



# Marine applications

**ORACAL<sup>®</sup>**

**ORAJET<sup>®</sup>**

**ORALITE<sup>®</sup>**

**ORAGUARD<sup>®</sup>**

**ORALUX<sup>®</sup>**

**Engineered to Perform Better™**



# ORAFOL Europe GmbH

## ORAFOL's Worldwide Locations





# Index

## Marine applications

Page	List of contents
4	ORACAL® 975 Premium <b>Structure</b> Cast
4	ORACAL® 970 Premium <b>Shift Effect</b> Cast
4	ORACAL® 970 Premium <b>Special Effect</b> Cast
5	ORACAL® 970 Premium Wrapping Cast
5	ORACAL® 951 Premium Cast
5	ORACAL® 751C High Performance Cast
6	ORAJET® 3951 Digital Printing Cast
7	ORACAL® 301F Print Polyester
7	ORAJET® 3301F Digital Printing Polyester
8	ORACAL® 638 Wall Art
8	ORAJET® 3930 Photoluminescent Cast
8	ORALUX® 9300 Photoluminescent Cast
9	ORACAL® 383 Ultraleaf Cast
9	ORACAL® 351 Polyester Film
9	ORACAL® 352 Print Polyester
9	ORAJET® 3350 Digital Printing Polyester
10	ORACAL® 8510 Etched Glass Cal
10	ORACAL® 8710 Dusted Glass Cal
10	ORACAL® 8810 Frosted Glass Cast
10	ORAJET® 3851 Digital Printing Film
11	ORAGUARD® 280 / 280F / 283 / 283F Stone Guard Films
11	ORACAL® Precleaner
11	ORACAL® Cleaning & Care kit
13	ORALITE® FD 1403 Retroreflective Film
13	ORALITE® FD 1404 Retroreflective Film
13	ORALITE® VC 310 Marine Retroreflective Film
14-15	Product Overview



## Premium Structure Cast

# ORACAL® 975

Exciting boat tuning film in a range of **different textures** and colours. The ideal design refinement film for boat hulls or boat interiors.

**Product benefits include:**

- Multi-layered cast PVC film (150 micron)
- 7 different structured optics
- Several colours each
- Solvent polyacrylate, repositionable, permanent, transparent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35°C no variation

Black Carbon: Also available in a *RapidAir*® (RA) version. The *RapidAir*® technology allows a rapid and bubble-free application.



Example of ORACAL® 975 Black carbon

**Close ups:**



## Premium Shift Effect Cast

# ORACAL® 970

Boat wrapping film with a **unique shade shifting effect** depending on viewing angle. Ideal for wrapping of boat hulls.

**Product benefits include:**

- Multi-layered cast PVC film (110 micron)
- Glossy or matt finish
- 9 colours
- Solvent polyacrylate, repositionable, permanent, transparent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35°C no variation

Also available in a *RapidAir*® (RA) version. The *RapidAir*® technology allows a rapid and bubble-free application.

## Premium Special Effect Cast

# ORACAL® 970

Same quality as standard ORACAL® 970 film but with a **unique glitter effect**.

**4 NEW COLOURS**

**Product benefits include:**

- Multi-layered cast PVC film (110 micron)
- Glossy or matt finish
- 8 colours
- Solvent polyacrylate, repositionable, permanent, transparent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35°C no variation



Example of ORACAL® 970 Special Effect



Example of ORACAL® 970 Shift Effect



Example of ORACAL® 970 Premium Wrapping Cast

Boat wrapping is the ideal alternative to boat painting, which can be a very time consuming process. You will typically be able to wrap a 12-meter boat in one or two working days, where the traditional painting process takes significantly longer. Wrapping also opens up a world of new, exciting and creative design possibilities, with printed designs, subtle design enhancements with textures, or brilliant special effects.

**Boat wrapping can be done to all types of boats (above waterline).**

- Significant reduction in application time
- Very affordable price, definitely cheaper than painting
- Unlike painting, vinyl wrapping does not require the time consuming task of masking off
- Environmentally friendly process for the installer
- Easy removal
- The vinyl protects original paint, so the boat hull can appear as new at the point of reselling

## Premium Wrapping Cast

# ORACAL® 970

Highest durability and stability

**Product benefits include:**

- Multi-layered cast PVC film (110 micron)
- Glossy or matt finish
- 96 colours
- Solvent polyacrylate, repositionable, permanent, transparent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35°C no variation

Also available in a *RapidAir*® (RA) version. The *RapidAir*® technology allows a rapid and bubble-free application.

