ORALITE® 5600RA

Fleet Engineer Grade

ORALITE® 5600RA Fleet Engineer Grade is a removable reflective film for long-term outdoor advertising on painted surfaces. The film is extremely flexible and easily conformable over rivets. The RapidAir® technology prevents air bubbles and allows fast and easy installation. Detailed processing instructions can be found on our product website.

Reflective Properties

Reflective Technology: Glass bead, Reflection norm: ORALITE ® 5600 RA - Tabelle 1 (CIE Nr. 54.2), ORALITE ® 5600 RA - Tabelle 2 (CIE Nr. 15.2)

Areas of Application

- Construction vehicles
- Construction sites
- Emergency vehicles & vehicles with special rights
- Safety & emergency services
- Traffic & transportation
- Agricultural machines
- Advertising
- Advertising & signage

Colours

ORALITE® 5600RA is available in the following colours: White (F010), Yellow (F020), Red (F030), Orange (F035), Blue (F050), Green (F060), Black (F070), Azure (F084), Gold (F091), Lemon (F213), Ruby (F364)

Total thickness

- 0.15 mm (Average value, without protective paper)

Front material

Premium PVC film, cast film

Liner

RapidAir paper PE-coated on both sides, siliconised on one side, 155 g/m²

Adhesive

Solvent-polyacrylate, permanent, Transparent, repositionable

Recommended laminating films

ORAGUARD® 290F, ORAGUARD® 293F, ORAGUARD® XP279

ORAFOL Europe GmbH
Orafolstrasse 1
D-16515 Oranienburg
Germany

Tel: +49 (0)3301 864-0
reflective.solutions@orafol.de
www.orafol.com

ORALITE® 5600RA

Fleet Engineer Grade

Technical properties

RESISTANCE

Durability	7 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, central European normal climate

ADHESIVE PROPERTIES

Removability	Removable	The use of heat helps with easily removing the product.
Adhesive power	15 N/25 mm	after 24 h, adhered on stainless steel | Average value, FINAT TM 1
	12 N/25 mm	after 24 h, adhered on acrylic varnish | Average value, FINAT TM 1

PROCESSING

RapidAir technology	Yes
Application temperature	Minimum temperature 15 °C
Proposed application technology	Dry application

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

Observation Angle		0,2°		0,33°	
Entrance angle		5°	30°	5°	30°
White	**(010)**	100	40	80	35
Yellow	**(020)**	55	25	45	20
Red	**(030)**	18	8	15	6
Orange	**(035)**	27	10	23	8

ORAFOL Europe GmbH
Orafolstrasse 1
D-16515 Oranienburg
Germany

Tel: +49 (0)3301 864-0
reflective.solutions@orafol.com
www.orafol.com

ORALITE® 5600RA

Fleet Engineer Grade

Observation Angle		0,2°		0,33°	
Entrance angle		5°	30°	5°	30°
Blue	**(050)**	5	1,7	4	1
Green	**(060)**	13	5	11	5
Black	**(070)**	35	15	30	10
Azure	**(084)**	11	4	8	3
Gold	**(091)**	70	27	50	22
Lemon	**(213)**	75	30	55	25
Ruby	**(364)**	10	5	8	4

Table 2 - Chromaticity coordinates (Tagesaufsichtfarben; New condition; 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
Black	**(070)**	0,385	0,355	0,300	0,270	0,260	0,310	0,345	0,395	0 □ ß □ 0,03
Azure	**(084)**	0,120	0,125	0,160	0,120	0,160	0,480	0,160	0,460	□ 0,03
Gold	**(091)**	0,460	0,440	0,480	0,440	0,480	0,420	0,460	0,420	□ 0,16
Lemon	**(213)**	0,395	0,515	0,450	0,460	0,495	0,502	0,423	0,574	□ 0,16
Ruby	**(364)**	0,710	0,290	0,610	0,300	0,569	0,341	0,655	0,345	□ 0,03

ORAFOL Europe GmbH
Orafolstrasse 1
D-16515 Oranienburg
Germany

Tel: +49 (0)3301 864-0
reflective.solutions@orafol.de
www.orafol.com

ORALITE® 5600RA

Fleet Engineer Grade

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. Freshly varnished or painted surfaces must be fully cured. Before applying the material the user must check the compatibility of the selected paints and inks. The self-adhesive, reflecting material can only be applied when dry. For other applications, the user is responsible to the full extent for evaluating the suitability of the product and for all risks associated with this application. ORALITE® 5600RA can be printed with the ORALITE® 5018 screen printing ink or with most solvent-based inks, UV or latex inks. Please take into account the instructions of the selected ink manufacturer to determine whether an application laminate is required. If necessary, it is recommended to laminate the material with ORALITE® 5051 289F, ORAGUARD® 290F or ORAGUARD® 293F to ensure improved UV protection. When using other inks or printers than ORAFOL, the applications must be tested and approved by the customer. While the use of heat helps with removing the product easily, a solvent-based adhesive remover might be required to fully remove possible adhesive residues. For detailed information please use the processing instructions published by ORAFOL or contact the responsible employee of the ORAFOL Reflective Solutions Division. All ORALITE® products are manufactured in a production environment certified and checked in accordance with ISO 9001:2015. The batch can be traced at any time by means of the roll number.

IMPORTANT NOTES

All ORAFOL products are subject during their entire manufacturing process to thorough quality control so that it is ensured that they are of merchantable quality and free from manufacturing defects. The published information is based on our analyses and examinations and does not constitute warranted characteristics or a quality agreement. In view of the wide range of applications of ORAFOL 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. No warranty is assumed for purposes other than those listed in the Technical Data Sheet or for applications which are not processed in accordance with the processing guidelines of ORAFOL. The durability of the end product depends on a multitude of factors including, but not limited to, the substrate selection and preparation, compliance with the recommended application guidelines, geographical area, exposition conditions and maintenance of the ORAFOL material and of the end product. Product faults which are caused by the substrate or improper surface preparation, do not lie within the responsibility of ORAFOL. The relevant national provisions must be observed when using ORAFOL products. ORAFOL recommends that you obtain the current specifications from your local authority and ensure that the product complies with them. Please contact ORAFOL for further information. ORALITE® is a trademark of ORAFOL Europe GmbH.

ORAFOL Europe GmbH
Orafolstrasse 1
D-16515 Oranienburg
Germany

Tel: +49 (0)3301 864-0
reflective.solutions@orafol.de
www.orafol.com