Certyfikat UA20/819942667

System zarządzania

Spółki z ograniczoną odpowiedzialnością "ArtGrand"

9ZH Zhurnalistiv str., Dnipro city, Ukraina, 49051

została oceniona i certyfikowana jako spełniająca wymogi ISO 9001:2015

Dla następujących działań Projektowanie, produkcja i sprzedaż tapet ściennych

Niniejszy certyfikat jest ważny od 06 października 2023 r. do 22 września 2026 r. i zachowuje ważność pod warunkiem pomyślnego przeprowadzenia audytów nadzoru. Wydanie 2. Certyfikacja od 23 września 2020 r

Data wygaśnięcia ostatniego certyfikatu 22 września 2023 r. Data audytu recertyfikacyjnego 31 sierpnia 2023 r.

Jorothan M. Hell

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Preferred by Nature OÜ hereby confirms that the Chain of Custody system of

Limited Liability Company ArtGrand

9 Zh, Zhurnalistiv Dnipro, 49051 Ukraine

has been assessed and certified as meeting the requirements of FSC-STD-40-004 V3-1; FSC-STD-50-001 V2-0

The certificate is valid from 30 July 2023 to 29 July 2028 Certificate version date: 21 June 2023

Scope of certificate Certificate type: Single Chain of Custody

Certificate registration code NC-COC-032229

FSC License Code FSC-C142340

Justinas Janulaitis Management board member Filosoofi 31, Tartu Estonia

Specific information regarding products and sites is listed in the appendix(es) of this certificate. The validity and exact scope covered by this certificate shall always be verified at www.info.fsc.org.

FSC[™] accredited certification body (FSC[™] A000535) | The mark of responsible forestry | www.ic.fsc.org

This certificate itself does not constitute evidence that particular product supplied by the certificate holder is FSC™ certified [or FSC Controlled Wood]. Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on invoices and shipping documents. The physical printed certificate remains the property of Preferred by Nature OÜ and shall be returned upon request.



Annex A: Scope of Limited Liability Company ArtGrand FSC[™] Chain of Custody Certificate NC-COC-032229

Product Type Trade Name Output F		Output FSC Claims
P8.8	Wallpapers	FSC 100%; FSC Mix; FSC Mix Credit

This certificate itself does not constitute evidence that particular product supplied by the certificate holder is FSC[™] certified [or FSC Controlled Wood]. Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on invoices and shipping documents. The physical printed certificate remains the property of Preferred by Nature OÜ and shall be returned upon request.

CERTYFIKAT ZGODNOŚCI

(nazwa rodzaju certyfikatu: certyfikat weryfikacji rodzaju lub certyfikat weryfikacji projektu lub certyfikat zgodności)

Zarejestrowany w rejestrze organu oceniającego zgodność TOW OS EUROSTANDART pod nr UA.PN.191.0146-25

Okres ważności o	od:	21.01.2025 do 20.01.2026		
Certyfikat został wydany:		TOW ArtGrand, 49051, obwód dn kod EDRPOU 41955005	Grand, 49051, obwód dniepropietrowski, miasto Dniepr, ul. Żurnalistiw 9 Ż, POU 41955005	
Produkty:		Tapety papierowe i flizelinowe		4814 17.24.11 (kod UKT ZED.DK-016)
Spełnia wymaga	nia:	DSTU GOST 6810:2004 (EH 233 5.4-5.11, pkt 5.14.1, pkt 5.15.1, pl (certyfikacja produktów wytwarza	ct 5.15.2.	runki techniczne", pkt 4.6.1-4.6.4, pkt
Producent produktów:		TOW ArtGrand, 49051, obwód dniepropietrowski, miasto Dniepr, ul. Żurnalistiw 9 Ż, kod EDRPOU 41955005		
Dodatkowe informacje: 2		Certyfikat dotyczy produktów produkowanych seryjnie od 21.01.2025 do 20.01.2026. Z uwzględnieniem gwarancyjnego okresu przechowywania, kontrola techniczna jest przeprowadzana raz w roku. (Certyfikacja dobrowolna).		
Certyfikat został wydany przez organ oceniający zgodno		rzez organ oceniający zgodność:	TOW OS EUROSTANDART, ul. Proskury Akademika 1, bud. 12, Charków, Ukraina, 61070, kod EDRPOU 36911689	
Podstawy: Protokół z badań nr 2025.191.01.21.01 z dnia 21.01.2025 r., wydany przez WL TOW AKADEMT. ul. Wesnina 5, Charków, Ukraina, 61023, kod EDRPOU 37188889, protokół z badań nr 1 z dnia 14.01.2025 r. wydany przez WL TOW ArtGrand, ul. Żurnalistiw 9 Ż, Dniepr, Ukraina, 49051, kod EDRPOU 41955005			3889, protokół z badań nr 1 z dnia	

Dyrektor

Ruslan GORLOV

pieczątka

(Podpis, imię i nazwisko)

Ważność certyfikatu zgodności można sprawdzić w Rejestrze Organu Oceniającego Zgodność OS EUROSTANDART pod numerem telefonu (057) 766-12-78.

