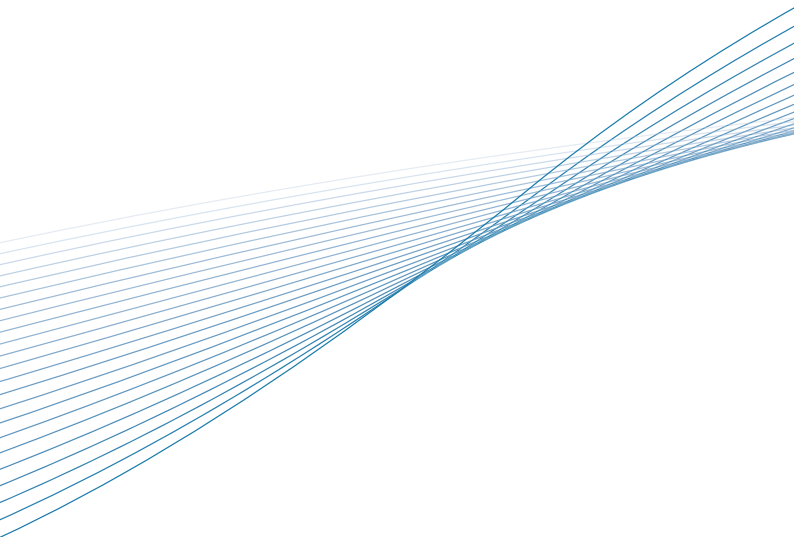
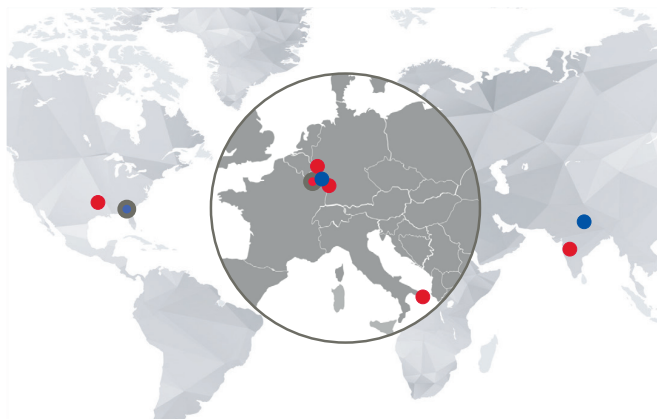


Product Portfolio Overview In Mould Labeling Films



ABOUT US

Global footprint



- Production Sites
- Production Site with Technology Centre
- Regional Headquarter
- Regional Headquarter & Production Site with Technology Centre

Our films are produced in plants that are certified

ISO 9001

BRCGS Packaging Materials.

ISO 45001 for safety and health management system

ISO 14001 for environment

ISO 50001 for energy

ISCC+ for the Re Range

Who we are

Jindal Films is an industry leader in the development and manufacture of biaxially oriented polypropylene (BOPP) and polyethylene (BOPE) films designed for flexible packaging labeling, tobacco and technical applications. The Jindal Films product range includes multi-layer clear, white opaque, metalized and water-based coated films.

Packaging for our planet

Jindal Films offers a wide range of films designed for sustainable flexible packaging and labeling applications, continuously developing the next generation products that are required for the environmentally friendly and sustainable world.

Label Films

Our exceptional label solutions have been carefully tailored and optimized over time to meet the high performance and cost-effective needs of our customers.

Treofan IML:

With over 40 years of expertise, Jindal Films is the leader and continuously developing state-of-the-art film solutions for IML (in mould labelling) applications. Our product portfolio includes transparent, solid white and voided white films and offers a wide range of finishes from glossy to soft touch/orange peel and matt effect, for optimum brand differentiation. We offer solutions suitable for PP as well as for PE injection moulding materials.

