ORALITE® 5431

Construction Grade

ORALITE® 5431 Construction Grade was specially developed for construction site security and offers reliable retroreflective marking for temporary markings on various substrates, including polyolefinic materials.

Reflective Properties

Reflective Technology: Glass bead, Reflectivity classes: RA1, Reflective film structure: Design A (embedded glass beads), Reflection norm: ORALITE 5431 - Tabelle 1, ORALITE 5431 - Tabelle 2

Areas of Application

- Containers & refuse containers
- Construction sites
- Industry
- Traffic & transportation

Colours

ORALITE® 5431 is available in the following colours: White / Red (F010), Yellow / Black (F020)

Total thickness

- 0.09 mm (Average value, without protective liner and adhesive)

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 (with aggressive tack)

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

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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	Inkjet printing with solvent inks
Suitable substrate	Polyolefin substrates
Application temperature	Minimum temperature 10 °C

Table 1 - Specific coefficient of retroreflection R' in cd / (lx m²) (DIN 67520-1)

Observation Angle		0.2°			0.33°			2°		
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	0	10	4	0	0	0	0
Orange	(035)	25	10	2.2	20	8	2.2	1.2	0.5	-

Table 2 - Chromaticity coordinates (New condition; DIN 5033-3, DIN 5036-1, DIN 6171)

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	0.505	0.470	0.480	0.513	0.437	0.545	0.454	□ 0.27
Red	(030)	0.735	0.265	0.700	0.250	0.610	0.340	0.660	0.340	□ 0.03

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PRODUCT NOTE

The material is equipped with identification watermarks. The material is available with the overprint required for construction site beacons both in rolls and cut to size. Problem-free printing using solvent-based inkjet printing, excellent processing on cutting plotters and good adaptability even on uneven surfaces are guaranteed. The respective national provisions have to be considered during the application of the ORALITE® reflection films series 5431 CONSTRUCTION GRADE.

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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