LINGUA LAB s.c. W. Szyszkiewicz, M. Dembińska ul. Sereno Fenn'a 6/14, 31-143 Kraków NIP 677-235-31-19 REGON 121429850





NEPCon hereby confirms that the Chain of Custody system of Limited Liability Company ArtGrand

9 Zh, Zhumalistov 49051 Dnipro Ukraine

has been assessed and certified as meeting the requirements of FSC-STD-40-004 V3-0; FSC-STD-50-001 V2-0

The certificate is valid from 30-07-2018 to 30-07-2023 Certificate version date: 06-08-2018

Scope of certificate Certificate type: Single Chain of Custody

Certificate registration code NC-COC-032229

FSC License Code FSC-C142340

Justinas Janulaitis Operations Directo Filosoofi 31, Tartu

Specific information regarding products and sites is listed in the appendix(es) of this certificate. The validity and exact scope covered by this certificate shall always be verified at info.fsc.org.

FSC** A000535 | The mark of responsible forestry | www.ic.fsc.org

This certificate itself does not constitute evidence that particular product supplied by the certificate holder is FSC^{*} certified [or FSC Controlled Wood]. Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on invoices and shipping documents.

The physical printed certificate remains the property of NEPCon and shall be returned upon request.



Annex A: Scope of Limited Liability Company ArtGrand FSC™ Chain of Custody Certificate NC-COC-032229

Product Type	Trade Name	Output FSC Claims
P8.8	Wallpapers	FSC 100%; FSC Mix; FSC Mix Credit

This certificate itself does not constitute evidence that particular product supplied by the certificate holder is FSC[~] certified [or FSC Controlled Wood]. Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required FSC claim is clearly stated on invoices and shipping documents. The physical printed certificate remains the property of NEPCon and shall be returned upon request.



DECLARATION OF PERFORMANCE

1. Unique identification code of the product-type:	Blown and mechanically embossed vinyl wallcovering with paper or non-woven backing
Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4):	See the batch and article number on the label
 Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer: 	Wallcovering in roll form supplied for hanging onto walls or ceilings by means of an adhesive.
4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant Article 11(5):	«ArtGrand» Limited Liability Company Address: 9ZH Zhurnalistov str., Dnepr city, Ukraine 49051
5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):	e-Delux GmbH Address: Röntgenstr.8D-40699 Erkrath/ Germany
6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:	System 3
 In case of the declaration of performance concerning a construction product covered by a harmonised standard: 	MPA BAU Hannover, performed reaction to fire test and classification according to EN 13501-1 under system 3 and issued classification report nr. 185893 dated December 7th 2018. and WESSLING GmbH, performed release tests of formaldehyde, heavy metals, other dangerous substances and Vinylchloride-Monomer (VCM) according to EN 12149:1997 and issued Report-No.: CAL18-151490-1a/tec, dated November 14th, 2018, CAL18-151490-2a/tec, dated
8. Declaredperformance	

8. Declaredperformance

Essential characteristics	Performance	Harmonized technical specification
Reaction to fire	C-s1, d0	EN 15102:2011
Release of formaldehyde	complies	EN 12149:1997
Release of heavy metals and specific elements	complies	EN 12149:1997
Release of vinyl chloride monomer	complies	EN 12149:1997

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:
Director L.Y. Solodovnik
(name and function) (signatur, Dnipro, December 7th 2018 (place and date of issue)



DECLARATION OF CONFORMITY

according to ISO/IEC 17050-1 and EN 17050-1

	DoC #: BCLAA-0901-R07
Supplier's Name:	Hewlett-Packard Company
Supplier's Address:	Cami de Can Graells, 1-21
	08174 Sant Cugat del Vallès
	Barcelona, Spain
declares, that the product	
Product Name and Model:	HP Designjet L25500 / L26100 / L26500 printer series
	HP Latex 260 / Latex 210 printer series
Regulatory Model Number: ¹⁾	BCLAA-0901
Product Options:	All
conforms to the following Product Sp	ecifications and Regulations:

