ORALITE® 5400

Commercial Grade

ORALITE® 5400 Commercial Grade is a durable reflective film for temporary outdoor applications. Due to its flexibility, it is also suitable for uneven surfaces.

Reflective Properties

Reflective Technology: Glass bead, Reflectivity classes: RA1, Reflective film structure: Design A (embedded glass beads), Reflection norm: ORALITE 5400 - Tabelle 1, ORALITE 5400 - Tabelle 2

Areas of Application

- Identification of danger spots and zones
- Construction sites
- Identification of danger spots
- Industry
- Identification of danger zones
- Safety & emergency services
- Advertising
- Advertising & signage

Colours

ORALITE® 5400 is available in the following colours: White (F010), Yellow (F020), Orange (F035), Red (F030), Green (F060), Blue (F050)

Total thickness

- 0.135 mm (Average value, without protective paper)

Front material

Premium PVC film, cast film, 0.09 mm

Liner

Silicone cardboard PE coated on both sides, 145 g/m²

Adhesive

Solvent-polyacrylate, permanent

Recommended laminating films

ORAGUARD® 290, ORAGUARD® 290DU, ORAGUARD® 290F, ORAGUARD® 293, ORAGUARD® 293F

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Technical properties

RESISTANCE

Durability	4 Year(s)	with professional processing, with vertical outdoor weathering, central European normal climate
Shelf Life	2 Year(s)	in original packaging, at 20 °C and 50 % relative humidity
Temperature resistance	Minimum temperature -40 °C Maximum temperature 80 °C	adhered on aluminium

ADHESIVE PROPERTIES

Adhesive power	15 N/25 mm	after 24 h, on stainless steel | Average value, FINAT TM 1

PROCESSING

Recommended printing procedure	Solvent-based inkjet printing, Screen printing, Eco-solvent printing	
Application temperature	Minimum temperature 10 °C	

Table 1 - Specific coefficient of retroreflection R' in cd / (lx m²) [Typical values] (New sheeting; CIE standard illuminant A; CIE Nr. 54.2, EN 12899-1)

Observation Angle		0.2°			0.33°			1.5°		
Entrance angle		5°	30°	40°	5°	30°	40°	5°	30°	40°
White	(010)	70	30	10	50	24	9	5	2.5	1.5
Yellow	(020)	50	22	7	35	16	6	3	1.5	1
Red	(030)	14.5	6	2	10	4	1.8	1	0.5	0.5
Orange	(035)	25	10	2.2	20	8	2.2	1.2	0.5	-
Blue	(050)	4	1.7	0.5	2	1	-	-	-	-
Green	(060)	9	3.5	1.5	7	3	1.2	0.5	0.3	0.2

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Table 2 - Chromaticity coordinates (New sheeting; Daylight ; CIE Nr. 15.2)

Colours		1		2		3		4		Luminance factor β
		x	y	x	y	x	y	x	y	
White	**(010)**	0.305	0.315	0.335	0.345	0.325	0.355	0.295	0.325	□ 0.35
Yellow	**(020)**	0.494	0.506	0.470	0.480	0.513	0.437	0.545	0.455	□ 0.27
Red	**(030)**	0.735	0.265	0.700	0.250	0.607	0.343	0.655	0.345	□ 0.05
Orange	**(035)**	0.631	0.369	0.552	0.359	0.506	0.404	0.570	0.430	□ 0.12
Blue	**(050)**	0.100	0.109	0.146	0.156	0.183	0.115	0.137	0.038	□ 0.01
Green	**(060)**	0.007	0.703	0.216	0.448	0.147	0.400	0.018	0.454	□ 0.04

PRODUCT NOTE

Please observe the information of the printer and ink manufacturers and determine whether a lamination is required. If appropriate, lamination with ORAGUARD® 290F or ORAGUARD® 293F to improve the UV protection is recommended. ORAFOL recommends the use of ORALITE® 5018 Screen Printing Ink for printing by means of screen printing. If colours, inks or printers are used which are not sold by ORAFOL, their application must be tested and approved by the customer. The respective national provisions have to be considered for the application of the ORALITE® reflection films.

IMPORTANT NOTES

Relevant national specifications have to be observed when using films of the ORALITE® series. ORAFOL recommends that you obtain the current specifications from your local authority and ensure that the product complies with them. For further information, please contact ORAFOL directly. All ORALITE® products are subject to thorough quality control during the entire manufacturing process and it is ensured that they are of merchantable quality and free from manufacturing defects. The information published on the ORALITE® products is based on research results which the company considers to be reliable, but which do not constitute a guarantee. In view of the wide range of applications of ORALITE® products and the continuous development of new applications, it is up to the buyer to carefully check the suitability and performance of the product for the respective purpose and assume all risks associated with this use. All specifications may be changed without advance notice. Any warranty is excluded for applications which are not listed in the Technical Data sheet or which are not performed in accordance with the processing guidelines set out by ORAFOL. The durability of the shields depends on a multitude of factors, such as for example the selection and preparation of the substrate, compliance with the recommended processing guidelines, the geographical application area, the weather conditions as well as the maintenance of the product and the finished shield. ORAFOL does not accept any liability for defects which can be traced back to an unsuitable substrate or inadequate surface preparation. You can find comprehensive information in the warranty document under www.orafol.com. ORALITE® is a trademark of ORAFOL Europe GmbH.

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