

Tabliczka na podłożu ze spienionego PCV, z kolorowym nadrukiem na białej folii - Typ13



Producent:

Pracownia Dekoracji AKATJA Katarzyna Kwiel
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Zamierzone zastosowanie:

Tabliczka przeznaczona do umieszczenia zarówno na zewnątrz jak i wewnątrz budynków w celach informacyjnych, ostrzegawczych, dekoracyjnych itp. – zależnie od wybranej przez Klienta grafiki.

Instrukcja montażu:

Tabliczkę najczęściej montuje się do podłoża – ściany, drzwi, szyby, konstrukcji metalowej lub drewnianej. W zależności od potrzeb i wybranego podłoża można to zrobić przy pomocy np. kleju – do tworzyw sztucznych np. polimerowego, taśmy dwustronnie klejącej lub po wykonaniu otworów w tabliczce - za pomocą śrub, kołków rozporowych, trytytek.

Instrukcja używania i konserwacji:

Tabliczkę można myć, wycierać miękką wilgotną szmatką z łagodnymi środkami myjącymi. Nie używać substancji żrących, wybielaczy, rozpuszczalników.

Instrukcja utylizacji:

Tabliczkę po okresie użytkowania wyrzucać do pojemnika na segregowane tworzywa sztuczne.

Ostrzeżenia:

Producent na podstawie wieloletnich obserwacji własnych i Klientów stwierdza, że produkt jest bezpieczny w przypadku stosowania w dających się racjonalnie przewidzieć warunkach.

Dokumentacja techniczna:

Tabliczka została wyprodukowana przy użyciu poniższych materiałów:

- spienione PCV - SIMOPOR EP
- folia samoprzylepna biała - ORAJET® 3164
- atrament – Mutoh UMS

Proces produkcyjny w żadnym stopniu nie zmienia właściwości, bezpieczeństwa powyższych materiałów. Producenci i dystrybutorzy powyższych materiałów deklarują, że są one bezpieczne i nadają się do zastosowania w niniejszym produkcie.

Na kolejnych stronach znajduje się dokumentacja techniczna udostępniona przez producentów w/w materiałów.

CERTIFICATE OF COMPLIANCE



311321-420

Certificate Number

16 Oct 2023 - 16 Nov 2024

Certificate Period

Certified

Status

MUTOH INDUSTRIES
LTD
UMS21

UL 2818 - 2022 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using a Classroom Environment with an air change of 0.82 hr⁻¹ and a loading of 94.60 m³, and Wall finishes are determined compliant in accordance with California Department of Public Health (CDPH) Standard Method V1.2-2017 using an Office Environment with an air change of 0.68 hr⁻¹ and a loading of 33.40 m³.

Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.



UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC ^(A)	-	0.22	mg/m ³
Formaldehyde	50-00-0	9 (7.3 ppb)	µg/m ³
Total Aldehydes ^(B)	-	0.043	ppm
4-Phenylcyclohexene	4994-16-5	6.5	µg/m ³
Particle Matter less than 10 µm ^(C)	-	20	µg/m ³
1-Methyl-2-pyrrolidinone ^(D)	872-50-4	160	µg/m ³
Individual VOCs ^(E)	-	1/2 CREL or 1/100th TLV	-

(A) Defined to be the total response of measured VOCs falling within the C₆ – C₁₀ range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.

(B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.

(C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.

(D) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day

(E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.2 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).



Description

Soft PVC film available in transparent and white, with a glossy or matt surface.

Release Paper

Silicone coated paper on one side, 135 g/m²

Adhesive

Polyacrylate, permanent, transparent

Area of use

For brilliant and colourful advertising for short- and medium-term outdoor use

Printing Method

Inkjet printing with solvent based inks, UV- or latex inks

Technical Data

Thickness* (without paper and adhesive)	100 micron
Dimensional stability (FINAT TM 14)	Adhered to steel, no shrinkage in cross direction, in length 0,4 mm max.
Temperature resistance***	Adhered to aluminium, -40° C to +80° C, no variation
Water resistance	Adhered to aluminium, after 48h/23° C no variation
Adhesive power* (FINAT TM 1, after 24h, stainless steel)	16 N/25 mm
Tensile strength (DIN EN ISO 527)	Along: min. 19 MPa Across: min. 19 MPa
Elongation at break (DIN EN ISO 527)	Along: min. 130% Across: min. 150%
Shelf life**	2 years
Minimum application temperature	>+10° C
Service life by specialist application Under vertical outdoor exposure***	4 years (not printed)

* average ** in original packaging, at 20° C and 50% relative humidity

*** normal climate of Central Europe

Note

After printing, the ink must be allowed to thoroughly dry, in order to avoid any issues when later combined with the laminate. Surfaces to which the material will be applied must be thoroughly cleaned and free 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. The compatibility of the selected lacquers and paints should be tested by the user, prior to the application of the material. Furthermore the application information published by ORAFOL must be considered.

