

# SRL "TEAM ART CONSTRUCT"

mun. Chişinău, com. Băcioi, str. Cîmpiilor 1, Republica Moldova, tel. 069348877

## DECLARAȚIE DE PERFORMANȚĂ

Nr. \_\_\_\_ data \_\_\_\_ 20\_\_

**Cod unic de identificare al produsului-tip:**  
*Indicatoare pentru semnalizare rutieră verticală*

**2. Tipul, lotul sau numărul de serie:**  
*Indicator de tipul* \_\_\_\_\_

**3. Fabricant:**

**SRL "TEAM ART CONSTRUCT"**  
*mun. Chişinău, str. Otovasca, 19*

**4. Utilizarea sau utilizările preconizate ale produsului:**  
*pentru instalare pe străzi și drumuri pentru informarea participanților la circulația rutieră despre condițiile și regimurile din trafic.*

**5. Standard armonizat:**

*SM EN 12899-1:2010*

**6. Sistemul sau sistemele de evaluare și verificare a constanței performanței produsului pentru construcții:**

*Sistemul 4*

**7. În cazul declarației de performanță privind un produs pentru construcții acoperit de un standard armonizat:**

*Evaluarea tehnică nr. 02/07-022:2022*

**8. Performanța declarată**

Parametru/Caracteristică	Performanță declarată
Material	Tablă plană cu grosimea de 1 mm din oțel
Marginile structurii panoului	E(1-2)
Fața panoului	Clasa P(1-2)
Rezistența la încărcături orizontale	
Elemente de fixare	satisfăcător
Acțiuni datorate vântului	Clasa WL (1-3)
Încărcare dinamică datorată zăpezii	Clasa DSL (1-3)
Deformație permanentă	satisfăcător
Performanțe în cazul impactului cu un vehicul	NPD
Substanțe periculoase	Nu conține

**9. Performanța produsului identificat la punctele 1 și 2 este în conformitate cu performanța declarată de la punctul 8.**

*Această declarație de performanță este emisă pe răspunderea exclusivă a fabricantului identificat la punctul 3.*

**Semnată pentru și în numele fabricantului de către:**

**Director Andrieș Andrei**  
(Numele, Funcția)



Публичное акционерное общество "Запорожский металлургический комбинат "Запорожсталь"  
Public Joint Stock Company "Integrated Iron and Steel Works "Zaporizhstal"

Украина 69008 г. Запорожье Южное шоссе, 72  
факс +38 (061) 213-18-58

UKRAINE 69008 Zaporizhzhya 72, Pivdenne Shose  
Fax +38 (061) 213-18-58

**СЕРТИФИКАТ КАЧЕСТВА / QUALITY CERTIFICATE № 635344**

от / date 22.09.2020

Получатель / consignee

**SRL "BIMETCOM"**

2036 г. Кишинев ул. Заводская, д. 205/2

Страна назначения Молдова

Заводской заказ № / Manufacturer's works order

**2020 991000-1401**

Контракт № / Contract

**МКЕ-909967/01/19**

от/date 14.01.2019

Вагон № / Freight car <b>63981849</b>	Вид грузомест / Type of packages <b>пачки / packs</b> №№ мест / Packages № <b>11-12/12</b>
Наименование и код товара / Description and code of goods <b>7209.279000 Прокат плоский из углеродистой стали холоднокатаный не в рулонах</b> Маркировка продукции: <b>ХОЛОДНОКАТАНЫЙ ЛИСТ / COLD ROLLED STEEL SHEETS</b>	НД на продукцию; химсостав / Specification forms and record ГОСТ 16523-97 ГОСТ 1050-88 ГОСТ 19904-90

