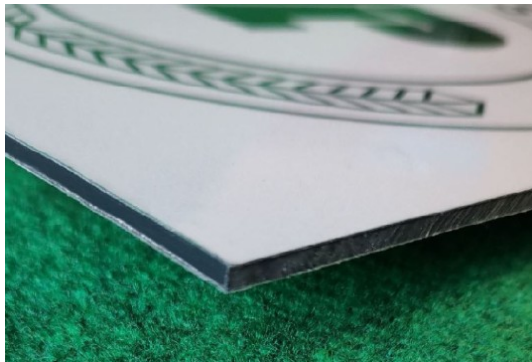


## Tabliczka na podłożu z dibondu, z kolorowym nadrukiem na białej folii, z laminatem błyszczącym lub matowym - Typ18



### **Producent:**

Pracownia Dekoracji AKATJA Katarzyna Kwiel  
26-200 Końskie ul. Różana 35 email: [akatja@akatja.pl](mailto:akatja@akatja.pl)

### **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. 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 metale i 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:

- podłoże- TUBOND® SLIM
- folia samoprzylepna biała - ORAJET® 3164
- atrament – Mutoh UMS
- laminat błyszczący lub matowy -Ikonos Profiflex Lam-Pro GPT L80+/ MPT L80+

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



MUTOH INDUSTRIES  
LTD  
UMS21

311321-420

Certificate Number

16 Oct 2023 - 16 Nov 2024

Certificate Period

Certified

Status

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  $0.82 \text{ hr}^{-1}$  and a loading of  $94.60 \text{ m}^3$ , 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  $0.68 \text{ hr}^{-1}$  and a loading of  $33.40 \text{ m}^3$ .

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 <sup>(A)</sup>                            | -          | 0.22                                      | mg/m <sup>3</sup> |
| Formaldehyde                                   | 50-00-0    | 9 (7.3 ppb)                               | µg/m <sup>3</sup> |
| Total Aldehydes <sup>(B)</sup>                 | -          | 0.043                                     | ppm               |
| 4-Phenylcyclohexene                            | 4994-16-5  | 6.5                                       | µg/m <sup>3</sup> |
| Particle Matter less than 10 µm <sup>(C)</sup> | -          | 20                                        | µg/m <sup>3</sup> |
| 1-Methyl-2-pyrrolidinone <sup>(D)</sup>        | 872-50-4   | 160                                       | µg/m <sup>3</sup> |
| Individual VOCs <sup>(E)</sup>                 | -          | 1/2 CREL<br>or<br>1/100th TLV             | -                 |

(A) Defined to be the total response of measured VOCs falling within the C<sub>6</sub> – C<sub>10</sub> range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m<sup>3</sup>) fall in the range of 0.5 mg/m<sup>3</sup> 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 m<sup>3</sup>/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

|                                                                                     |                                                                          |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <b>Thickness*</b> (without paper and adhesive)                                      | 100 micron                                                               |
| <b>Dimensional stability</b> (FINAT TM 14)                                          | Adhered to steel, no shrinkage in cross direction, in length 0,4 mm max. |
| <b>Temperature resistance***</b>                                                    | Adhered to aluminium, -40° C to +80° C, no variation                     |
| <b>Water resistance</b>                                                             | Adhered to aluminium, after 48h/23° C no variation                       |
| <b>Adhesive power*</b> (FINAT TM 1, after 24h, stainless steel)                     | 16 N/25 mm                                                               |
| <b>Tensile strength</b> (DIN EN ISO 527)                                            | Along: min. 19 MPa<br>Across: min. 19 MPa                                |
| <b>Elongation at break</b> (DIN EN ISO 527)                                         | Along: min. 130%<br>Across: min. 150%                                    |
| <b>Shelf life**</b>                                                                 | 2 years                                                                  |
| <b>Minimum application temperature</b>                                              | >+10° C                                                                  |
| <b>Service life by specialist application</b><br>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/m<sup>2</sup>

## 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<br>230011151-2 of 29.03.18 | DIN EN ISO 11925 – 2<br>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<br>30 s flaming time | Flamespread<br>≤150 mm<br>Burning droplets/particles | 72                        | --                                       | yes<br>no                          |
| DIN EN 13823                            | FIGRA <sub>0,2</sub> in W/s                          | 8                         | 101                                      | --                                 |
|                                         | FIGRA <sub>0,4</sub> in W/s                          |                           | 0                                        | --                                 |
|                                         | THR <sub>600s</sub> in MJ                            |                           | 0,8                                      | --                                 |
|                                         | LFS <sub>edge</sub>                                  |                           | --                                       | < edge                             |
|                                         | SMOGR <sub>A</sub> in m <sup>2</sup> /s <sup>2</sup> |                           | 13                                       | --                                 |
|                                         | TSP <sub>600s</sub> in m <sup>2</sup>                |                           | 34                                       | --                                 |
|                                         | Duration of burning droplets/particles in s          |                           | 0                                        | --                                 |