IMPORTANT NOTICE

All ORAJET® 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 ORAJET® 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 ORAJET® 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. ORAJET® is a registered trademark of ORAFOL Europe GmbH.



Report of the classification of the reaction to fire performance

No. 230011151-3

issued 29.03.2018

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: 17.08.2017

Identification number of the notified testing institute: 0432

Name of the classified product:

With solvent-digital print-inks printable, mat respectively glossy, white PVC-self-adhesive foils
„ORAJET 3164“, „ORAJET 3164X“ and „ORAJET 3164XRA“

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

Publishing and copying of classification reports without permission of the MPA NRW is only allowed without any changes
of the content and the form of the reports.
The shortened reproduction of classification reports needs the permission of the MPA NRW.
This classification report consists of 3 pages.

1 Description of the building product

White, with solvent-digital print-inks in different colours printable soft-PVC foils in different gloss levels with a polyacrylate-based adhesive coating on one side

Thickness of the foils without the self-adhesive coating: 0,1 mm

Gloss level of the foils: mat respectively glossy

Colour of the adhesive on the foils „ORAJET 3164“: colourless, transparent

Colour of the adhesive on the foils „ORAJET 3164X“: grey

Colour of the adhesive on the foils „ORAJET 3164XRA“: grey

The self-adhesive coating of the foils „ORAJET 3164XRA“ is provided with a special cover material to simplify the sticking without bubbles.

Mass per unit area of the self-adhesive foils: app. 154 g/m²

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	230011151-1 of 29.03.18 230011151-2 of 29.03.18	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 diskrete parameter
DIN EN ISO 11925-2 30 s flaming time	Flamespread ≤150 mm Burning droplets/particles	72	--	yes no
DIN EN 13823	FIGRA _{0,2} in W/s	8	101	--
	FIGRA _{0,4} in W/s		0	--
	THR _{600s} in MJ		0,8	--
	LFS _{edge}		--	< edge
	SMOGR _A in m ² /s ²		13	--
	TSP _{600s} in m ²		34	--
	Duration of burning droplets/particles in s		0	--

The values for SMOGR_A and TSP_{600s} were calculated by using the alternative calculation procedure according to DIN EN 13823 remark to section A.6.1.2.

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	s1	d0

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 metallic substrates of Euroclass A1 or A2-s1,d0 with a density of $\geq 5887 \text{ kg/m}^3$, a thickness of $\geq 0,6 \text{ mm}$ and a melting point of $\geq 1000 \text{ °C}$. The classification is also valid, if the foils will be printed with solvent-digital print-inks in different colours.

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, 29.03.2018
 On behalf




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

Date of issue of this English version: 29.03.2018

Introduction

ORAFOL offers a wide range of self-adhesive digital printing materials for many different applications. They come with a well-matched set of laminating films. To ensure that the films display the specified properties, it is important to follow the instructions for preparation and application which can be found online: www.orafol.de.

If you want to apply an ORAJET-material on a car, please also see our practical information for self-adhesive films for application on cars (www.orafol.com).

ORAFOL recommends to use only material with the same batch number for one graphical application. In this context ORAFOL ensures that every film roll consists of material of the same batch no. and consequently does not have any splice. When different batch numbers are used the technician should make tests to find out possible differences in using the films and in the quality of the graphical application.

Storage and Processing Conditions

The self-adhesive products which ORAFOL supplies in rolls should at all times be stored either suspended (with end caps) or standing on end on the roll blocks, and never lying (without end caps). For storage and processing, they should be kept in a cool, dry place protected from sunlight. Relative air humidity between 40% and 50% and temperature between +18° C and +22° C should be ensured. Direct sunlight, storage beside radiators etc. should by all means be avoided. Please observe the shelf life instructions contained in the technical data sheet accompanying each film.