Результаты испытаний / Result of trial

№ п/п Item №	№ плавки Heat №	№ партий Batch №	Марка Grade	Категория Category	Группа прочности Group of strength	Размеры, мм Dimensions, mm			Колич. Товара Number of goods	С о п т	Масса, т Mass, tons		
						Толщина Thickness	Ширина Width	Длина Length			брутто gross	брутто2 gross2	нетто net
1	810490	26782-а	08КП	6	K260B	0,90	1250	2500	1	1	5,780		5,690
2	810490	26782-0	08КП	6	K260B	0,90	1250	2500	1	1	5,925		5,830
<b>Итого:</b>											<b>11,705</b>		<b>11,520</b>



Данными настоящего сертификата подтверждается, что продукция испытана и соответствует по качеству действующим в Украине стандартам, техническим условиям и согласованным условиям заказа, контракта.

It is hereby certified that the quality of goods mentioned in this shipping document is in conformity with the standards in the Ukraine, specifications and goods may be exposed.

№ п-п Item №	№ позиции заказа Order reference №	Признак обработки Sign treatment	Шифр кальк. групп Group code	Форма раск. Pattern cutting	Группа поверх. Group of surface	Точность прокатки / изготовления Rolling accuracy / manufacturing	Катег. вытяжки Category of drawing	Плоскостн. Flatness	Характ. кромки Trim of edge	Гарант. свариваемости Weldability	Состояние материала State of material	Прочие характеристики Other features
1-2	4	ТРАВЛ	694	4	III	БТ БД	Г	ПН	НО			Э/УПАК

№ п-п Item №	№ плавки Heat №	Химический состав, % Composition, %										Ti x100	Mo x1000	CEV %	V x1000	W x10000
		C x100	Mn x100	Si x100	S x1000	P x1000	Cr x100	Ni x100	Cu x100	As x100	N2 x1000					
1-2	810490	7	34	1	21	32	3	2	2	8		0,1	1	0,136	3	

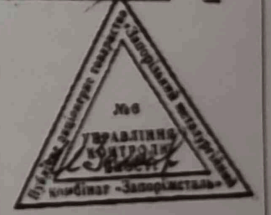
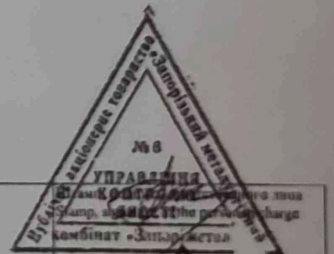
№ п-п Item №	Механические и технологические свойства Mechanical and technological properties										№ зерна феррита Grain size	Обезуглероживание Decarburization	Шероховатость Roughness (RA)	Цементит Cementite	Метод испытаний Testing method	
	Временное сопротивление Tensile strength	Предел текучести Yield point	Относительное удлинение Elongation	Изгиб Bend	Твердость Hardness	Глубина сферич. лунки Erickson	Ударная вязкость Impact toughness									
							KCU	KCV	После мех. старения After mech. ageing							
	кгс/мм <sup>2</sup>	кгс/мм <sup>2</sup>	%			мм	t	кгс*м/ см <sup>2</sup>	t	кгс*м/ см <sup>2</sup>						t
1-2	37,0		34,0	уд		10,1						9-10				разр



*S. Podv...*

ПРИМЕЧАНИЕ: п.26782 отож. в среде сух. водорода. КОНТРОЛЬНАЯ ЛЕНТА ЗЕЛЕНАЯ

ЗАМ.Х/А: плавка с индексом Продута аргоном Раскислена А1



9974250240

Подлинность сертификата можно проверить в реестре сертификатов комбината, на сайте <http://metinvest.io> путем введения номера сертификата и шифра, размещенного на обратной стороне в ячейке "Штамп, подпись эксперта", либо путем считывания QR-кода и перехода по прямой ссылке на сайт. В случае выявления факта подделки сертификатов просим Вас сообщить об этом на электронный адрес [otk@zaporizhstal.com](mailto:otk@zaporizhstal.com)