## CAD/CAM

### Premium Cast

# ORACAL® 951

Extreme durability and dimensional stability also in corrugations and on rivets

**Product benefits include:**

- Cast PVC film (50 micron)
- Glossy finish (white and black also available in matt)
- 146 colours
- Solvent polyacrylate, permanent, transparent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35°C no variation

### High Performance Cast

# ORACAL® 751C

**Product benefits include:**

- Cast PVC film (60 micron)
- 117 high gloss colours + matt black / white
- Adhesive: Solvent polyacrylate, permanent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35°C no variation

**NEW  
COLOUR**



Example of ORACAL® 751C

### Digital Printing Cast

# ORAJET® 3951

#### Product benefits include:

- Premium Cast PVC film (55 micron)
- Glossy finish
- White and transparent
- Solvent polyacrylate, repositionable, permanent, grey or transparent
- Recommended laminating films: ORAGUARD® 290/293
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35° C no variation



Example of ORAJET® 3951

Also available in a *RapidAir®* (RA) version. The *RapidAir®* technology allows a rapid and bubble-free application.



### Print Polyester

# ORACAL® 301F

For screen printed decorative labels and doming applications

**Product benefits include:**

- Polyester film (50 micron)
- White gloss, metallised chrome or chrome brushed
- Modified solvent polyacrylate, permanent, transparent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35°C no variation

### Digital Printing Polyester

# ORAJET® 3301F

For digitally printed decorative labels and doming applications.

**Product benefits include:**

- Polyester film (50 micron)
- Metallised chrome or chrome brushed
- Modified solvent polyacrylate, permanent, transparent

**Boat wrapping unleashes unlimited possibilities for creating unique and personal designs, whilst at the same time benefitting from quick application times and a more environmentally friendly decoration solution.**



The high quality films from ORAFOL create unlimited design possibilities for boat interiors; from wall art decorations, privacy instalments on glass partitions, textured design enhancements on dashboards – to photoluminescent exit signs. Different applications require different solutions, and within the range from ORAFOL you will find all the specialised films needed. Furniture and construction parts do not have to be removed when being refurbished.

**Wall Art**

**ORACAL® 638**

The wall art film will provide room for personality and individuality to any boat interior.



Example of ORACAL® 638

**Product benefits include:**

- Soft PVC film (80 micron)
- Matt surface
- 57 colours
- Polyacrylate, easily removable, transparent

The ORACAL® 970/975 are also perfect for applications to the interior of the boat. For product details please see pages 4/5.

**Photoluminescent Signs and Labelling**

For markings of danger spots and decorative elements that are visible at night

**Photoluminescent Cast**

**ORAJET® 3930**

Digital printing film with photoluminescent properties, for indoor and outdoor markings.

**Product benefits include:**

- Three-layered, light yellow, cadmium-free, high performance cast PVC film (150 micron)
- Glossy surface
- Ink-jet printing with solvent based inks, UV- or Latex inks
- Recommended laminating film: ORAGUARD® 293
- Solvent polyacrylate, permanent, transparent



Example of ORAJET® 3930

**Photoluminescent Cast**

**ORALUX® 9300**

For photoluminescent markings, applied indoors.

**Product benefits include:**

- Photoluminescent cast PVC film (150 micron)
- Screen printing
- Glossy satin surface
- Solvent polyacrylate, permanent, transparent



Example of ORALUX® 9300



## Metallised Films

For decorative labels, name- and technical plates, decorations and symbols

### Ultraleaf Cast

# ORACAL® 383

Unique pressure sensitive film for lettering, marking and decoration of windows and signs with highest requirements for long outdoor durability.

**Product benefits include:**

- Metallised cast alkyd resin film (85 micron)
- High-gloss finish
- 3-dimensional embossed in chrome and glossy gold
- Solvent polyacrylate, permanent, transparent

### Polyester Film

# ORACAL® 351

**NEW  
COLOUR**

This high-gloss metallic film is available in a double-sided version, providing outstanding effects when applied onto transparent surfaces.