The values for SMOGR<sub>A</sub> and TSP<sub>600s</sub> 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>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 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](http://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](http://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](http://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

ORAFOL Europe GmbH  
Orafolstrasse 2, D-16515 Oranienburg, Germany

Tel. : +49 (0) 3301 864 0, Fax : +49 (0) 3301 864 100  
graphic.products@orafol.de





## KARTA TECHNICZNA

### DOTYCZY: PŁYTY TUBOND® SLIM, GRUBOŚĆ WARSTWY ALUMINIUM 0,21 MM

Aluminiowe płyty kompozytowe z wypełnieniem polietylenowym, obustronna folia ochronna, grubość obu warstw aluminium 0,21 mm, dedykowane do plikacji 2D. Dzięki swojej konstrukcji płyty te charakteryzują się wyjątkową sztywnością materiału przy jednoczesnym zachowaniu niskiej wagi. Te cechy w połączeniu z idealnie gładką powierzchnią płyty sprawiają, że materiał może być wszechstronnie stosowany w branży reklamowej, drukarskiej, budowlanej, przemysłowej oraz wielu innych dziedzinach.

Płyty Tubond® Slim z warstwą aluminium o grubości 0,21mm zalecane są do aplikacji płaskich 2D. Płyty Tubond® Slim w kolorze białym są powlekane specjalną warstwą poliestrową, która wykazuje optymalną przyczepność tuszu, co umożliwia zadruk cyfrowy i sitodruk. Dzięki temu producent płyt Tubond® Slim udziela 5 letniej gwarancji na płyty pokryte tą warstwą.

| CECHY                  | Standard<br>index | Testy | Wartości / Grubość                           |                   |
|------------------------|-------------------|-------|----------------------------------------------|-------------------|
|                        |                   |       | 2mm                                          | 3mm               |
| Oznaczenie             | Tubond® Slim      |       |                                              |                   |
| FIZYCZNE               |                   |       |                                              |                   |
| Grubość Aluminium      |                   |       | 0,21 mm                                      |                   |
| Wykończenie            |                   |       | mat/mat<br>polysk/mat<br>płyty jednostronne* |                   |
| Waga                   |                   |       | t2mm=3.15kg/m2                               | t3mm=4,2-4,3kg/m2 |
| Rodzaj rdzenia         |                   |       | PE                                           |                   |
| Długość                |                   |       | ± 3mm                                        |                   |
| Szerokość              |                   |       | ± 2mm                                        |                   |
| Grubość                |                   |       | ±0,2mm                                       |                   |
| Przekątna              |                   |       | ≤ 5mm                                        |                   |
| Nierówność krawędzi    |                   |       | ≤ 1 mm/m                                     |                   |
| Odkształcenie          |                   |       | ≤ 5mm/m                                      |                   |
| Standardowe szerokości |                   |       | 1250/1500/2000                               |                   |



www.tuplex.pl



| MECHANICZNE                                                                             |                                          |                                      |
|-----------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------|
| Twardość ołówkowa                                                                       | ≥H                                       | ASTM D3363-00                        |
| Grubość lakieru                                                                         | 2 pokrycie ≥25 um<br>3 pokrycie ≥ 35 um  |                                      |
| Odporność na zginanie                                                                   | 2T brak szczelin                         | ASTM 4145                            |
| Odporność na uderzenia                                                                  | bez pęknięć                              | ASTM D2794 (50KG.CM)                 |
| Adhezja                                                                                 | 0.85kgf/mm                               |                                      |
| Minimalny promień gięcia                                                                | 45mm 70mm                                |                                      |
| CIEPLNE                                                                                 |                                          |                                      |
| Odporność termiczna                                                                     | -50°C do 70°C                            |                                      |
| Rozszerzalność cieplna                                                                  | 2.4mm/m przy 100°C<br>różnicy temperatur |                                      |
| Temperatura odkształcenia cieplnego                                                     | 115°C                                    | ASTM D 648                           |
| ODPORNOŚĆ CHEMICZNA                                                                     |                                          |                                      |
| Odporność na wrzącą wodę                                                                | po 2h w gotującej wodzie bez zmian       |                                      |
| Odporność chemiczna:<br>- kwas solny 5% HCL 24 godz<br>- wodorotlenek sodu 5% NaOH 24 h | bez zmian                                | ASTM D 308                           |
| Odporność na rozpuszczalnik                                                             | bez zmian                                | ASTM D 2248<br>(100 razy)            |
| Odporność na wilgoć                                                                     | bez zmian                                | ASTM D 2247-02<br>ASTM D 714 (4000h) |
| ŁATWOPALNOŚĆ                                                                            |                                          |                                      |
| Rozprzestrzenianie ognia                                                                | zakwalifikowany                          | ASTM E84                             |
| INNE                                                                                    |                                          |                                      |
| Tolerancja na dźwięki                                                                   | 27 acc.                                  | ASTM E413                            |
| Odporność na działanie wody                                                             | zaliczone                                | ASTM E331                            |