The authenticity of the certificate can be checked in the register of the plant's certificates on the site <http://metinvest.io> by entering the certificate number and the cipher placed on the reverse side in the "Stamp, expert signature" cell, or by reading the QR code and go to a direct link to the site. In case of detection of the fact of forgery of certificates, we kindly ask you to inform about this to the email address [otk@zaporizhstal.com](mailto:otk@zaporizhstal.com)

Данный сертификат качества подписан электронной цифровой подписью контролёра ОТК. Проверить валидность документа можно на государственном сайте <https://czo.gov.ua/verify>

This quality certificate is signed by the electronic digital signature of the controller of the technical control department. You can check the validity of the document on the state website <https://czo.gov.ua/verify>

# ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ ПРОДУКТА

09038.07016



## RAL7016 PP-MAT (RAL7016)

### Полиэфирная (без ТГИЦ)

ТЕСТ	СТАНДАРТ	ЗНАЧЕНИЕ
Стойкость к солевому туману (Фосфат цинка)	ISO 9227	За 480 часов прогрессирование ржавчины с царапины $\leq$ 2 мм
Стойкость к солевому туману (Хроматирование / Эквивалент)	ISO 9227	За 1000 часов прогрессирование ржавчины с царапины $\leq$ 2 мм

### ВНЕШНЯЯ СТОЙКОСТЬ

ТЕСТ	ЗНАЧЕНИЕ
QUV-B (CLASS 1)	Через 300 часов > 50% сохранение блеска
FLORIDA (CLASS 1)	Через 1 год > 50% сохранение блеска

### ПРИМЕНЕНИЕ

Предварительная обработка поверхности

Окрашиваемая поверхность должна быть предварительно полностью обезжирена. В частности, если требуется высокая коррозионная стойкость и стойкость покрытия, рекомендуется фосфатация или хроматирование.

ПРЕДУПРЕЖДЕНИЕ: Информация, содержащаяся в этом отчёте, предоставлена Pulver Kimya добросовестно и не является обязательной для исполнения. Pulver Kimya не несет ответственности за какие-либо ошибки или упущения.

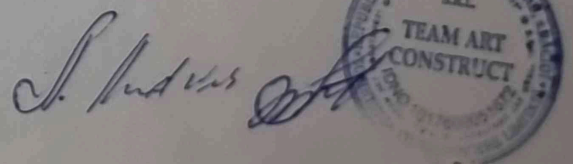
FR.07.03.18 Rev. 01 08.03.2021

Страница 2/2

Дата печати : 21.06.2022

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# ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ ПРОДУКТА

09038.07016



## RAL7016 PP-MAT (RAL7016)

### Полиэфирная (без ТГИЦ)

Qualicoat .....	: P-0781 CLASS 1
Область Применения.....	: Краска для наружных изделий
Вид Поверхности.....	: Гладкий
Цвет.....	: RAL 7016
Блеск(60°).....	: 25 ± 5 Gloss
Плотность.....	: 1,49 ± 0,05 gr/cm <sup>3</sup>
Температура полимеризации	: 180°C-10' 170°C 18-32' 180°C 10-15' 190°C 8-12'
Тип пистолета.....	: Корона/Трибо
Толщина плёнки покрытия	: 65 ± 5 µm
Условия хранения.....	: 12 мес. с даты производства в сухой и прохладной среде (≤27 ° C).

#### ФИЗИЧЕСКИЕ И ХИМИЧЕСКИЕ СВОЙСТВА

ТЕСТ	СТАНДАРТ	ЗНАЧЕНИЕ
Обратный удар	ASTM D 2794	min. 25 kg.cm
Обратный удар	ASTM D 2794	min. 25 kg.cm
Гибкость	ISO 1520	min. 6 mm
Адгезия	ISO 2409	Gt 0

#### КОРРОЗИОННЫЕ СВОЙСТВА

ТЕСТ	СТАНДАРТ	ЗНАЧЕНИЕ
Влагостойкость (Фосфат железа)	ISO 6270-2	За 240 часов не образуются пузыри или потеря блеска
Стойкость к солевому туману (Фосфат железа)	ISO 9227	За 240 часов прогрессирование ржавчины с царапины ≤ 2 мм