**Product benefits include:**

- Metallised polyester film (23 micron / 50 micron)
- Chrome, matt chrome, chrome-brushed, gloss gold on both sides and rose gold
- Top coated surface for printing
- Solvent polyacrylate, permanent, transparent

### Print Polyester

# ORACAL® 352

Print polyester for labels and decorations

**Product benefits include:**

- Transparent, white or metallised polyester film (23 or 50 micron)
- Transparent, white and in chrome, matt chrome, brushed chrome and gold
- Outstanding dimensional stability and a good ageing behaviour
- Solvent polyacrylate, permanent

### Digital Printing Polyester

# ORAJET® 3350

For digitally printed labels and decorations

**Product benefits include:**

- Metallised polyester film (50 micron)
- Chrome and gold
- Solvent polyacrylate, permanent



**ORACAL® 301F and ORAJET® 3301F are also perfect for interior applications (see page 7).**



Whether for artistic effect or simply to create privacy, the range of glass decoration films by ORAFOL is the perfect cost-effective alternative to traditional etched glass.

## Etched Glass Cal

# ORACAL® 8510

Used for decorative designs on windows and glass doors. Available in gold and silver-grey in coarse and fine textures.



### Product benefits include:

- Polymeric PVC film (80 micron)
- Coarse and fine texture
- Wet application is recommended
- Available also with *RapidAir*® for extra easy application (8510RA)
- Solvent polyacrylate, permanent, transparent

## Dusted Glass Cal

# ORACAL® 8710

Creates the look of a rough glass surface.

### Product benefits include:

- Polymeric PVC film (70 micron)
- Medium glossy surface prevents unwanted light reflections
- Wet application is recommended
- Solvent polyacrylate, permanent, transparent

## Frosted Glass Cast

# ORACAL® 8810

For extra high quality glass decoration of glass partitions and glass doors. Five soft colours available with a sparkling effect.



### Product benefits include:

- Cast high-performance PVC film (80 micron)
- Eye-catching, glamorous glitter effects
- Excellent resistance to weathering and UV
- Wet application is recommended
- Solvent polyacrylate, permanent, transparent

## Digital Printing Film

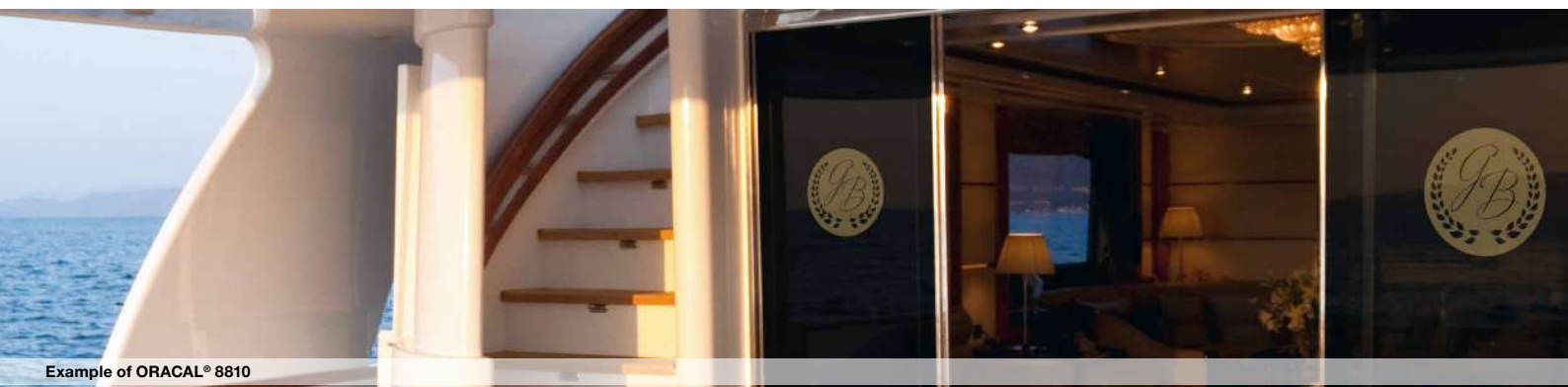
**NEW**

# ORAJET® 3851

For digitally printed glass decorations of glass partitions and glass doors.