EMC:

```
EN 55022:2010 / CISPR 22:2008 Class A
EN 55024:2010 / CISPR 24:2010
EN 61000-3-2:2006 + A1:2009 + A2:2009 / IEC 61000-3-2:2005 + A1:2008 + A2:2009
EN 61000-3-3:2008 / IEC 61000-3-3:2008
FCC CFR 47 Part 15 Class A
```

Safety:

```
IEC 60950-1:2005 (2nd Edition) + A1:2009 / EN60950-1:2006 + A11:2009 + A1:2010 + A12:2011
CAN/CSA-C22.2 No. 60950-1-07 + A1:2011 / UL 60950-1:2011
EN 62479:2010
```

RoHS:

EN 50581:2012

The product herewith complies with the requirements of the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU and carries the $C \in$ marking accordingly. In addition, it complies with the WEEE Directive 2002/96/EC.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Additional Information:

1) This product is assigned a Regulatory Model Number which stays with the regulatory aspects of the design. The Regulatory Model Number is the main product identifier in the regulatory documentation and test reports, this number should not be confused with the marketing name or the product numbers.

Sant Cugat del Vallès (Barcelona). August 14th, 2013

Carlos Lahoz-Buch, Manager InkJet Commercial Division

Local contact for regulatory topics only:

- EU: Hewlett-Packard GmbH, HQ-TRE, Herrenberger Strasse 140, 71034 Boeblingen, Germany
- U.S.: Hewlett-Packard, 3000 Hanover St., Palo Alto, CA 94304, U.S.A. 650-857-1501

John A. Ortiz Senior Product Steward, GSB Environmental Operations



Hewlett Packard Graphics Solutions Business 3000 Hanover St. Palo Alto California United States www.hp.com

+1 541 715 5515 Tel john.ortiz@hp.com

Palo Alto, 25th September, 2009

To Whom It May Concern:

HP 786 and HP 789 Latex Inks are compliant with the chemical requirements of the Nordic Ecolabel (otherwise known as the Nordic Swan) 4.2 specification for printing companies.

A. Ortiz John



Achieving CHPS, Green Globes & Green Guide for Healthcare Credits

With GREENGUARD Certified Products

GREENGUARD Indoor Air Quality Certified[®] or GREENGUARD Children & SchoolsSM Certified products are recognized as criteria for several different green building programs. Low-emitting products that achieve GREENGUARD Certification can be used to qualify for a number of different credits, and are listed in the GREENGUARD Product Guide at <u>www.greenguard.org</u>. The following programs are highlighted to demonstrate some of the ways that GREENGUARD Certified products can be used to achieve points.

CHPS Best Practices Manual Volume III

The Collaborative for High Performance Schools (CHPS) is recognized as a pioneer in developing sustainable guidelines and a building rating program for schools. Variations of the CHPS program is used in *California, Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Texas, Vermont and Washington*.

• EQ Credit 2.2 – Low-Emitting Materials (Children & Schools)

Green Globes

Large developers and property management companies throughout Canada and the United States utilize Green Globes assessment and rating systems.

- 12.2.1 Source Control of Indoor Pollutants Volatile Organic Compounds (Children & Schools)
 - **12.2.1 A** Adhesives: Architectural, Substrates, Specialty, Sealants
 - □ **12.2.1 B** Paints: Latex Flat, Latex Non-flat, Floor Coverings, Insulations, Laminates, Hard Surfaces, Wallcoverings
 - □ **12.2.1 C –** Floors and Interior Fit-Outs

Green Guide for Health Care 2.2

An industry-recognized rating system that is being used as a foundational document for developing LEED-NC for Healthcare.

- **EP Credit 3.1-3.5** Ceiling Tiles (Children & Schools)
- EP Credit 3.1-3.5 Wall Coverings (Children & Schools)
- EP Credit 3.1-3.5 Flooring Systems (Children & Schools)
- EP Credit 3.6 Furniture & Medical Furnishings (Children & Schools)
- EQ Credit 4.1 Interior Adhesives & Sealants (Children & Schools)
- EQ Credit 4.2 Wall & Ceiling Finishes (Children & Schools)
- EQ Credit 4.3 Flooring Systems (Children & Schools)
- EQ Credit 4.5 Furniture & Medical Furnishings (Children & Schools)



March 12, 2010

HP Espanola, S.L. Mr. Adrian Liga Cami de Can Graells, 1-21 Sant Cugat del Valles SPAIN 08174

Dear Mr. Liga:

Hewlett-Packard Espanola SL has shown their commitment to healthy indoor environments by testing the **HP PVC Free Wallpaper + Latex Print Technologies** wall finish to current indoor air quality requirements. We are pleased to inform you that your **HP PVC Free Wallpaper + Latex Print Technologies** wall finish, as delivered by Hewlett-Packard Espanola SL, has been shown to meet the GREENGUARD and GREENGUARD Children & Schools emission levels and is eligible to be listed as a low emitting product in the GREENGUARD Product Guideù .