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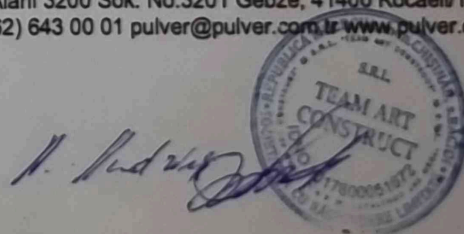
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Дата печати : 21.06.2022

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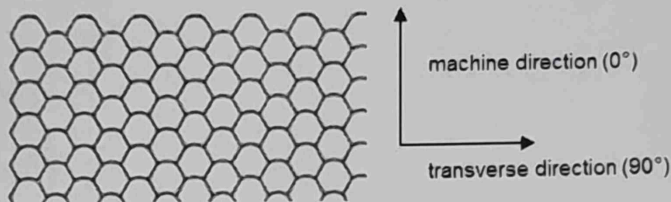
### Description

ORALITE® retroreflective films series 6700 Engineer Prismatic Grade is a reflective, weatherproof, self-adhesive sheeting with excellent corrosion and solvent resistance. The product was specifically developed for the manufacture of traffic control, guidance, warning and information signs, which are intended for long term vertical outdoor use.

### Product Construction

ORALITE® 6700 sheeting consists of sealed cells of air backed microprisms, using total internal reflection. The distinct shape of the sealing identifies the machine direction and the manufacturer of the sheeting, shown in figure 1.

**Figure 1 - Sealing pattern and application directions**



### Reflectivity

ORALITE® 6700 meets and/or exceeds the minimum coefficient of retroreflection ( $R_A$ ) shown in Table 1 when tested in accordance with ASTM E810, "Standard Test Method for Coefficient of Retroreflection of Retroreflective Sheeting Utilizing the Coplanar Geometry". ORALITE® 6700 fully meets and/or exceeds the requirements of ASTM D4956 for Type I.

### Daytime Color

ORALITE® 6700 conforms to the daytime color requirements in Table 2 when tested in accordance with ASTM D4956. ORALITE® 6700 is available in white, yellow, orange, green, red, blue, and brown.

### Nighttime Color

ORALITE® 6700 conforms to the nighttime color requirements in Table 3 when tested in accordance with ASTM D4956 and ASTM E811. The sheeting shall be measured using CIE Illuminant A, an observation angle of  $0.33^\circ$  and an entrance angle of  $+5^\circ$ .

### Adhesive

The adhesive is protected by a release liner which shall be removed by peeling, without soaking in water or other solvents. The adhesive produces such a bond that a 1" (50 mm) strip shall support a 1 3/4 pound (0.79 kg) weight for 5 minutes without the strip peeling for a distance of more than 2" (50 mm) when applied to a smooth aluminum surface as specified in the ASTM D4956, section 7.5 adhesion test.

### Impact Resistance

Following application to a smooth surface aluminum rectangle, 0.040" x 3" x 6" [1.01mm x 75mm x 150mm], the specimen is conditioned for 24 hours at  $73^\circ \pm 3^\circ\text{F}$  ( $23^\circ \pm 2^\circ\text{C}$ ) and 50% relative humidity, subject the sheeting to an impact of a 2 lb (0.91 kg) weight with a 5/8" (16 mm) rounded tip dropped from a 10 in-lb (1.13 N-m) setting on a Gardner variable impact tester, IG-1120, as per ASTM D4956, section S2.2.1. The sheeting shall show no cracking or delamination outside the actual area of impact.

### Flexibility

The sheeting is conditioned for 24 hours at  $72^\circ\text{F}$  [ $23^\circ\text{C}$ ] and 50% relative humidity. The release liner is removed and the sheeting is sufficiently flexible to show no cracking when bent in one second's time around a 1/8-inch [3.2mm] diameter mandrel with the adhesive contacting the mandrel.