### Product benefits include:

- Polymeric PVC film (80 micron)
- Silvergrey with a fine structure
- Wet application is recommended
- Solvent polyacrylate, permanent, transparent



Example of ORACAL® 8810

### Surface Guard Films

Use an ORAGUARD® paint protection film for extra protection of areas exposed to mechanical stress. This will ensure long-term durability of boat surfaces. The films are all highly transparent, glossy, highly UV resistant, and with excellent tear strength.

### Stone Guard Films

## ORAGUARD® 280 / 280F / 283 / 283F

**ORAGUARD® 280 / 280F**  
product benefits include:

- Polyurethane film (200 micron)
- Outstanding transparency and gloss
- Solvent polyacrylate, permanent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35° C no variation

**ORAGUARD® 283 / 283F**  
product benefits include:

- Polyurethane film (130 micron)
- Highly transparent
- Glossy
- Solvent polyacrylate, permanent
- Sea water resistance (DIN EN ISO 9227). Adhered to aluminium; after 100h/35° C no variation

### Vinyl Treatment Products

## ORACAL® Cleaning and Care Products

The series of ORACAL® after care products have been specifically developed for proper surface treatment of the wrapping films from ORAFOL. All the products have been engineered to enable consistent, excellent results. With the ORACAL® cleaning and care agents you can be sure that you are always working with professional treatment products for your boat.

The products are supplied in complete care kits, with versions for glossy or matt surfaces. Each kit contains:

- 500 ml Shampoo
- 500 ml Intensive Cleaner
- 500 ml Fast Care Agent
- 500 ml Long-Lasting Seal
- 2 x special Cleaning Sponges

Each item in the kit is also available for purchase separately (in batches of 4).



**ORACAL® Pre-wrap surface cleaner**

This special pre-wrap surface cleaner degreases and removes cleaning agent residues prior to the application of ORAFOL® self-adhesive films.

**Contact ORAFOL for details.**



Please refer to the full application instructions on [www.orafol.com](http://www.orafol.com)

## Other marine applications

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With the high-quality graphic films from ORAFOL, there are endless application possibilities for exploring creativity and individual designs within the maritime world. Any low energy surfaces on e.g. Jet Skis, kayaks, surfboards and much more can be decorated. Special films are also available where very high-tack is required, or applications are to be done over very rough surfaces such as hammerschlag.

Contact ORAFOL and let us guide you to the best products for your specific application.

Since 1980 our retroreflective materials have been used at sea to improve detection during night-time search and rescue missions. The microprismatic technology lengthens the detection sighting distance compared to traditional reflective materials. The FD tapes comply with SOLAS/IMO requirements and are approved by the European BV as well as the US Coast Guard.

### ORALITE® FD 1403

For harsh maritime applications, e.g. sew on PFDs and spray-wear, as well as devices and equipment with rigid substrates such as steel and aluminium.

**Product benefits include:**

- Retroreflective microprismatic tape
- Silver colour
- Pressure sensitive adhesive or textile backing
- No risk of water penetration
- Designed to withstand continuous immersion in sea water and extreme temperatures
- IMO Res. A.658(16) Type I and II

### ORALITE® FD 1404

Flexible marine tape for inflatable devices, inflatable PFDs and immersion suits.

**Product benefits include:**

- Retroreflective microprismatic tape
- Flexible
- Silver colour
- Pressure sensitive adhesive backing
- No risk of water penetration
- Designed to withstand continuous immersion in sea water and extreme temperatures
- IMO Res. A.658(16) Type I

### ORALITE® VC 310 Marine

Retroreflective film for application to rigid boat surfaces, visible at distances of more than one kilometer

**Product benefits include:**

- Retroreflective microprismatic film
- Red, yellow, blue, green and silver
- Pressure sensitive adhesive backing
- Wide widths available (775 mm)



