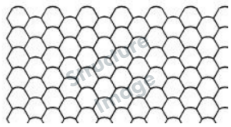
ORALITE® 5800

High Intensity Grade

ORALITE® 5800 High Intensity Grade is a highly reflective film characterized by its extraordinary brightness and durability. With a honeycomb structure, it ensures excellent visibility day and night.

Reflective Properties

Cell structure:



Reflective Technology: Glass bead, Reflectivity classes: RA2, Reflective film structure: B, Reflection norm: ORALITE® 5800 - Tabelle 1 (EN 12899-1), ORALITE® 5800 - Farbkoordination Tabelle 2 (EN 12899-1)

Areas of Application

- Traffic signs
- Construction sites
- Traffic & transportation
- Advertising & signage

Colours

ORALITE® 5800 is available in the following colours: White (F010), Yellow (F020), Orange (F035), Red (F030), Green (F060), Blue (F050), Brown (F080)

Total thickness

- 0.28 mm (Average value, without protective paper)

Front material

Acrylic film

Liner

One-sided silicon-coated PP film, 0.075 mm

Adhesive

Solvent-polyacrylate, permanent

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Technical properties

RESISTANCE

Resistance to cleaning agents	No change	adhered on aluminium | 8 h in detergent solution (0.5 % household cleaner) at room temperature and 65 °C
Durability	10	unprinted, 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 -56 °C Maximum temperature 82 °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	Screen printing, UV printing, Eco-solvent printing	
Suitable substrate	Aluminium, Galvanised sheet steel, Metals	
Application temperature	Minimum temperature 10 °C	

Table 1 - Specific coefficient of retroreflection R' in cd / (lx m²) [Minimum values] (New condition; EN 12899-1, RA2)

Observation Angle		0,2°			0,33°			2°		
Entrance angle		5°	30°	40°	5°	30°	40°	5°	30°	40°
White	(010)	250	150	110	180	100	95	5	2,5	1,5
Yellow	(020)	170	100	70	120	70	60	3	1,5	1
Orange	(035)	100	60	29	65	40	20	1,5	1,0	#
Red	(030)	45	25	15	25	14	13	1,0	0,4	0,3
Blue	(050)	20	11	8	14	8	7	0,2	#	#

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Observation Angle		0,2°			0,33°			2°		
Entrance angle		**5°**	**30°**	**40°**	**5°**	**30°**	**40°**	**5°**	**30°**	**40°**
Green	**(060)**	45	25	12	21	12	11	0,5	0,3	0,2
Brown	**(080)**	12	8,5	5	8	5	3	0,2	#	#

Table 2 - Chromaticity coordinates (Colour specification limits at daylight; New condition; EN12899-1)

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	> 0,27
Yellow	**(020)**	0,494	0,505	0,470	0,480	0,513	0,437	0,545	0,454	> 0,16
Orange	**(035)**	0,610	0,390	0,535	0,375	0,506	0,404	0,570	0,429	0,14
Red	**(030)**	0,735	0,265	0,700	0,250	0,610	0,340	0,660	0,340	0,03
Green	**(060)**	0,110	0,415	0,170	0,415	0,170	0,500	0,110	0,500	0,03
Blue	**(050)**	0,130	0,090	0,160	0,090	0,160	0,140	0,130	0,140	0,01
Brown	**(080)**	0,455	0,397	0,523	0,429	0,479	0,373	0,558	0,394	0,03 – 0,09

PRODUCT NOTE

The substrate to be bonded must be free of dust, grease or other contamination, which can affect the adhesive strength of the material. The adhesive is designed for metallic substrates. For other application areas the user is responsible for testing and assessing whether the product is suitable and whether risks may arise from its use. ORALITE® 5800 in white can be printed in screen printing with ORALITE® 5018 Screen Printing Ink. Printing via UV digital printing is also possible. The printed or laminated material fulfils the specifications for colour location and reflection value of this colour if the ORAFOL processing instructions are observed. The recommended overlay films are ORALITE® 5061 Transparent Film, ORALITE® 5090 Anti-Dew Film and ORALITE® 5095 Anti-Graffiti Film. We recommend ORALITE® 5018 as the screen printing ink. Clear varnish is not required. The ORALITE® UV Traffic Sign Printer in combination with the UV digital print inks ORALITE® 5019 developed specifically for this purpose is approved for the application. For long-term, vertical applications outdoors, it is recommended to use the printed material in combination with ORALITE® 5061 Transparent Film. For detailed information please use the processing instructions No. 4.1. published by ORAFOL or contact the responsible employee of the ORAFOL Reflective Solutions Division. All ORALITE® products have been manufactured in a production process certified in accordance with ISO 9001:2015. The batch can be traced at any time by means of the roll number.

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IMPORTANT NOTES

Observe the relevant national specifications when using the ORALITE® films. 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. 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, the buyer should carefully weigh up the suitability and performance of the product for the respective purpose and they bear all risks in connection with such 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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