

EC-CERTIFICATE OF CONFORMITY

0913 – CPD – 2009 / 001

In compliance the Directive 89/106/EEC of the Council of European Communities of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to the construction products (Construction Products Directive - CPD), amended by the Directive 93/68/EEC of the Council of European Communities of 22 July 1993, it has been stated that the construction product

**Retroreflective sheetings 5710 Engineer Grade
for permanent vertical traffic signs,
with colours white, yellow, red, blue, green, orange and brown,
manufactured by using glass-bead technology
Daylight chromaticity according to EN 12899-1:2007 table 2 class CR2
Coefficient of retroreflection according to EN 12899-1:2007 table 3 class RA1**

placed on the market by

**ORAFOL Europe GmbH
Orafolstraße 2
16515 Oranienburg**

and produced in the factory

**Werk Oranienburg
Orafolstraße 2
16515 Oranienburg**

is submitted by the manufacturer to a factory production control and to the further testing of samples taken at the factory in accordance with a prescribed test plan and that the approved body – StrAus-Zert - has performed the initial type-testing for the relevant characteristics of the product, the initial inspection of the factory and of the factory production control and performs the continuous surveillance, assessment and approval of the factory production control.

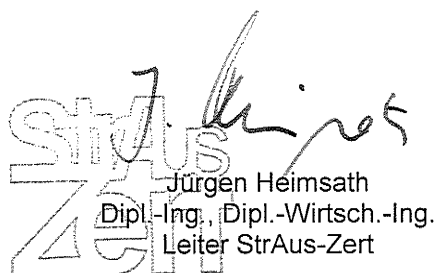
This certificate attests that all provisions concerning the attestation of conformity and the performances described in Annex ZA of the standard

EN 12899-1:2007,

were applied and that the product fulfils all the prescribed requirements.

This certificate was first issued on march 17th 2009 and remains valid as long as the conditions laid down in the harmonised technical specification in reference or the manufacturing conditions in the factory or the FPC itself are not modified significantly .

Hagen, den 17. März 2009



Jürgen Heimsath
Dipl.-Ing., Dipl.-Wirtsch.-Ing.
Leiter StrAus-Zert

Attachment to EC Certificate of Conformity 0913 – CPD – 2009 / 001 (2 pages)

The above certified retroreflective sheeting ORALITE® 5710 Engineer Grade to be used for fixed, vertical road traffic signs using glass bead technology is admitted for the following original dyed colours:

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor 4.1.1.3	Coefficient of retroreflection 4.1.1.4	Impact resistance 4.1.2.1	Resistance to weathering 4.1.1.5
White	ORALITE® 5710-010 Engineer Grade	CR2	RA1	pass	pass
Yellow	ORALITE® 5710-020 Engineer Grade	CR2	RA1	pass	pass
Red	ORALITE® 5710-030 Engineer Grade	CR2	RA1	pass	pass
Blue	ORALITE® 5710-050 Engineer Grade	CR2	RA1	pass	pass
Green	ORALITE® 5710-060 Engineer Grade	CR2	RA1	pass	pass
Orange	ORALITE® 5710-035 Engineer Grade	CR1	RA1	pass	pass
Brown	ORALITE® 5710-080 Engineer Grade	CR2	RA1	pass	pass

The above certified retroreflective sheeting ORALITE® 5710 Engineer Grade to be used for fixed, vertical road traffic signs using glass bead technology is accepted to be coloured by the below listed materials:

Lettering Film:

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor 7.3.1.3	Coefficient of retroreflection 4.1.1.4	Impact resistance 4.1.2.1	Resistance to weathering 4.1.1.5
Black	ORALITE® 5071-070 Lettering Film	NR1	-	pass	pass

Screenprinting Colours:

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor 4.1.1.3	Coefficient of retroreflection 4.1.1.4	Impact resistance 4.1.2.1	Resistance to weathering 4.1.1.5
Yellow	ORALITE® 5018-020 Screen Printing Ink	CR2	RA1	pass	pass
Red	ORALITE® 5018-030 Screen Printing Ink	CR2	RA1	pass	pass
Blue	ORALITE® 5018-050 Screen Printing Ink	CR2	RA1	pass	pass
Green	ORALITE® 5018-060 Screen Printing Ink	CR2	RA1	pass	pass
Black	ORALITE® 5018-070 Screen Printing Ink	NR1	-	pass	pass

Digital Printing Colours:

The digital printing is processed on white retroreflective sheeting with the digital printing system AGFA ANAPURNA M2050 High-Speed-UV-Inkjet-System and is to be laminated with the transparent laminate ORALITE® 5062-000 Transparent Film.

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor 4.1.1.3	Coefficient of retroreflection 4.1.1.4	Impact resistance 4.1.2.1	Resistance to weathering 4.1.1.5
on white sheeting	ORALITE® 5710-010 Engineer Grade and				
White	ORALITE® 5062-000 Transparent Film	CR2	RA1	pass	pass
Yellow	ORALITE® 5019-020 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	CR2	RA1	pass	pass
Red	ORALITE® 5019-030 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	CR2	RA1	pass	pass
Blue	ORALITE® 5019-050 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	CR2	RA1	pass	pass
Green	ORALITE® 5019-060 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	CR2	RA1	pass	pass
Grey	ORALITE® 5019-625 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	CR2	RA1	pass	pass

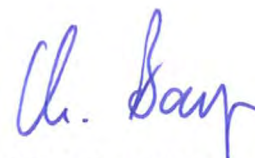
Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor 7.3.1.3	Coefficient of retroreflection 4.1.1.4	Impact resistance 4.1.2.1	Resistance to weathering 4.1.1.5
Black	ORALITE® 5019-070 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	NR1	-	pass	pass

If the colour Black is printed solely, this material combination is admitted to be used without the transparent laminate.

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor 7.3.1.3	Coefficient of retroreflection 4.1.1.4	Impact resistance 4.1.2.1	Resistance to weathering 4.1.1.5
Black	ORALITE® 5019-070 UV Digital Printing Ink	NR1	-	pass	pass

The manufacturer of the fixed vertical road traffic sign is responsible for conformity with the mandated characteristics according to EN 12899-1 by using these materials.

Hagen, 21 March 2014

Christian Barga
Dipl.-Ing.
Leiter StrAus-Zert