Example of ORALITE® FD 1404



Example of ORALITE® FD 1403



Example of ORALITE® FD 1404

Films	Product	Short name	Front material	Colours / surfaces Gloss (G), Matt (M), Supermatt (SM)	Adhesive	Covering material	Recommended lamination film (where applicable)
CAD/CAM	ORACAL® <b>951</b>	Premium Cast	Cast PVC film 50 micron	146 colours (G) Black/white (M)	Solvent polyacrylate permanent transparent	Special silicone coated paper with extra good weeding properties 137 g/m <sup>2</sup>	
	ORACAL® <b>751C</b>	High Performance Cast	Cast PVC film 60 micron	117 colours (G) Black/white (M)	Solvent polyacrylate permanent transparent	Special silicone coated paper with extra good weeding properties 137 g/m <sup>2</sup>	
	ORACAL® <b>638</b>	Wall Art	Soft PVC film 80 micron	57 colours (M)	Polyacrylate removable transparent	Silicone coated paper 135 g/m <sup>2</sup>	
	ORACAL® <b>383</b>	Ultraleaf Cast	Cast metallised film 85 micron	Chrome Gold (G)	Solvent polyacrylate permanent transparent	Special silicone coated paper 135 g/m <sup>2</sup>	
	ORACAL® <b>351</b>	Polyester Film	Metallised polyester film 23/50 micron	Chrome (G+M) Chrome-brushed Rose gold Gloss gold on both sides	Solvent polyacrylate permanent transparent	Special silicone coated paper with extra good weeding properties 137 g/m <sup>2</sup>	
	ORACAL® <b>8510</b>	Etched Glass Cal	Special PVC film 80 micron	Gold Silver-grey	Solvent polyacrylate permanent transparent	Special silicone coated paper with extra good weeding properties 137 g/m <sup>2</sup>	
	ORACAL® <b>8710</b>	Dusted Glass Cal	Polymeric PVC film 70 micron	Translucent grey	Solvent polyacrylate permanent transparent	Special silicone coated paper with extra good weeding properties 137 g/m <sup>2</sup>	
	ORACAL® <b>8810</b>	Frosted Glass Cast	Cast PVC film 80 micron	5 colours (sparkling effect)	Solvent polyacrylate permanent transparent	Special polyester film, 100 micron	
Wrapping	ORACAL® <b>970</b>	Premium <b>Wrapping</b> Cast	Cast PVC film 110 micron	75 colours (G) 21 colours (M) black (SM)	Solvent polyacrylate repositionable permanent transparent	PE coated paper one side siliconised 143 g/m <sup>2</sup>	
	ORACAL® <b>970</b>	Premium <b>Shift Effect</b> Cast	Cast PVC film 110 micron	9 colours (G+M)	Solvent polyacrylate repositionable permanent transparent	PE coated paper one side siliconised 143 g/m <sup>2</sup>	
	ORACAL® <b>970</b>	Premium <b>Special Effect</b> Cast	Cast PVC film 110 micron	8 colours (G) 2 colours (M)	Solvent polyacrylate repositionable permanent transparent	PE coated paper one side siliconised 143 g/m <sup>2</sup>	
	ORACAL® <b>975</b>	Premium <b>Structure</b> Cast	Cast PVC film 150 micron	Carbon: 9 colours, Brushed: 5 colours, Honeycomb: 5 colours, Crocodile: 3 colours, Cocoon: 2 colours, Dune: 2 colours, Emulsion: 2 colours	Solvent polyacrylate repositionable permanent transparent	PE coated paper one side siliconised 143 g/m <sup>2</sup>	
Printing	ORACAL® <b>352</b>	Print Polyester	Polyester film 23/50 micron	Transparent, Chrome (M+G), Gold (G), Gold on both sides (G), White, Chrome brushed	Solvent polyacrylate permanent transparent	PE coated paper one side siliconised 160 g/m <sup>2</sup>	
	ORACAL® <b>301F</b>	Print Polyester	Polyester film 50 micron	White (G) Metallised chrome Chrome brushed	Modified solvent polyacrylate permanent transparent	Polyester film siliconised 100 micron	
	ORALUX® <b>9300</b>	Photoluminescent Cast	Three-layered, light yellow, cadmium-free PVC film, 150 micron	Light yellow (G satin)	Solvent polyacrylate permanent transparent	PE coated paper one side siliconised 148 g/m <sup>2</sup>	
Digital Printing	ORAJET® <b>3951</b>	Digital Printing Cast	Cast PVC film 55 micron	White (G) Transparent (G)	Solvent polyacrylate repositionable permanent grey or transparent	PE coated paper one side siliconised 143 g/m <sup>2</sup>	ORAGUARD® 293F / 293 / 290 / 290F
	ORAJET® <b>3350</b>	Digital Printing Polyester	Polyester film 50 micron	Chrome Gold	Solvent polyacrylate permanent transparent	PE coated paper one side siliconised 143 g/m <sup>2</sup>	
	ORAJET® <b>3851</b>	Digital Printing Film	Polymeric PVC film 80 micron	Silverygrey with fine structure (090)	Solvent polyacrylate permanent transparent	Double sided PE coated paper, one side siliconised, 143 g/m <sup>2</sup>	
	ORACAL® <b>3301F</b>	Digital Printing Polyester	Polyester film 50 micron	Metallised chrome Chrome brushed	Modified solvent polyacrylate permanent transparent	Polyester film siliconised 100 micron	
	ORAJET® <b>3930</b>	Digital Printing Photoluminescent Cast	Three-layered, light yellow, cadmium-free PVC film, 150 micron	Light yellow (G)	Solvent polyacrylate permanent transparent	PE coated paper one side siliconised 143 g/m <sup>2</sup>	ORAGUARD® 293
Stone Guard	ORAGUARD® <b>280/280F</b>	Stone Guard Film	Polyurethane film 200 micron	Transparent (G)	Solvent polyacrylate, permanent	280: Siliconised Kraft paper, 137 g/m <sup>2</sup> 280F: Siliconised polyester film, 100 micron	
	ORAGUARD® <b>283/283F</b>	Stone Guard Film	Polyurethane film 130 micron	Transparent (G)	Solvent polyacrylate, permanent	283: Siliconised Kraft paper, 137 g/m <sup>2</sup> 283F: Siliconised polyester film, 100 micron	