\* folia jednostronna, spodnia warstwa aluminium pokryta powłoką zabezpieczającą



www.tuplex.pl



NARODOWY INSTYTUT ZDROWIA PUBLICZNEGO PZH  
– Państwowy Instytut Badawczy  
National Institute of Public Health NIH – National Research Institute

## ATEST HIGIENICZNY

**B.BK.60111.0789.2022**

HYGIENIC CERTIFICATE

ORYGINAL

**NATIONAL INSTITUTE OF PUBLIC HEALTH NIH – NATIONAL RESEARCH INSTITUTE**

Wyrób / product: **Laminaty IKONOS PROFIFLEX LAM-PRO**

Zawierający / containing: poli(chlorek winylu), stabilizator barowo-cynkowy i inne składniki wg dokumentacji producenta

Przeznaczony do / destined: ochrony wydruków wielkoformatowych stosowanych w miejscach użyteczności publicznej np. centrach handlowych, hotelach, restauracjach, szkołach, przedszkolach itp.

Wymieniony wyżej produkt odpowiada wymaganiom higienicznym przy spełnieniu następujących warunków  
/ the above-named product is acceptable according to hygienic criteria with the following conditions:

Zastosowanie wyrobu musi być zgodne z zaleceniami producenta oraz aktualnymi przepisami dotyczącymi obiektu, w którym ma on być używany. Na opakowaniu należy umieścić etykietę w języku polskim, zawierającą zalecenia dotyczące środków ostrożności wg karty charakterystyki wyrobu, zgodnie z obowiązującymi przepisami prawnymi. Wyrób należy przechowywać w miejscu niedostępnym dla dzieci. Atest higieniczny nie dotyczy parametrów technicznych, walorów użytkowych i oceny właściwości alergizujących wyrobu.

Wytwórca / producer:

ATRIUM Centrum Plotkowe Sp. z o.o.  
45-446 Opole  
ul. Gostawicka 2d, Polska

Niniejszy dokument wydano na wniosek / this certificate issued for:

ATRIUM Centrum Plotkowe Sp. z o.o.  
45-446 Opole  
ul. Gostawicka 2d, Polska

**Atest może być zmieniony lub unieważniony po przedstawieniu stosownych dowodów przez którąkolwiek stronę. Niniejszy atest traci ważność po 2028.02.13 lub w przypadku zmian w recepturze albo w technologii wytwarzania wyrobu.**

**The certificate may be corrected or cancelled after appropriate motivation. The certificate loses its validity after 2028.02.13 or in the case of changes in composition or in technology of production.**

Data wydania atestu higienicznego: 13 lutego 2023

The date of issue of the certificate: 13th February 2023

Kierownik  
Zakładu Bezpieczeństwa Zdrowotnego  
Środowiska

*2 mp. M. Jolanta Solecka*  
dr hab. Jolanta Solecka, prof. NIZP PZH-PIB

Kontakt w sprawie niniejszego atestu higienicznego / To contact regarding this hygienic certificate  
Zakład Bezpieczeństwa Zdrowotnego Środowiska NIZP PZH - PIB / Department of Environmental Health and Safety NIPH NIH - NRI  
00-791 Warszawa, ul. Chocimska 24 / 00-791 Warsaw, Chocimska 24, Poland  
e-mail: sekretariat-bk@pzh.gov.pl tel. +48 22 54-21-354, +48 22 54-21-349

### IKONOS PROFIFLEX LAM-PRO GPT L80+ (GLOSSY) / MPT L80+ (MATT)

#### PRODUCT DESCRIPTION:

Ikonos Profiflex Lam-Pro Series includes monomeric, transparent, glossy (GPT L80+) or matt (MPT L80+) overlamination PVC films with UV adsorber. Materials intensifying the colour range of an image and significantly extending its durability. Profiflex Lam-Pro GPT L80+/MPT L80+ reduce colour fading and effectively retards printout deterioration caused by weather conditions.