Your product is now eligible for listing in the GREENGUARD On-Line Product Guide. However, the product is neither GREENGUARD nor GREENGUARD Children & Schools Certified. Thus, Hewlett-Packard Espanola SL is not entitled to promote or market the product as GREENGUARD or GREENGUARD Children & Schools Certified. The qualified product will be listed on the guide, in the exact tested configuration, for a 12-month period as being `tested once_ and meeting the GREENGUARD emission levels. If the product does not become certified or has not been retested within one year of the initial testing date, the product will be removed from the GREENGUARD Product Guide at the end of the 12-month period.

The GREENGUARD Certification ProgramSM offers many benefits in addition to Product Guide listing such as use of the GREENGUARD certification mark on your marketing and packaging materials, limiting liability exposure and litigation cost, differentiating your product within your market, commitment to ongoing quality performance, and possibly increasing revenue and market share. If you are interested in learning more information about GREENGUARD Certification, please contact the GREENGUARD Environmental Institute (GEI) at 1-800-427-9681.

Air Quality Sciences, Inc. has completed the product listing authorization form and submitted a copy to the GEI on your behalf. Listing of your products on the GEI website will occur within 5 days of the GEI's receipt of the authorization form. In the event that Hewlett-Packard Espanola SL does not wish to be listed on the GEI website, please notify the contact person listed below.

GREENGUARD Environmental Institute Attn: Operations Manager 2211 Newmarket Parkway, Suite 110 Atlanta, GA 30067 1-800-427-9861, Fax: 770-980-0072

Thank you for testing with Air Quality Sciences. Please feel free to contact me at 678-931-2280 if you have any questions or require additional information. You may also contact the GEI directly at 1-800-427-9861 for listing questions.

Sincerely,

U. Mctry

Allyson M. McFry Chemistry Laboratory Director

Enclosures: AQS Report Nos. 16579-01 & -02



AUTHORIZATION FORM FOR LISTING OF TESTED, NON-CERTIFIED PRODUCTS PRODUCT EMISSIONS CRITERIA FOR ACCEPTABLE INDOOR AIR QUALITY WALL FINISH

Air Quality Sciences, Inc (AQS) has tested the product(s) below according to GREENGUARD's Test Method P066, 'Measuring Chemical Emissions from Various Sources Using Dynamic Environmental Chambers._ This method meets the requirements of ASTM D 5116, ASTM D 6670, and the U.S. Environmental Protection Agency's (USEPA) Environmental Technology Verification (ETV) protocol. Test results indicate how emissions from the product compare with currently acceptable GREENGUARD Emissions criteria and those of other programs recognizing these criteria. The product is not certified by the GREENGUARD Environmental Institute, but favorable results indicate that it is low emitting and should be considered for certification. The product has been tested once on the date indicated.

MANUFACTURER INFORMATION	Contact: HP Espanola, S.L. Attn: Adrian Liga Cami de Can Graells, 1-21 Sant Cugat del Valles Spain 08174 Phone: +34 9358 25725	
GREENGUARD Code	WC179-01	
Product Test Date	03/12/2010	
PRODUCT DESCRIPTION	HP PVC Free Wallpaper + Latex Print Technologies	

Below you will see an organization and the specified compliance requirements for each of the qualifying protocols for that organization. A `**Yes**_ indicates the product(s) have been found to meet the low-emission requirements, and a `**No**_ indicates the product(s) have failed to comply with the low-emission requirements.

Acceptable GREENGUA	Meets Criteria (Y/N)		
GREENGUARD Certification	TVOC	Ħ0.5 mg/m³	Yes
Program ^s ™	Formaldehyde	Ħ0.05 ppm	Yes
	Total Aldehydes	Ħ0.1 ppm	Yes
	4-Phenylcyclohexene	Ħ0.0065 mg/m³	Yes
	Individual VOC's	all Ħ1/10 TLV	Yes
GREENGUARD Children & Schools Certification Program SM	TVOC	Ħ0.22 mg/m³	Yes
	Formaldehyde	Ħ0.0135 ppm	Yes
	Total Aldehydes	Ħ0.043 ppm	Yes
	Total Phthalates	Ħ0.01 mg/m³	Yes
	IVOCs	Ħ1/100 TLV and Ħ1/2 chronic REL	Yes

Emissions data were obtained on the product as selected and delivered to AQS by the manufacturer. AQS did not oversee sample collection and packaging of product. AQS expressly disclaims any warranty or representation that the emissions criteria, met by the tested product, have been or will be approved, sanctioned, or authorized by any government agency, or that those emission criteria are sufficient or safe for human exposure. This product is not GREENGUARD Certificat^{5M}. Test results indicate that the provide, the tested at tested at AQS, initially meets acceptable IAQ criteria. For more information on GREENGUARD Certification Programs^{5M} visit www.greenguard.org or call 1-800-427-9681.

