ORALITE® 5710

Engineer Grade Premium

ORALITE® 5710 Engineer Grade Premium is a highly reflective film developed for traffic signs, guidance systems, and other applications. The film has high resistance to weather conditions and is therefore particularly durable.

Reflective Properties

Reflective Technology: Glass bead, Reflectivity classes: RA1, Reflective film structure: Design A (embedded glass beads), Reflection norm: ORALITE® 5710 - Tabelle 1 (DIN 67520 Teil 1 und 2, Neuzustand), ORALITE® 5710 - Tabelle 2 (DIN 5033 Teil 3, DIN 5036 Teil 1, DIN 6171, Neuzustand)

Areas of Application

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

Colours

ORALITE® 5710 is available in the following colours: White (F010), Yellow (F020), Orange (F035), Red (F030), Green (F060), Blue (F050), Brown (F080)

Total thickness

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

Front material

Alkyd resin, 0.13 mm

Liner

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

Adhesive

Solvent-polyacrylate, permanent

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

ORAFOL Europe GmbH
Orafolstrasse 1
D-16515 Oranienburg
Germany

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

ORALITE® 5710

Engineer Grade Premium

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
Resistance to solvents and chemicals	Mineral oils	
Seawater resistance	Tested	adhered on aluminium | DIN 50021, after 100 h/ 23 °C no change
Temperature resistance	Minimum temperature -40 °C Maximum temperature 80 °C	

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, Eco-solvent printing, UV 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) (New condition; DIN 67520-1/2)

Observation Angle		0,2°			0,33°			2°		
Entrance angle		5°	30°	40°	5°	30°	40°	5°	30°	40°
White	(010)	100	40	10	80	35	9	5	2,5	1,5
Yellow	(020)	60	26	7	45	20	6	3	1,5	1
Orange	(035)	30	12	2,2	25	10	2,2	1,2	0,5	-
Red	(030)	22	9	2	17	6,5	1,8	1	0,5	0,5
Green	(060)	13	5	1,5	11	5	1,2	0,5	0,3	0,2
Blue	(050)	6	2,4	0,5	4	1,3	-	-	-	-

ORAFOL Europe GmbH
Orafolstrasse 1
D-16515 Oranienburg
Germany

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

ORALITE® 5710

Engineer Grade Premium

Observation Angle	0,2°			0,33°			2°		
Entrance angle	**5°**	**30°**	**40°**	**5°**	**30°**	**40°**	**5°**	**30°**	**40°**
Brown (080)	5	2	-	3	1	-	-	-	-

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
Orange (035)	0,610	0,390	0,535	0,375	0,506	0,404	0,570	0,429	≥ 0,17
Red (030)	0,735	0,265	0,700	0,250	0,610	0,340	0,660	0,340	≥ 0,05
Green (060)	0,110	0,415	0,170	0,415	0,170	0,500	0,110	0,500	≥ 0,04
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

Certificates

- ORALITE 5710 - CE 0913-CPD-2009-001 - de - 2014-03-21 - Zertifikat.pdf (Download)
- ORALITE 5710 - CE 0913-CPD-2009-001 - en - 2014-03-21 - Certificate-1.pdf (Download)
- Oralite 5710_1358-CPR-0171-3.pdf (Download)
- 2020-05-28 Orafol 5710 EG 0913-CPD-2009-001 Anlage.pdf (Download)
- 2020-05-28 Orafol 5710 EG 0913-CPD-2009-001 UK Anlage.pdf (Download)
- DoP5710.5017.001.20220208-DE.pdf (Download)
- DoP5710.001.20220208-DE.pdf (Download)
- DoP5710.001.20220208-EN.pdf (Download)
- DoP5710.5017.001.20230918-EN.pdf (Download)
- ORALITE 5710 - CE 0913-CPD-2009-001 - en - 2014-03-21 - Certificate.pdf (Download)
- ORALITE 5710 - CE 0913-CPD-2009-001 - en - 2014-03-21 - Certificate.pdf (Download)
- ORALITE 5710 - CE 0913-CPD-2009-001 - en - 2014-03-21 - Certificate.pdf (Download)
- ORALITE 5710 - CE 0913-CPD-2009-001 - en - 2014-03-21 - Certificate.pdf (Download)

ORAFOL Europe GmbH
Orafolstrasse 1
D-16515 Oranienburg
Germany

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

ORALITE® 5710

Engineer Grade Premium

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. 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.

ORAFOL Europe GmbH
Orafolstrasse 1
D-16515 Oranienburg
Germany

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