Key Features:

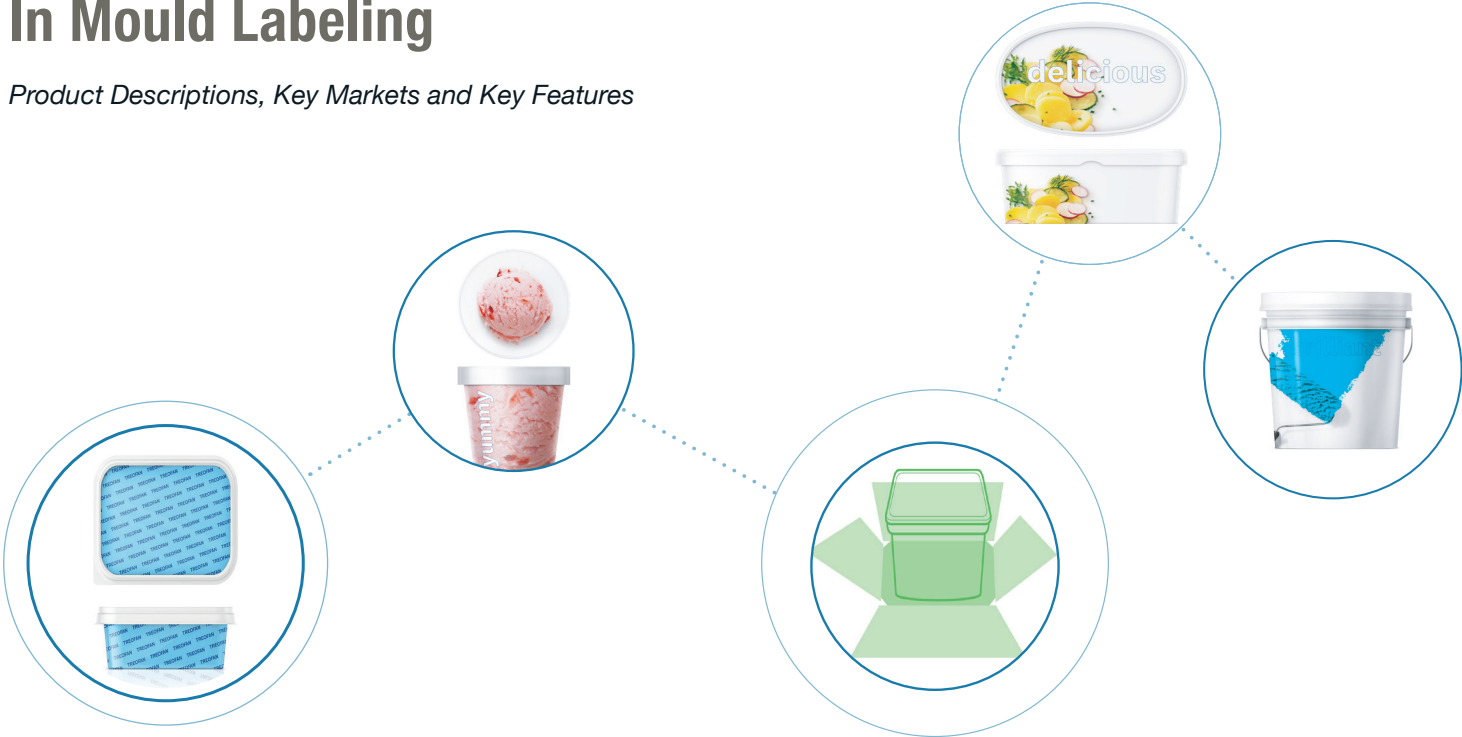
Excellent antistatic properties
 Good web flatness
 Superior machinability and die cutting
 Excellent printability results

Main applications of In Mould Labeling films:

Ice Cream • Confectionery • Food/Meat Packaging
 Household products • Chemical Drum Labels
 Industrial

Product Portfolio Overview In Mould Labeling

Product Descriptions, Key Markets and Key Features



TREOFAN

In Mould Labeling Films

White Voided

EUH, EUP, ELR

■ Page 6-8

**Thick Solid
Transparent**

ETH, ETR

■ Page 10-11

**Thick Solid
White**

EWR

■ Page 12

White Voided

EPT

■ Page 13

TREOFAN In Mould Labeling Films White Voided

EUH

White voided BOPP film, treated on both sides.
Designed one side matt, one side glossy.