For AQS Use Only:			
Emissions approved:	03/12/2010		
AQS Code:	WC179-01		
AQS Report #:	16579-01		
AQS Report Date:	03/12/2010		
-			

For GEI Use Only:

Date Received: Payment:

Website Updated:

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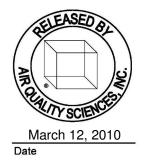


GREENGUARD EMISSIONS TEST FOR WALL FINISH

Prepared for

HEWLETT-PACKARD ESPANOLA SL

Test Product Description: HP PVC Free Wallpaper + Latex Print Technologies



AQS Report No. 16579-01

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Released by Air Quality Sciences, Inc.Date Prepared:March 12, 2010AQS Project #:16579AQS Report #:16579-01

EXECUTIVE SUMMARY

PROJECT DESCRIPTION

Air Quality Sciences, Inc. (AQS) is pleased to present the results of its indoor air quality (IAQ) evaluation of a **Wall Finish** product identified as `HP PVC Free Wallpaper + Latex Print Technologies_ wall covering as submitted by Hewlett-Packard Espanola SL. AQS conducted this study using a GREENGUARD product evaluation test protocol (1) following the requirements of The GREENGUARD Environmental Institute's (GEI) Product Certification Program, ASTM Standard D 5116, and the United States Environmental Protection Agency (USEPA) (2-4). Testing of the product was conducted using standard environmental chamber operating conditions as presented in Table 1. The wall covering was delivered to AQS by the manufacturer as presented in the Chain of Custody description in Appendix 1.

Products meeting all the emissions requirements of the GREENGUARD Environmental Institute are eligible for listing in the GREENGUARD Product Guide[™] for a one year period from the date of notification to the manufacturer. The listed product is exactly as described in Appendix 1. The product is eligible to remain listed for one year as certification program processes are initiated. Listing in the GREENGUARD Product Guide does not qualify the product for certification, nor does it entitle Hewlett-Packard Espanola SL to market or promote the product as GREENGUARD Certified or use the registered certification mark.

The wall covering was monitored for emissions of total volatile organic compounds (TVOCs), formaldehyde, total aldehydes, and other individual volatile organic compounds (IVOCs) over a 168 hour exposure period. These emissions were measured and the resultant air concentrations were determined for each of the potential pollutants. Air concentration predictions were computer modeled based on the GEI Requirements, which include a standard room loading and ASHRAE Standard 62.1-2007 ventilation conditions (5). Product loading is based on standard wall usage (28.1 m²) in a 32 m³ room. Results were compared to current emission levels as required by the GREENGUARD standard.

RESULTS

The wall covering identified as `HP PVC Free Wallpaper + Latex Print Technologies_ and matching the product description in Appendix 1, qualifies as low-emitting; it meets all of the emission level requirements of the GREENGUARD Product Guide Listing as indicated below.

GREENGUARD Acceptable IAQ Criteria		Product Measurement	Product Compliance for IAQ
TVOC	Ħ0.5 mg/m³	0.24 mg/m ³	Yes
Formaldehyde	Ħ0.05 ppm	0.006 ppm	Yes
Total Aldehydes	Ħ0.1 ppm	0.006 ppm	Yes
4-Phenylcyclohexene	Ħ0.0065 mg/m ³	< 0.003 mg/m ³	Yes
Individual VOC s	all #1/10 TLV*		Yes

* All individual VOCs detected met the criteria of less than 1/10 the ACGIH established threshold limit values (TLVs) (ref. 14).

Emissions data and expected air concentrations are given in Tables 2-4, detected individual volatile organic compounds are listed in Table 5, and individual aldehydes are listed in Table 6. Appendix 2 presents supplemental emissions information on individual VOCs, which may be requested by certain purchasing programs.