### Weatherability

ORALITE® 6700 meets the requirements of ASTM D4956, Section 6.4. The material is weather resistant and shows no appreciable cracking, scaling, pitting, blistering, edge lifting, or curling, or more than 1/32" (0.8 mm) shrinkage or expansion. Retroreflectivity measurements are conducted after outdoor weathering with an observation angle of  $0.20^\circ$  and entrance angles of  $-4^\circ$  and  $+30^\circ$ . The minimum coefficient of retroreflection ( $R_A$ ) after weathering is 80% of the Table 1 values.



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# ORALITE® 6700

## Engineer Prismatic Grade

Technical Datasheet  
1/2018  
Page 2 of 3

### Solvent Resistance

ORALITE® 6700 meets the requirements of LS-300C solvent resistance, section 3.6.7, when tested as specified in Table VI, test method 4.4.6.

### Specular Gloss

ORALITE® 6700 shall have a specular gloss of not less than 40 when tested per ASTM D523 at an angle of 85°

### Shrinkage

A 9 inch by 9 inch [229mm by 229mm] specimen of the sheeting with liner is conditioned a minimum of one hour at 72°F [23°C] and 50% relative humidity. The liner is then removed and the specimen is placed on a flat surface with the adhesive side up. Ten minutes after the liner is removed and again after 24 hours, the specimen is measured to determine the amount of dimensional change. The specimen will not shrink in any dimension more than 1/32 inch [0.8mm] in 10 minutes and 1/8 inch [3.2mm] in 24 hours.

### Application Instructions

The recommended application temperature to achieve best results is 65°F [18°C] or above.

### Warranty

7-year limited warranty

Contact your ORAFOL Americas Inc. representative for details.

**Table 1, Coefficient of Retroreflection (R<sub>A</sub>)\***

Observation Angle	Entrance Angle	White	Yellow	Orange	Green	Red	Blue	Brown
0.20°	-4°	70	50	25	9.0	14	4.0	1
	30°	30	22	7.0	3.5	6.0	1.7	0.3
0.50°	-4°	30	25	13	4.5	7.5	2.0	0.3
	30°	15	13	4.0	2.2	3.0	0.8	0.2

\*all values have units of cd/ft<sup>2</sup> (cd/lx/m<sup>2</sup>)

**Table 2, Color Specification Limits (Daytime)**

Color	Chromaticity Coordinates†								Luminance Factor (Y%)	
	1		2		3		4		Min.	Max.
	x	y	x	y	x	y	x	y		
White	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	≥ 27	
Yellow	0.498	0.412	0.557	0.442	0.479	0.520	0.438	0.472	15	45
Orange	0.558	0.352	0.636	0.364	0.570	0.429	0.506	0.404	10	30
Green	0.026	0.399	0.166	0.364	0.286	0.446	0.207	0.771	3.0	12
Red	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	2.5	15
Blue	0.140	0.035	0.244	0.210	0.190	0.255	0.065	0.216	1.0	10
Brown	0.430	0.340	0.610	0.390	0.550	0.450	0.430	0.390	1.0	9.0

†The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant D65.



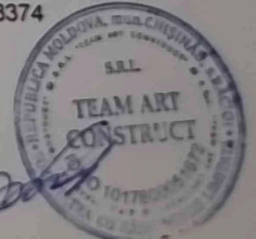
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**Table 3, Color Specification Limits (Nighttime)**

Color	Chromaticity Coordinates‡							
	1		2		3		4	
	x	y	x	y	x	y	x	y
White	0.475	0.452	0.360	0.415	0.392	0.370	0.515	0.409
Yellow	0.513	0.487	0.500	0.470	0.545	0.425	0.572	0.425
Orange	0.595	0.405	0.565	0.405	0.613	0.355	0.643	0.355
Green	0.007	0.570	0.200	0.500	0.322	0.590	0.193	0.782
Red	0.650	0.348	0.620	0.348	0.712	0.255	0.735	0.265
Blue	0.033	0.370	0.180	0.370	0.230	0.240	0.091	0.133
Brown	0.595	0.405	0.540	0.405	0.570	0.365	0.643	0.355

‡ The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant A.

