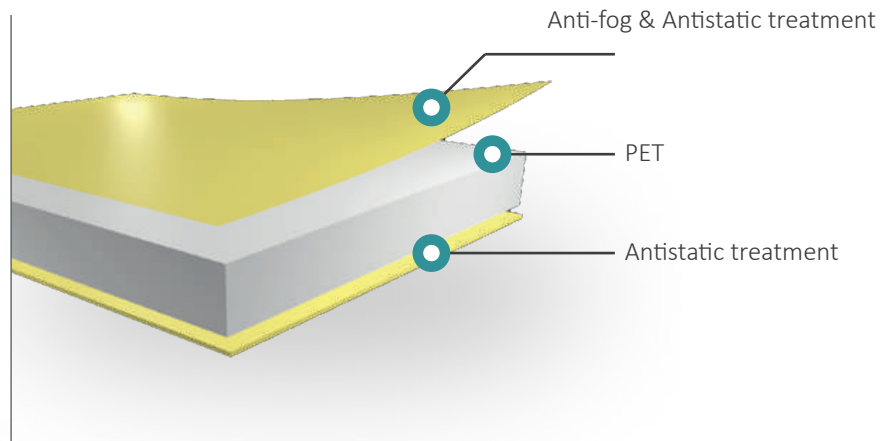


# Lumirror® 45.11

## Application

- Flexible printed circuits
- Optical applications
  - Montage
- Visors & Protection Masks



CLEAR SYMMETRICAL MICROROUGH  
ANTISTATIC COATED PET FILM

## Benefits

- Antistatic properties with anti-dust effect on both sides
- Anti-fog properties on one side
- High dimensional stability
- Excellent flatness
- Good machinability due to micro-roughness on both sides

Toray Films Europe SAS,  
Place d'Arménie,  
01700 Saint-Maurice-de-Beynost, FRANCE

To access Toray Films Europe's **certifications list**, please visit  
[www.torayfilms.eu/en/certifications](http://www.torayfilms.eu/en/certifications)

## Typical Values *(These values do not constitute binding specifications)*

Properties	Test Method	Unit	96 µm	125 µm	145 µm	165 µm	175 µm
<b>YIELD</b>							
Unit Weight		g/m <sup>2</sup>	134.4	175.0	203.0	231.0	245.0
Area Yield		m <sup>2</sup> /kg	7.4	5.7	4.9.0	4.4	4.1
<b>MECHANICAL</b>							
Tensile Strength MD	ASTM D 882	daN/mm <sup>2</sup>	20	21	20	20	21
Elongation at Break MD		%	135	140	140	140	145
<b>THERMAL</b>							
Shrinkage 150°C 30mn MD	Internal Method	%	1.4	1.5	1.6	1.56	1.6
Shrinkage 150°C 30mn TD			0.3	0.5	0.6	0.6	0.7
<b>OPTICAL</b>							
Total Light Transmission	ASTM D1003	%	89	89	89	89	89
Gardner Haze			1.7	1.7	1.8	1.9	2.1
<b>SURFACE</b>							
Roughness Ra	Internal Method	nm	14	12	13	14	13
Roughness Rz			190	160	190	200	190
Half time decay			s	2.0	2.0	2.0	2.0

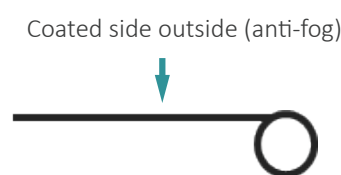
## Regulation

Lumirror® 45.11 does **not** comply with European legal requirements of food contact applications due to its specific treatment. For Toray's certification concerning specific applications with each product, please refer to the 'Declaration of Compliance'.

## Presentation of the rolls

**Roll packaging:** The rolls are suspended on standard paper core with internal diameter of 152.8mm. For all presentation, minimum roll width = 340mm and maximum roll width = 3400mm.

**Returnable packaging:** Wooden flanges, plastic flanges and pallets are returnable.



## Please contact us for...

- Any other presentation (width, length, core)
- Process for returnable packaging
- Any other information about typical values, measuring conditions, tolerances, deliveries...

Lumirror® is a registered trademark of Toray Films Europe SAS - TFE March 2023

**DISCLAIMER:** This leaflet is provided for informational purpose only and is not binding, nor can it constitute specifications to the buyer. The information contained in this document is based on numerous tests and trials we have carried out in our laboratories. Deviations from the results thus obtained can therefore be experienced depending on the actual conditions of use. This document does not provide any guarantee with regard to compliance of our product with the typical values indicated, nor does it provide any guarantee as the suitability of our products for any particular use.