PRODUCT EVALUATION METHODOLOGIES

ENVIRONMENTAL CHAMBER

The wall covering was tested in a small sized environmental chamber 0.0874 m³ in volume, and chemical emissions were analytically measured. Environmental chamber operation and control measures used in this study complied with GREENGUARD Method and Laboratory Quality Requirements and ASTM Standard D 5116. The chamber used is manufactured from stainless steel, and its interior is polished to a mirror-like finish to minimize contaminant adsorption. Air flow through the chamber enters and exits through an aerodynamically designed air distribution manifold also manufactured of stainless steel. Supply air to the chamber is stripped of formaldehyde, VOCs, and other contaminants, so that any contaminant backgrounds present in the empty chamber fall below strict levels (< 10 \approx g/m³ TVOC, < 10 \approx g/m³ total particles, < 2 \approx g/m³ formaldehyde, < 2 \approx g/m³ for any individual VOC). AQS chambers are process controlled and are equipped with a continuous data acquisition system for verification of the operating conditions of air flow, temperature, and humidity.

Air supply to the chamber was maintained at a temperature of $23^{\circ}C \pm 2^{\circ}C$ and relative humidity at 50% ± 5%. The air exchange rate was 1.00 ± 0.05 air change/hour (ACH). Environmental chamber study parameters are presented in Table 1.

ANALYTICAL MEASUREMENTS

Selected Aldehydes

Emissions of selected aldehydes including formaldehyde were measured following ASTM D 5197 and USEPA IP-6A, measurement by HPLC, or high performance liquid chromatography (1, 6, 7). Solid sorbent cartridges with 2,4-dinitrophenylhydrazine (DNPH) were used to collect formaldehyde and other low-molecular weight carbonyl compounds in chamber air. The DNPH reagent in the cartridge reacted with collected carbonyl compounds to form the stable hydrazone derivatives retained by the cartridge.

The hydrazone derivatives were eluted from a cartridge with HPLC-grade acetonitrile. An aliquot of the sample was analyzed for low-molecular weight aldehyde hydrazone derivatives using reverse-phase high-performance liquid chromatography (HPLC) with UV detection. The absorbances of the derivatives were measured at 360 nm. The mass responses of the resulting peaks were determined using multi-point calibration curves prepared from standard solutions of the hydrazone derivatives. Measurements are reported to a quantifiable level of 0.1 μ g based on a standard air volume collection of 45 L.

Volatile Organic Compounds

VOC measurements were made using gas chromatography with mass spectrometric detection (GC/MS). Chamber air was collected onto a solid sorbent which was then thermally desorbed into the GC/MS. Instrumentation included a sample concentrator (Perkin Elmer Model ATD 400, Model TurboMatrix ATD or TurboMatrix 650), a Hewlett-Packard/Agilent 5890 Series II, 6890 or 7890 Series Gas Chromatograph and a Hewlett-Packard/Agilent 5971, 5973 or 5975 Mass Selective Detector (GC/MS). The sorbent collection technique, separation, and detection analysis methodology has been adapted from techniques presented by the USEPA and other researchers. The technique follows USEPA Method IP-1B and ASTM D 6196 and is generally applicable to

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Released by Air Quality Sciences, Inc.Date Prepared:March 12, 2010AQS Project #:16579AQS Report #:16579-01

 C_6 - C_{16} organic chemicals with boiling points ranging from 35°C to 250°C (1,7-11). Measurements are reported to a quantifiable level of 0.04 µg based on a standard air volume collection of 18 L.

Individual VOCs were separated and detected by GC/MS. The TVOC measurements were made by adding all individual VOC responses obtained by the mass spectrometer and calibrating the total mass relative to toluene. Individual VOCs, if analyzed, were quantified (relative to toluene as a standard) and identified using AQS specialized indoor air mass spectral database. Other compounds were identified with less certainty using a general mass spectral library available from the National Institute of Standards and Technology (NIST). This library contains mass spectral characteristics of more than 75,000 compounds as made available from NIST, the USEPA and the National Institutes of Health (NIH). A match is first sought in the AQS database, which includes data for the gas chromatographic retention time of the compound in addition to the mass spectrum. This additional information, along with the use of spectra generated on AQS equipment, makes confidence in identifications made from the AQS database higher than in identifications made using only the NIST/USEPA/NIH mass spectral library.

AIR CONCENTRATION DETERMINATIONS

Emission rates of formaldehyde, total aldehydes, and TVOC were used in a computer model to determine potential air concentrations of the pollutants. The computer model used the measured emission rate changes over the one-week time period to determine the change in air concentrations that would accordingly occur.

The model measurements were made with the following assumptions: air within open office areas of the building is well-mixed at the breathing level zone of the occupied space; environmental conditions are maintained at 50% relative humidity and 23°C (73°F); there are no additional sources of these pollutants; and there are no sinks or potential re-emitting sources within the space for these pollutants. Ventilation and occupancy parameters were those provided in ASHRAE Standard 62.1-2007.