**Note:**

All ORALITE® products are manufactured within an ISO 9001:2008 controlled manufacturing environment and batch traceability is possible on the basis of the roll number.

**IMPORTANT NOTICE**

When using ORALITE® sheeting, please comply with relevant national specifications. ORAFOL recommends obtaining the current requirements from your local authority and ensure product conformance with such requirements. Please contact ORAFOL for further information.

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable, although, such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be allowed to dry for at least three weeks and to completely cure respectively. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. The self-adhesive reflective material can only be used for dry application. The low tensile strength of the material can make the removability of the reflective film more difficult. Please review applicable application information published by ORAFOL.

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL. Please refer to the full warranty document available at [www.orafolamericas.com](http://www.orafolamericas.com) for detailed information.

**WARNING:** This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

ORALITE® is a trademark of ORAFOL Europe GmbH



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# Report of the classification of the reaction to fire performance

**No. 230009556-3**

issued 29.10.2014

English version

## Sponsor

ORAFOL Europe GmbH  
Orafolstraße 2

16515 Oranienburg

## Order

Classification of the reaction to fire performance according to DIN EN 13501-1:2010-01

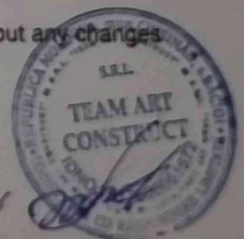
**Date of order:** 06.06.2014

## Name of the classified product:

Self-adhesive foil „ORACAL 8300 Transparent Cal“

This report gives the classification of the above-mentioned building product in accordance to the procedure given in DIN EN 13501-1.

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This classification report consists of 3 pages.



## 1 Description of the building product

UV-stabilized, transparent, different coloured PVC-foils with glossy surface for the production of illuminated advertising facilities and to design back-lit glass planes; the PVC-foils are provided with a permanent adhesive on acrylic basis on the backside.

Thickness of the PVC-foil without adhesive coating: 0.080 mm

Thickness of the PVC-foil with adhesive coating: 0.1 mm ± 10 %

Mass per unit area of the PVC-foil with adhesive coating: 124 g/m<sup>2</sup> ± 10 %

## 2. Test reports and test results supporting the classification

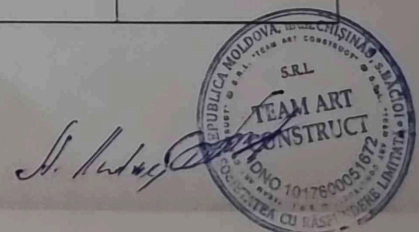
### 2.1 Test reports

Name of the test laboratory	Sponsor	No. of the test report	Test procedure
MPA NRW	ORAFOL Europe GmbH	230009556-1 of 29.10.14 230009556-2 of 29.10.14	DIN EN ISO 11925 – 2 DIN EN 13823

### 2.2 Test results

The following test results are the basis of the classification

Test method	Parameter	Number of tests performed	Test results	
			Average values of continuously parameter	Requirements of discrete parameter
DIN EN ISO 11925-2 30 s flaming time	Flamespread ≤150 mm Burning droplets/particles	24	--	yes no
DIN EN 13823	FIGRA <sub>0,2</sub> in W/s	3	0	--
	FIGRA <sub>0,4</sub> in W/s		0	--
	THR <sub>600s</sub> in MJ		0,4	--
	LFS <sub>edge</sub>		--	< edge
	SMOGR <sub>A</sub> in m <sup>2</sup> /s <sup>2</sup>		3	--
	TSP <sub>600s</sub> in m <sup>2</sup>		50	--
	Duration of burning droplets/particles in s		0	--



### 3. Classification and direct field of application

#### 3.1 Reference

This classification was carried out in accordance to the clauses 11 and 14 of the standard DIN EN 13501-1:2010-01.