#### PRODUCT STRUCTURE:

Film: 70 mic, transparent, glossy or matt, monomeric PVC

Adhesive: permanent, transparent, water-based dispersion of polyacrylate

Liner: one-side siliconized, clay coated paper, 121 gsm

**RANGE OF APPLICATION:** Ikonos Profiflex Lam-Pro GPT L80+ and MPT L80+ protect pictures and images from mechanical damage, moisture and UV radiation. They are perfect solution for any kind of indoor applications as well as for short- and midterm outdoor usage.

#### PHYSICAL FEATURES:

|                                   | STANDARD NO.                                                        | VALUE                       |
|-----------------------------------|---------------------------------------------------------------------|-----------------------------|
| <b>Thickness</b>                  |                                                                     |                             |
| Thickness of PVC                  | ISO 2286-3                                                          | 70 mic (±5%)                |
| Total thickness (film+glue+liner) | ISO 2286-3                                                          | 198 mic (±10%)              |
| <b>Tensile stress at break</b>    |                                                                     |                             |
| Along                             | ISO 527-3/2/200                                                     | 20 MPa                      |
| Initial                           | ISO 527-3/2/200                                                     | 15 MPa                      |
| <b>Tensile strain at break</b>    |                                                                     |                             |
| Along                             | ISO 527-3/2/200                                                     | 160%                        |
| Initial                           | ISO 527-3/2/200                                                     | 160%                        |
| <b>Adhesive Power</b>             |                                                                     |                             |
| Initial                           | FINAT 9                                                             | 8.8 N/25 mm                 |
| After 20 min                      | FINAT 1                                                             | 13.3 N/25 mm                |
| After 24 h                        | FINAT 1                                                             | 19.8 N/25 mm                |
| <b>Temperature range</b>          |                                                                     |                             |
| While applying                    | -                                                                   | from 10°C to 33°C           |
| While exploiting                  | -                                                                   | from 10°C to 30°C           |
| <b>Flammability</b>               | Adhered to aluminium, glass or steel – self-extinguishing*          |                             |
| <b>Durability</b>                 | 90° vertical exposure                                               | indoor 5 years (unprinted)  |
|                                   | 90° vertical exposure                                               | outdoor 2 years (unprinted) |
| <b>Shelf Life</b>                 | 2 years (in original packaging, at 20 °C and 50% relative humidity) |                             |

\* Producer's internal test method

## GENERAL CHARACTERISTICS OF THE PRODUCT

All IKONOS products are subject to quality control throughout the entire manufacturing process, are covered with a commercial quality warranty and are free of any manufacturing defects. Any published information on IKONOS products is based on research which the manufacturer deems reliable, even though this information is not considered a warranty. The Manufacturer/Supplier confirms the specific scope of use of the product, provided the Buyer strictly complies with all recommendations.

The Manufacturer/Supplier shall not guarantee the full scope of use of the product if:

- the Buyer fails to comply with the recommendations of the Manufacturer/Supplier or its instructions;
- the material is subject to mechanical damage or it loses its physical and chemical characteristics or its resistance, e.g. water resistance, UV resistance, etc. due to incorrect application of the material;
- the material is processed, e.g. printed on, combined with another material, subject to physical and chemical treatment, etc.;
- the material has been affected by mechanical force or is used incorrectly;
- the material has been misused.

The Buyer shall use the material only in properly prepared and dedicated locations, the Buyer shall use all materials strictly according to their intended use. In case of some applications/locations, the material may be subject to increased wear and tear rate or may lose its physical and chemical properties.

## PRODUCT LIFE

The Supplier guarantees product life provided all rules described above are adhered to and subject to the following conditions. The data included in the product data sheet applies to a vertical display of a non-printed/unprocessed product. Outdoor product life applies to moderate climate of Central Europe. The Manufacturer/Supplier recommends using solvent glue for outdoor applications. In the event the product is subject to extreme weather conditions, e.g. strong sunlight, high levels of humidity or intensive UV radiation, degradation at an increased rate may occur. In case of some applications/locations, the material may be subject to increased wear and tear rate or may lose its physical and chemical properties. The strength of a PVC film may also be reduced in areas characterised by high pollution levels and at high altitudes. The Buyer shall use the material only in properly prepared and dedicated locations/on properly prepared and dedicated surfaces. The Buyer shall use all materials only as intended.