The constant emission factor (as determined at 168 hour) is used to determine compliance with the GREENGUARD Criteria by calculating an exposure concentration. The predicted exposure concentrations ($C_{P,t}$) ($\approx g/m^3$) are calculated from the modeled emission factors as:

$$C_{P,t} = EF_{m,t} \bar{a} \frac{\bar{A}}{V} \bar{a} \frac{1}{N}$$

where,

N = room air change per hour $(hr^{-1}) = 0.72 hr^{-1}$

QUALITY CONTROL PROCEDURES FOR ENVIRONMENTAL CHAMBER EVALUATIONS

Air Quality Sciences, Inc. is an ISO 9001 registered and ISO 17025 accredited testing firm with defined and executed internal and third party verification programs encompassing emission test methods and low level pollutant measurements. AQS' quality control/assurance plan is designed to ensure the integrity of the measured and reported data obtained during its product evaluation studies. This QC program encompasses all facets of the measurement program from sample receipt to final review and issuance of reports. As an ISO 9001 registered and ISO 17025 accredited firm, AQS product control, testing, data handling, and reporting protocols and procedures are standardized and controlled. AQS participates in proficiency and accreditation measurements programs for VOC and emission testing as required by the State of California, Germany Ministry of Health's Blue Angel Program, and GREENGUARD Certification Programs. Quality assurance is maintained through AQS computerized data management system (ADM). An electronic 'paper trail_for each analysis is also maintained and utilized to track the status of each sample, and to store the results. A complete quality report can be provided upon request and all test data and analysis procedures are available on site for customer review.

Chamber Evaluations

One of the most critical parameters in AQS' product evaluations is the measurement of ultratrace levels of gaseous chemicals, typically in the ppb air concentration range. This necessitates a very rigidly maintained effort to control background contributions and contamination. These contributions must be significantly less than those levels being measured for statistically significant data to be obtained. AQS addresses this control in many directions including chamber construction materials, air purification and humidification, sampling materials and chemicals, sample introduction, and analysis.

Supply air purity is monitored on a weekly basis, using identical methodology to the chamber testing. The supply air is assured to contain less than 10 \approx g/m³ TVOC, < 10 \approx g/m³ total particles, < 2 \approx g/m³ formaldehyde, and < 2 \approx g/m³ for any individual VOC. Preventative maintenance ensures supply air purity, and corrective action is taken when any potential problems are noted in weekly samples. Supply air filter maintenance is critical for ensuring the purity of the chamber supply air. Chamber background samples are obtained prior to product exposure to ensure contaminant backgrounds meet the required specifications prior to product exposure. Results of this monitoring are maintained at AQS and available for on-site inspection.

All environmental chamber procedures are in accordance with ASTM D 5116 and D 6670 (12) and the USEPA's ETV Protocol (13), and meet the data quality objectives required.

Various measures are routinely implemented in a product's evaluation program. These include but are not limited to:

appropriate record keeping of sample identifications and tracking throughout the study;

calibration of all instrumentation and equipment used in the collection and analysis of samples;

validation and tracking of all chamber parameters including air purification, environmental controls, air change rate, chamber mixing, air velocities, and sample recovery;

analysis of spiked samples for accuracy determinations;

duplicate analyses of 10% of all samples evaluated and analyzed;

multi-point calibration and linear regression of all standardization;

analysis of controls including chamber backgrounds, sampling media, and instrumental systems.

VOC and Aldehyde Measurements

Precision of TVOC and aldehyde analyses is assessed by the relative standard deviation (%RSD) from duplicate samples, defined as the standard deviation of each data set divided by the mean multiplied by 100. VOC accuracy is based on recovery of toluene mass spiked onto sorbent material. QC data on TVOC measurements conducted for the 12 month period ending January 31, 2010, showed an average precision measurement of 5.6% RSD based on duplicate measurements and 100.6% recovery based on toluene spikes. Aldehyde accuracy is based on Workplace Analysis Proficiency Scheme (WASP) formaldehyde proficiency test results. QC data on total aldehyde measurements (including formaldehyde) for the 12 month period ending January 31, 2010, showed an average precision measurement of 2.6% RSD based on duplicate measurements and an average accuracy of 2.6% RPD based on WASP results. Performance audits have been conducted on-site at AQS by the U.S. Environmental Protection Agency for several industry test programs. They are favorable and are open for review at AQS. Third party proficiency and round robin testing for low level VOCs for national and international programs are continuously conducted and reported in AQS' quarterly quality report, available to all customers.