#### 3.2 Classification

The tested building product in relation to its reaction to fire behaviour is classified as: **B**

The additional classification in relation to smoke production is: **s1**

The additional classification in relation to flaming droplets/particles is: **d0**

The classification of the reaction to fire performance is therefore:

Fire behaviour	Smoke development	Flaming droplets
<b>B</b>	<b>s1</b>	<b>d0</b>

i. e. **B – s1,d0**

#### 3.3 Field of application of the product

The classification is valid solely for the product described in clause 1 for the application on glass substrates.

### 4. Restrictions

This classification report does not represent type approval or certification of the product.

### 5. Remark

This classification report written in English language is issued additionally to the report written in German language with the same report number. In case of doubt the German version is valid solely.

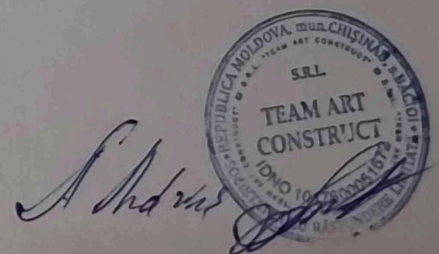
Erwitte, 29.10.2014  
 On behalf



Dipl.-Ing. Schreiner  
 Assistant head of notified testing body



Date of issue of this English version: 15.12.2014



**Certificate of constancy of performance**

**No. 0913-CPR-2016/11**

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

**Microprismatic Retroreflective Sheetting  
ORALITE® 6710 Engineer Prismatic Grade, originally dyed  
for fixed, vertical road traffic signs,  
(modalities attached, pursuant to ETA 16/0579 from 2016-10-20),**

placed on the market under the name of

**Orafol Europe GmbH  
Orafolstraße 1  
D-16515 Oranienburg  
Germany**

and produced in the manufacturing plant:

**Orafol Europe GmbH  
Orafolstraße 1  
D-16515 Oranienburg  
Germany.**

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in the

**ETA 16/0579, issued on 11/09/2017**

and


**EAD 120001-01-0106**

under system 1 for the performance set out in in the ETA are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

**the constancy of performance of the construction product.**

This certificate was first issued on **November 15<sup>th</sup> 2016** and will remain valid as long as neither the ETA, the EAD, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the product certification body.

Hagen, 18 September 2018



*Christian Barga*  
Christian Barga  
Dipl.-Ing.  
Leiter StrAus-Zert

*S. Indreay*

**Prüf-, Überwachungs- und Zertifizierungsgemeinschaft der Straßenausstatter e.V.**

Notifiziert unter 0913 durch DIBt nach BauPVO



**Attachment to Certificate of constancy of performance 0913-CPR-2016/11 (3 pages)**

The description in this attachment refer to the ETB (ETAssessment)

- ETA-16/0579, from 2017-09-11,
- ETA-16/0580, from 2017-09-11,
- ETA-16/0581, from 2016-10-20.

The above certified microprismatic retroreflective sheeting ORALITE® 6710 Engineer Prismatic Grade to be used for fixed, vertical road traffic signs is admitted for the following originally dyed colours:

**Originally dyed retroreflective sheeting:**

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor ETA 16/0579 annex 1	Coefficient of retroreflection ETA 16/0579 annex 2	Impact resistance according to EN 12899-1	Resistance to weathering ETA 16/0579 annex 3
White	ORALITE® 6710-010 Engineer Prismatic Grade	pass	pass	pass	pass
Yellow	ORALITE® 6710-020 Engineer Prismatic Grade	pass	pass	pass	pass
Blue	ORALITE® 6710-050 Engineer Prismatic Grade	pass	pass	pass	pass
Green	ORALITE® 6710-060 Engineer Prismatic Grade	pass	pass	pass	pass
Orange	ORALITE® 6710-035 Engineer Prismatic Grade	pass	pass	pass	pass
Brown	ORALITE® 6710-080 Engineer Prismatic Grade	pass	pass	pass	pass