## USE, STORAGE AND PROCESSING OF THE PRODUCT

### NOTE:

THE PRODUCT/MATERIAL is subject to the above-mentioned rules in terms of its original intended use. DO NOT use the material for any purposes other than those indicated by the Manufacturer/Supplier. The Customer shall be fully responsible for any misuse of the material and/or failing to comply with the recommendations of the Manufacturer/Supplier. Any explicit or implied assurances or declarations of the Manufacturer/Supplier shall not be legally binding if the Product/Material is misused.

## APPROPRIATE TRANSPORT

The Supplier shall become familiar with the recommended transportation conditions (particularly in terms of temperature, humidity, arrangement of the product on the pallet and the number of packaging layers).

## APPROPRIATE STORAGE

The Supplier hereby indicates that appropriate storage is vital for the life of the product. Recommended storage conditions: relative humidity of 50%, 20°C in the original packaging. The Customer shall store the rolls with the label containing the information on the product type, dimensions of the roll and the batch number. Any complaints shall be accepted only if the batch number is indicated. Edges of the PVC film may be subject to shrinkage during storage. For best printing quality/processing results, we recommend storing rolls for at least 24 hours, prior to printing/processing, in the room where the printing/processing is to be done. Large temperature and humidity difference between the room and the material may cause material rippling and may affect printing quality. Once the material has been printed on, the ink must become completely dry prior to any further processing of the material, e.g. laminating or application. Any solvent residues may cause a change in the characteristics of the product. The surface on which the product is to be applied must be free of dust, grease, lubricants and other substances, which may negatively affect the adhesion of the material. Due to the wide range of possible applications, the Customer shall, on each occasion, make sure the given material fully corresponds to their needs. We recommend conducting individual tests prior to each application. As IKONOS products are suitable for a wide range of applications and are constantly developed, the Buyer should always test the given product in terms of the intended application.

## LOSS OF WARRANTY/PRODUCT CHARACTERISTICS

The Manufacturer/Supplier shall not guarantee the full scope of use of the product if:

- the Buyer fails to comply with the recommendations of the Manufacturer/Supplier or its instructions;
- the material is subject to mechanical damage or it loses its physical and chemical characteristics or its resistance, e.g. water resistance, UV resistance, etc. due to incorrect application of the material;
- the material is processed, e.g. printed on, combined with another material, subject to physical and chemical treatment, etc.;
- the material has been affected by mechanical force or is used incorrectly;
- the material is damaged due to unprofessional application;
- the material is misused.

## SUMMARY

All IKONOS products are subject to quality control throughout the entire manufacturing process, are covered with a commercial quality warranty and are free of any manufacturing defects. Any published information on IKONOS products is based on research which the manufacturer deems reliable, even though this information is not considered a warranty. The Manufacturer/Supplier confirms the full scope of use of the product, provided the Buyer strictly observes all recommendations. As IKONOS products are suitable for a wide range of applications and are constantly developed, the Buyer should always test the given product in terms of the intended application.

The information contained herein is based on our knowledge and practical experience and may be amended without prior notice. Any information always represents the average, the minimum or the maximum value and should be treated as such. Any data presented herein is for information purposes only and shall not be the basis for any warranty.

Any possible limited liability of the Manufacturer/Supplier applies exclusively to the costs of defective material purchased by the customer. Agents, representatives or vendors shall not have the right to give any warranties, certifications, guarantees or to make representations other than those provided for herein.

The Manufacturer/Supplier shall not be responsible for any damage to substrates, surfaces or equipment resulting from use or removal of the products.

The Manufacturer/Supplier shall not be responsible for any other damage caused during the processes of application or removal of IKONOS products.

All offered IKONOS products are subject to "General Commercial Terms and Conditions" available at: <https://atrium.com.pl/wsparcie/ogolne-warunki-handlowe> or <https://ikonosmedia.eu/terms-and-conditions/>.

The Manufacturer/Supplier shall not be responsible for any accidental and/or consequential damage including, but not limited to, lost profits or revenue, other lost gains, costs of labour, costs and fees related to reconstruction of a graphic, lost production time, costs of removal of defective graphics, etc. All rights reserved. All trademarks and registered trademarks are the property of their respective owners. Provisions of this TDS are not a commercial offer as defined in the Civil Code.