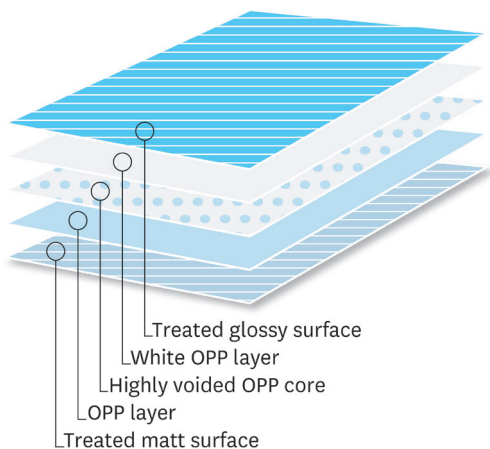
Key Markets:

In mould labels for PP and PE Injection Moulding

Packaging Formats:

Ultra high yield grade
Excellent conversion performance
Distortion-free decoration
Unique soft touch effect

Thickness (μm)	Unit Weight (g/m^2)	Yield (m^2/kg)	Density (g/cm^3)
60	33.0	30.3	0.55
70	38.5	26.0	0.55
75	41.3	24.2	0.55



EUP

White voided BOPP film, both sides treated and matt.

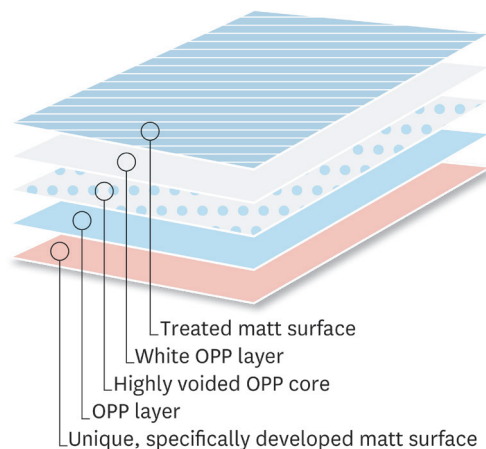
Key Markets:

In mould labels for PP and PE Injection Moulding

Packaging Formats:

Superior sheet fed performance
Distortion-free decoration
Unique soft touch effect
Ultra high yield grade with outstanding
converting characteristics

Thickness (μm)	Unit Weight (g/m^2)	Yield (m^2/kg)	Density (g/cm^3)
40	22.0	45.5	0.55
50	27.5	36.4	0.55
60	33.0	30.3	0.55
70	38.5	26	0.55



ELR

White voided BOPP film, treated on both sides.
Designed one side matt, one side glossy.

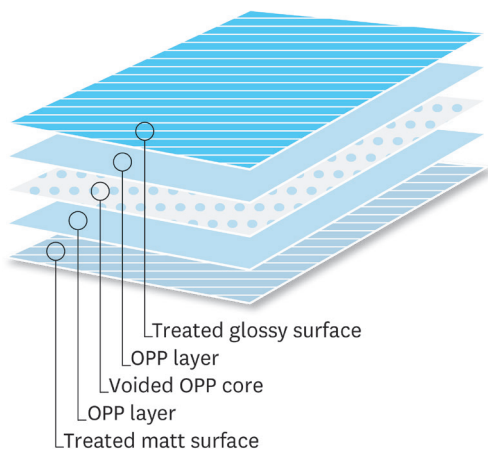
Key Markets:

Large sheet conversion for large size labels with glossy finish after moulding

Packaging Formats:

High performance for large sheet conversion
Glossy finish after moulding
Yield advantage against competitive solutions

Thickness (μm)	Unit Weight (g/m ²)	Yield (m ² /kg)	Density (g/cm ³)
58	51	19.6	0.88
68	59.8	16.7	0.88



NOTES

TREOFAN In Mould Labeling Films Thick Solid - Transparent

ETH

Transparent BOPP film treated and glossy on both sides.

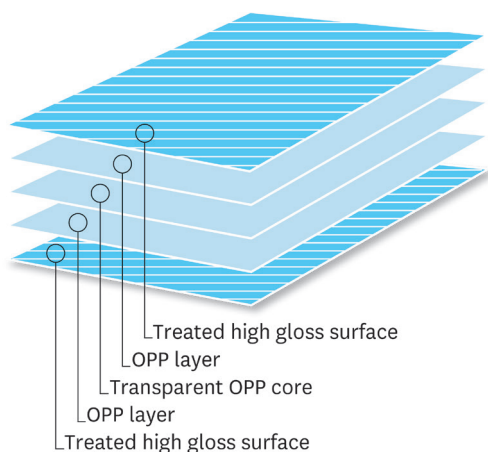
Key Markets:

In mould labels for PP and PE Injection Moulding

Packaging Formats:

Superior optics resulting in “no-label look”
Superior conversion efficiencies
Excellent optics, glossy finish after moulding

Thickness (μm)	Unit Weight (g/m^2)	Yield (m^2/kg)	Density (g/cm^3)
50	45.5	22.0	0.91
56	51.0	19.6	0.91



ETR

Transparent BOPP film, treated on both sides. One side is matt, one side glossy.