☐ Service lives given here are only valid for vertical application in climate zone 1 in marine environments. For other climate zones and more details see the application instructions.  
For printing materials, the service lives given are only valid for unprinted films.

Reflective Materials

Product	Short name	Product Approval	Colours / surfaces	Backing	Approval
ORALITE® <b>FD 1403</b>	Imo	IMO resolution A.658(16) Type I and II	Silver (G)	PSA or textile	U.S. Department of Transportation specification USCG 46 CFR, section 164.018 and International Maritime Organisation (IMO) resolution A.658(16) Type I & II.
ORALITE® <b>FD 1404</b>	Imo Flex	IMO resolution A.658(16) Type I	Silver (G)	PSA or textile	U.S. Department of Transportation specification USCG 46 CFR, section 164.018 and International Maritime Organisation (IMO) resolution A.658(16) Type I.
ORALITE® <b>VC 310</b>	Marine	n/a	Silver (G), Red (G), Yellow (G), Blue (G), Green (G)	PSA	n/a

Recommended application tapes	Area of use	Adhesive Power	Minimum appl. Temp.	Service life for marine applications <sup>1</sup>	Widths (mm)		Lengths (m)
ORATAPE® HT 95, LT 52, LT 95, MT 52, MT 72, MT 80P, MT 95	Outdoor and indoor use. For full colour wrapping, or single colour decals.	18 N/25 mm	> +8° C	Black/white: 8 years Transparent/coloured: 6 years, Metallic: 4 years selected colours*: 2 years	1260 1000 630 500	378 (white + transp. only: 914)	50
ORATAPE® HT 95, LT 52, LT 95, MT 52, MT 72, MT 80P, MT 95	Outdoor and indoor use. For full colour wrapping, or single colour decals.	18 N/25 mm	> +8° C	Black/white: 6 years Transparent/Coloured: 5 years, Metallic: 3 years Gold L, Brilliant Blue L: 1 year	1260 1000 914 630	500 378	50
ORATAPE® LT95	Indoor use. For short term wall decorations.	6 N/25 mm	> +10° C	2 years	1260 1000 630	500 378	50
ORATAPE® HT 95, LT 52, LT 95, MT 52, MT 72, MT 80P, MT 95	Outdoor and indoor use. Metallised film for decorative labels, name- and technical plates, decorations and symbols. 3 dimensional embossed texture.	16 N/25 mm	> +10° C	5 years	1220		50
ORATAPE® HT 95, LT 52, LT 95, MT 52, MT 72, MT 80P, MT 95	Outdoor and indoor use. Metallised film for decorative labels, name- and technical plates, decorations and symbols. Available as double sided gold for applications that are seen from both sides.	12 N/25 mm	> +8° C	2 years Gold (G): 1 year	1260 1000 630	500 378	50
ORATAPE® HT 95, LT 5, LT 95, MT 52, MT 72, MT 80P, MT 95	Indoor and outdoor decorative design uses on glass, especially shop windows and doors.	18 N/25 mm (on glass) 16 N/25 mm (on acrylic glass)	> +8° C	7 years	1260 1000 630	500 378	50
ORATAPE® HT 95	Developed for decorative glass or mirror design elements, to achieve a translucent etched glass appearance. Great for shop windows, room dividers and glass doors.	18 N/25 mm (on glass) 16 N/25 mm (on acrylic glass)	> +8° C	7 years	1260		50
ORATAPE® HT 95, MT 95, MT 52, MT 72	Long-term indoor and outdoor decorative design; developed for long-term decorative sparkling effects on glass and glass like shop windows and doors.	16 N/25 mm	> +8° C	7 years	1260 1000 630	500 378	50
