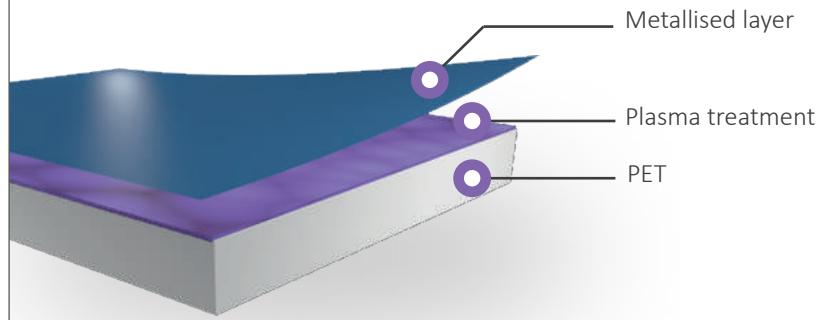


# MA Claryl® MA-O

## Application

- Flexible packaging requiring barrier properties and improved metal adhesion



METALLISED PET FILM WITH  
ENHANCED METAL ADHESION

## Benefits

- Opaque gas barrier film
- Improved metal adhesion
- High protection against natural and UV light
- High thermal stability and good machinability

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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	12 µm
<b>YIELD</b>			
Unit Weight		g/m <sup>2</sup>	16.8
Area Yield		m <sup>2</sup> /kg	59.5
<b>MECHANICAL</b>			
Tensile Strength MD	ASTM D 882	daN/mm <sup>2</sup>	19
Tensile Strength TD			20
Elongation at Break MD	ASTM D 882	%	110
Elongation at Break TD			110
<b>THERMAL</b>			
Shrinkage 150°C 30mn MD	Internal Method	%	1.6
Shrinkage 150°C 30mn TD			0.4
<b>OPTICAL</b>			
Optical density			2.2
<b>BARRIER</b>			
OTR. 50% HR. 23°C	ASTM F1927	cm <sup>3</sup> /m <sup>2</sup> per day	0.4
MVTR. 90% HR. 38°C	ASTM F1249	g/m <sup>2</sup> per day	1.0
<b>SURFACE</b>			
Metal adhesion / Heat seal test	Internal Method	N/38mm	2

## Regulation

Claryl® MA and MA-O comply with European applicable requirements for food contact applications. 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 = 2100mm.

**Returnable packaging:** Wooden flanges, plastic flanges and pallets are returnable. The metallised side is identified on the labels.



## Please contact us for...

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

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