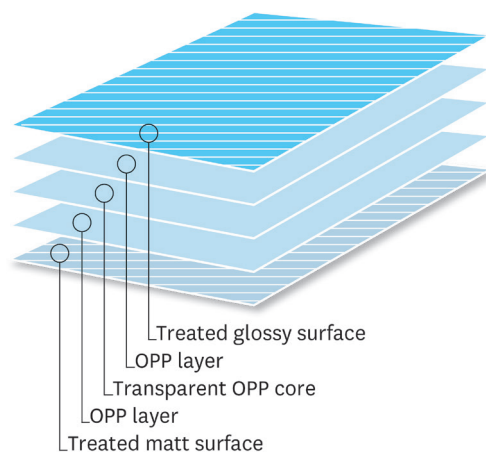
Key Markets:

In mould labels for PP and PE Injection Moulding

Packaging Formats:

Transparent one side matt, one side glossy
Excellent conversion efficiencies
Glossy finish after moulding

Thickness (μm)	Unit Weight (g/m^2)	Yield (m^2/kg)	Density (g/cm^3)
56	51.0	19.6	0.91



⋮ **TREOFAN** In Mould Labeling Films Thick Solid White

EWR

Solid white BOPP film, treated on both sides.
One side is matt, one side is glossy.

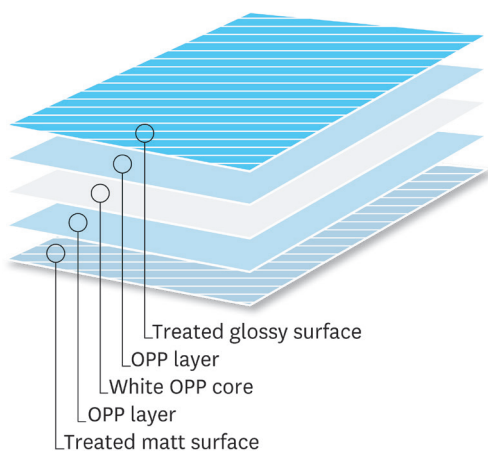
Key Markets:

In Mould labels for PP and
PE Injection Moulding with glossy finish

Packaging Formats:

Solid white
One side matt, one side glossy
Glossy finish after moulding

Thickness (μm)	Unit Weight (g/m^2)	Yield (m^2/kg)	Density (g/cm^3)
50	48.0	20.8	0.96
56	53.8	18.6	0.96



⋮ **TREOFAN** In Mould Labeling Films White Voided

EPT

White voided BOPP film, treated on one side.
Matt on both sides.

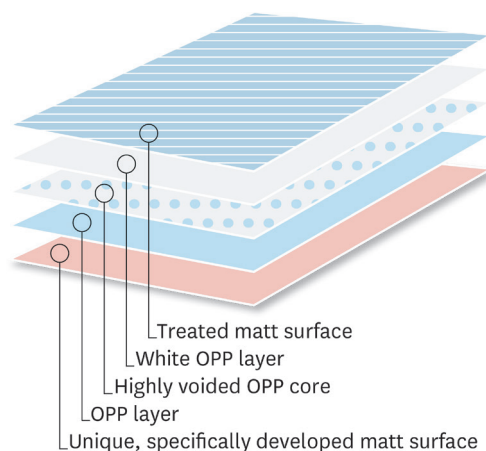
Key Markets:

In Mould Labeling-Thermoforming Process

Packaging Formats:

Unique, specifically developed matt surface
Superior yield over competitive products
Soft touch effect after moulding
Improved sheet fed performance

Thickness (μm)	Unit Weight (g/m^2)	Yield (m^2/kg)	Density (g/cm^3)
60	33.0	30.3	0.55