n/a	Outdoor and indoor use. For full colour wrapping, or single colour decals.	18 N/25 mm	> +15° C	Black/white: 10 years Coloured: 8 years Metallic: 4 years selected colours*: 2 years	1520		25 50
n/a	Outdoor and indoor use. For full colour applications. This material comes with a shade shifter effect, meaning that the colour will change depending on viewing angle.	18 N/25 mm	> +15° C	2 years	1520		25 50
n/a	Outdoor and indoor use. For full colour applications. This material has a unique glitter effect.	18 N/25 mm	> +15° C	2 years	1520		25 50
n/a	Outdoor and indoor use. To be used as a tuning film for design details. Comes in seven exciting textures and a range of colours.	22 N/25 mm	> +15° C	Black/white/coloured: 4 years	1520		10 25 50
ORATAPE® LT 95, MT 95	Outdoor and indoor use. Printing film for decorative labels, name- and technical plates, decorations and symbols.	12 N/25 mm	> +8° C	2 years Gold (G): 1 year	1260 1000		50 + available in sheets 700 x 500 mm, 700 x 1000 mm
ORATAPE® MT 95	Outdoor and indoor use, as well as doming. Printing film for decorative labels, name- and technical plates, decorations and symbols.	25 N/25 mm	> +8° C	2 years	1260 1000		50 + available in sheets 700 x 500 mm, 700 x 1000 mm
ORATAPE® MT 95	Indoor use. Typically unprinted markings for danger spots and decorative elements that are visible at night.	18 N/25 mm	> +8° C	5 years	1260 1000		50
n/a	Outdoor and indoor.	18 N/25 mm	> +8° C	White: 10 years Transparent: 8 years	1520 1370 1050	760 (white only: 914)	50 100
ORATAPE® LT 95, MT 95	Outdoor and indoor use. Digital printing film for decorative labels, name- and technical plates, decorations and symbols.	12 N/25 mm	> +8° C	2 years Gold (G): 1 year	1370		50
	Digital printing glass decor film, for decorative design of shop windows and glass doors.	18 N/25 mm	> +8° C	7 years	1260 1000 636	500 378	50
ORATAPE® MT 95	Outdoor and indoor use, as well as doming. Digital printing film for decorative labels, name- and technical plates, decorations and symbols.	25 N/25 mm	> +8° C	2 years	1370		50
ORATAPE® HT 95, LT 52, LT 95, MT 52, MT 72, MT 80P, MT 95	Outdoor and indoor use. For digitally printed marking signs for danger spots and decorative elements that are visible at night.	18 N/25 mm	> +8° C	5 years	1520 1370		10 50
n/a	For application as surface guard films to protect surfaces against mechanical influences.	22 N/25 mm	> +10° C	7 years	280: 1260, 1520 280F: 1520		25 50
n/a		18 N/25 mm	> +10° C	7 years	283: 1260, 1520 283F: 1520		25 50

<sup>1</sup> Copper, Orient brown metallic, Bronze, Pyrite, Graphite metallic, Red gold L metallic and Nacre

\*\* Brilliant blue L, copper, gold, metallic, bronze, pale gold, pyrite, redgold L, foliage green metallic, steppe green metallic

Area of use	Minimum appl. Temp.	Widths (mm)	Lengths (m)
Reflective material for life rafts, personal flotation devices and spray-wear.	> 15° C	50	50
Flexible reflective marine tape for inflatable devices, inflatable personal flotation devices and immersion suits.	> 15° C	50	50
Coloured reflective film visible at distances of more than 1 km. For application onto rigid surfaces, e.g. bouys or boats.	> 15° C	775	45,7

Marine applications  
**Engineered to Perform Better™**



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