Instructions for Printing

The digital printing materials should generally be handled with a high degree of care. Cotton gloves should be used to prevent damage to the surface or soiling. Check the surface quality prior to printing or application. Also check the print file with profiling. The ORACAL®/ORAJET® digital printing media require - due to their differing qualities like the thickness of the adhesive layer - different parameter settings of the printer and the selecting software (RIP). Make sure you take the relevant amount of ink and specific colour definitions into account. In addition, check the specifications of the digital printing materials and the inks for their respective applications (indoor/outdoor) and durability, and match them accordingly.

Drying up

Freshly printed films should be spread out and left to dry after printing to allow the residual solvent to evaporate. If freshly printed vinyls are plotted in the printed areas the vinyl might shrink. Laminating too early might – depending on the used ink – affect the functionality of the film (adhesive power, service life) by preventing residual solvents to evaporate. Printed and not sufficiently dried films shrink after printing during the drying process. If the drying process of the vinyls takes place after application on the substrate, the film might shrink and come off at the edges, from corrugations and rivets. Following these processing and handling instructions we recommend to spread out and dry the film for at least 72 hours (lying or hanging).

5 Lamination

Lamination of inkjet prints is recommended to ensure longer lives at optimum quality (gloss, colour depth, mechanical damage). ORAGUARD® laminate films enhance the colour affect for the desired appearance of the surface (glossy, matt, semi-gloss), provide excellent protection against the UV rays of the sun destroying the colour pigments, and against humidity and abrasion. Soiling can easily be removed by using common cleaning agents. We recommend only using films of same manufacture and type (e.g. monomeric PVC film on monomeric PVC film and polymeric PVC film on polymeric PVC film) as their raw materials are accurately matched with each other. Lamination has to be done stress-free to prevent a deformation of the film compound. For the same reason we recommend to ensure that the temperature of the compactor is not higher than +30° C.

Furthermore, we refer you to our list of recommendations for complementary application of the printing materials in Inkjet and thermo transfer printing, and to the specific laminating films provided for their surface protection. For product information about ORAGUARD® laminates, please see www.orafol.com.



Application

The application is described in the Practical Information for Plotter Films. For the application on cars please see additionally the practical information on how to apply self-adhesive films on cars.

For the application on car windows the remarks in the practical information for self-adhesive films for application on cars are to be followed.

Removability

Please see the practical information for Plotter Films.

General Information

ORAFOL will provide information on recommended printers and ICC profiles. A free CD with ICC profiles for various printers may be made available.

This information is based on our knowledge and experience. We have not explained all considering aspects of application. Specialised or occupational knowledge and competence of an professional sign maker are presupposed. Due to the diversity of potential influencing factors during application and use, we recommend to make own tests of our products by customers who wish to use the films for special applications. No legally binding warranty of certain qualities can be derived from our information.

Oranienburg, March 13, 2013

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Trade name: **SIMOPOR EP**
Date of printing: 02.08.2021

Revision: 15.07.2021

SIMOPOR EP	
Data sheet update	15.07.2021
Density, g/cm ³ , DIN EN ISO 1183	0.460
Tensile modulus of elasticity, MPa, DIN EN ISO 527	750
Flexural modulus of elasticity, MPa, DIN EN ISO 178	850
Impact strength, kJ/m ² , DIN EN ISO 179	10
Shore hardness D, DIN EN ISO 868	28
Mean coefficient of linear thermal expansion, K ⁻¹ , ISO 11359-2	0,7 x 10 ⁻⁴
Surface resistivity, Ohm , DIN IEC 60093	≥ 10 ¹³
Temperature range, °C	0 to +60

All specifications are deemed to be approximate values in respect of the specific material and may vary depending on the processing methods used. In general, data specified applies to average values measured on extruded sheets with a thickness of 4 mm. In the case of sheets manufactured by means of pressing, testing is generally performed on sheets with a thickness of 20 mm. Deviations from the values specified are possible if the sheets in this thickness are not available. In the case of backed sheets, all technical specifications relate to the non-backed base sheets. Information presented herein is not necessarily applicable to other products (e.g. pipes, solid rods) of the same material or products that have undergone downstream processing. Suitability of materials for a specific field of application must be assessed by the party responsible for processing or the end-user. All technical specifications presented herein are designed merely to provide assistance in terms of project planning. They do not constitute a guarantee of specific properties or qualities. For further information, please contact our Technical Service Centre at tsc@simona.de.