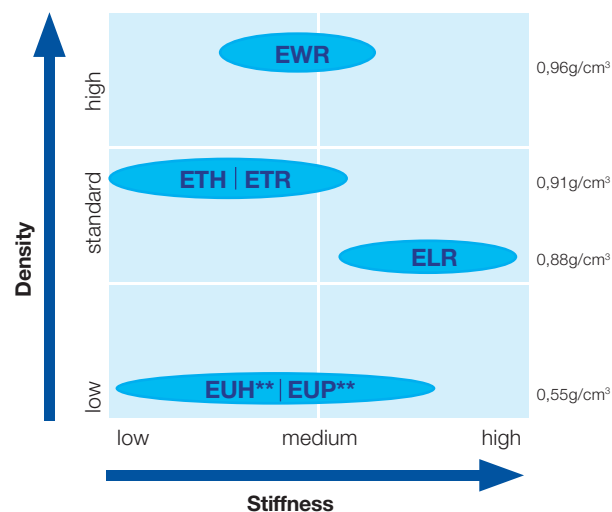
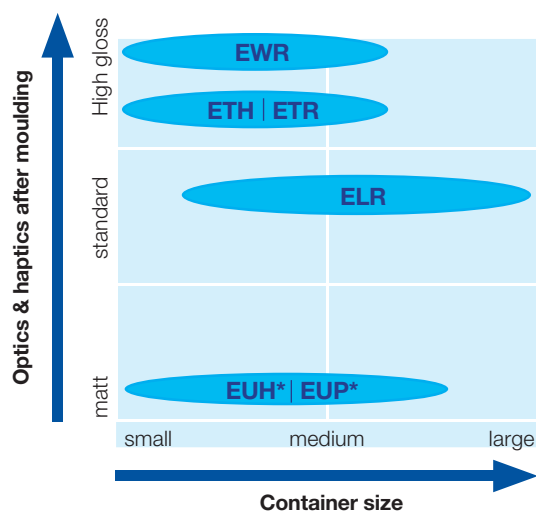


TREOFAN Application Overview IML

Which Product for which Application?

IML-IM film type	EUH	EUP	ELR	ETH	ETR	EWR
Optical characteristics	white voided	white voided	white voided	clear	matt	solid white
Container thickness & shape						
Thin walled container	●	●	▲	▲	▲	▲
Thick walled container	●	●	●	●	●	●
Symmetric container shape	●	●	▲	▲	▲	▲
Unsymmetric container shape	●	●				
Bucket / pail size						
Up to 5 litres	++	++	++	++	++	++
Up to 10 litres	+	+	++	+	+	+
Up to 25 litres	+	+	++			
Optics & haptics after moulding						
"Soft touch" effect, matt label surface	++	++				
High gloss finish			+	++	++	++

▲ = Products suitable for symmetrical shaped thin walled containers



*depending on container shape | ** depending on film gauge

TREOFAN In Mould Labeling Films



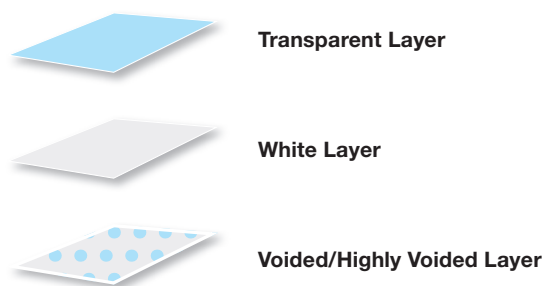
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Films Illustrations Colour Coding

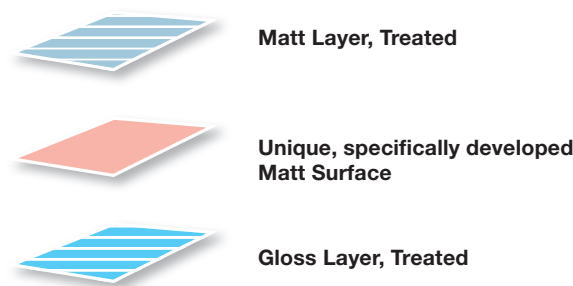
Surface Layer Outside:



Core Layer:



Surface Layer Inside:





www.jindalfilms.com

Jindal Films Europe

11, rue de l'Industrie

L-8399 Windhof

Luxembourg

T +352 45 102211

info@jindalfilms.com

Head Office Treofan Group

Treofan Germany GmbH & Co. KG

Bergstrasse

66539 Neunkirchen

Germany

T +49 (0) 6821 – 4000

Mail info@jindalfilms.com