*S. Andreas*



**Prüf-, Überwachungs- und Zertifizierungsgemeinschaft der Straßenausstatter e.V.**

Notifiziert unter 0913 durch DIBt nach BauPVO



The above certified retroreflective sheeting ORALITE® 6710 Engineer Prismatic Grade to be used for fixed, vertical road traffic signs is accepted to be coloured by the below listed materials:

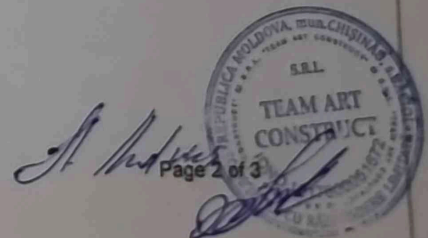
**Lettering Film:**

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor EN 12899-1 7.3.1.3	Coefficient of retroreflection EN 12899-1 4.1.1.4	Impact resistance EN 12899-1 4.1.2.1	Resistance to weathering EN 12899-1 4.1.1.5
Black	ORALITE® 5081-070 Lettering Film	NR1	-	pass	pass

**Screen Printing Colours:**

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor ETA 16/0580 annex 1	Coefficient of retroreflection ETA 16/0580 annex 2	Impact resistance according to EN 12899-1	Resistance to weathering ETA 16/0580 annex 3
on white sheeting	ORALITE® 6710-010 Engineer Prismatic Grade and				
Yellow	ORALITE® 5018-020 Screen Printing Ink	pass	pass	pass	pass
Red	ORALITE® 5018-030 Screen Printing Ink	pass	pass	pass	pass
Blue	ORALITE® 5018-050 Screen Printing Ink	pass	pass	pass	pass
Green	ORALITE® 5018-060 Screen Printing Ink	pass	pass	pass	pass

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor EN 12899-1 7.3.1.3	Coefficient of retroreflection EN 12899-1 4.1.1.4	Impact resistance EN 12899-1 4.1.2.1	Resistance to weathering EN 12899-1 4.1.1.5
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 a transparent protective laminate.

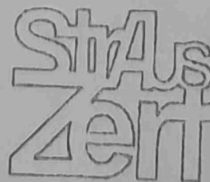
**Transparent protective laminate ORALITE® 5062-000 Transparent Film:**

Colour on white sheeting	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor ETA 16/0581 annex 1	Coefficient of retroreflection ETA 16/0581 annex 2	Impact resistance according to EN 12899-1	Resistance to weathering ETA 16/0581 annex 3
White	ORALITE® 5062-000 Transparent Film	pass	pass	pass	pass
Yellow	ORALITE® 5019-020 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	pass	pass	pass	pass
Red	ORALITE® 5019-030 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	pass	pass	pass	pass
Blue	ORALITE® 5019-050 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	pass	pass	pass	pass
Green	ORALITE® 5019-060 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	pass	pass	pass	pass
Orange	ORALITE® 5019-035 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	pass	pass	pass	pass
Brown	ORALITE® 5019-080 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	pass	pass	pass	pass
Grey	ORALITE® 5019-073 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	pass	pass	pass	pass

Colour	Name of the product	Visibility characteristics		Durability	
		Daylight chromaticity & luminance factor EN 12899-1 7.3.1.3	Coefficient of retroreflection EN 12899-1 4.1.1.4	Impact resistance EN 12899-1 4.1.2.1	Resistance to weathering EN 12899-1 4.1.1.5
Black	ORALITE® 5019-070 UV Digital Printing Ink and ORALITE® 5062-000 Transparent Film	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, 18 September 2018



*Christian Barga*  
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Leiter StrAus-Zert

