		natural, white (other colours upon request)

Our "General Conditions of Sale" also apply.

## Product Description

Platilon® M is the trade name for breathable elastomer films made by Epurex Films. The range currently comprises films based on thermoplastic polyether polyurethanes and polyether block amides.

## Properties

Platilon® M films are known for the following properties:

- high flexibility/ elasticity over a wide temperature range down to -50°C
- breathable: wind tight, waterproof, but high water vapour transmission rate
- low noise
- soft haptic
- good resistance to laundering and dry cleaning
- good chemical and mechanical resistance
- free of plasticisers and solvents
- good adhesion to many adhesives and reaction foams

## Applications

Their broad range of properties make Platilon® M films particularly suitable for use as functional layer in laminates for:

- sportswear, leisure wear and rainwear garments
- workplace and safety apparel
- shoes and gloves
- medical devices such as wound dressings, mattress covers

## Processing

Suitable processes for lamination are:

- flame bonding
- back-foaming
- adhesive lamination by using hot melt, powders and pastes, bonding nets and nonwovens as well as spray adhesives.

Processing methods to apply adhesives to Platilon® M include:

- foam coating
- spray coating
- powder dot
- melt printing
- screen printing

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1) Please see the "Guidance on Use of Covestro Products in a Medical Application" document. For more information on Covestro products in Medical Applications, please request from your sales support contact our Guidance document: GUIDANCE ON USE OF COVESTRO PRODUCTS IN A MEDICAL APPLICATION.