ENVIRONMENTAL CHAMBER STUDY PARAMETERS HEWLETT-PACKARD ESPANOLA SL 16579-010AA

Product Description:	WALL COVERING; HP PVC Free Wallpaper + Latex Print Technologies (one-sided area = 0.0853 m ²) Product Documentation Sheet (Appendix 1)
Product Loading:	0.98 m²/m³
Test Conditions:	1.00 ± 0.05 ACH 50% RH ± 5% RH 23º C ± 2º C
Test Period:	02/24/2010 - 03/03/2010
Pollutant Emissions Evaluated:	Total Volatile Organic Compounds Individual Volatile Organic Compounds Formaldehyde Target List Aldehydes
Test Description:	The product was received by AQS on 02/22/10 as packaged and shipped by the customer. The package was visually inspected and stored in a controlled environment immediately following sample check-in. Just prior to loading, the product was unpackaged and prepared for required loading to expose the top surface side only. The sample was placed inside the environmental chamber, and tested according to the specified protocol.

Environmental chamber test following ASTM D 5116 in a 0.09 $\ensuremath{,}$ 0.007 m³ chamber.

SUMMARY OF TVOC EMISSION FACTORS AND PREDICTED AIR CONCENTRATIONS

PRODUCT 16579-010AA; HP PVC FREE WALLPAPER + LATEX PRINT TECHNOLOGIES

ELAPSED EXPOSURE HOUR*	EMISSION FACTOR µg/m² ðhr	PREDICTED AIR CONCENTRATION** ≈g/m ³
6.0	1,070	1,310
24.0	433	523
48.0	315	396
72.0	280	336
96.0	233	300
168.0	199	239

*Exposure hours are nominal (± 1 hour).

**Prediction based on standard wall usage (28.1 m²) in a room with ASHRAE 62.1-2007 ventilation conditions (32 m³ in volume and 0.72 ACH).

BQL = Below quantifiable level of 0.04 µg based on a standard 18 L air collection volume.

SUMMARY OF FORMALDEHYDE EMISSION FACTORS AND PREDICTED AIR CONCENTRATIONS

PRODUCT 16579-010AA; HP PVC FREE WALLPAPER + LATEX PRINT **TECHNOLOGIES**

ELAPSED EXPOSURE	EMISSION FACTOR	PREDICTED AIR CONCENTRATION**		
HOUR*	µg/m² ðhr	≈g/m³	ppm	
6.0	9.2	11	0.009	
24.0	6.7	8	0.007	
48.0	7.0	8	0.007	
72.0	6.0	8	0.006	
168.0	5.8	7	0.006	

*Exposure hours are nominal (± 1 hour). **Prediction based on standard wall usage (28.1 m²) in a room with ASHRAE 62.1-2007 ventilation conditions (32 m³ in volume and 0.72 ACH).

96.0 elapsed exposure hour sample was lost due to instrument malfunction.

BQL = Below quantifiable level of 0.1 µg based on a standard 45 L air collection volume.

SUMMARY OF TOTAL ALDEHYDE EMISSION FACTORS AND PREDICTED AIR CONCENTRATIONS

PRODUCT 16579-010AA; HP PVC FREE WALLPAPER + LATEX PRINT **TECHNOLOGIES**

ELAPSED EXPOSURE	EMISSION FACTOR	PREDICTED AIR CONCENTRATION**		
HOUR*	µg/m² ðhr	≈g/m³	ppm	
6.0	21.3	26	0.016	
24.0	6.7	8	0.007	
48.0	7.0	8	0.007	
72.0	6.0	8	0.006	
168.0	5.8	7	0.006	

*Exposure hours are nominal (± 1 hour). **Prediction based on standard wall usage (28.1 m²) in a room with ASHRAE 62.1-2007 ventilation conditions (32 m³ in volume and 0.72 ACH).

96.0 elapsed exposure hour sample was lost due to instrument malfunction.

BQL = Below quantifiable level of 0.1 µg based on a standard 45 L air collection volume.

$\begin{array}{c} \mbox{EMISSION FACTORS OF IDENTIFIED INDIVIDUAL} \\ \mbox{VOLATILE ORGANIC COMPOUNDS} \\ \mbox{$\mu g/m^2 \ \delta hr$} \end{array}$

PRODUCT 16579-010AA; HP PVC FREE WALLPAPER + LATEX PRINT TECHNOLOGIES

CAS		E	ELAPS	ED EX	POSUF	RE HOU	JR
NUMBER	COMPOUND IDENTIFIED	6.0	24.0	48.0	72.0	96.0	168.0
616-45-5	2-Pyrrolidinone	453	223	157	140	114	102
2163-42-0	Propane-1,3-diol, 2-methyl-	340	108	74.3	65.3	53.6	44.9
57-55-6	1,2-Propanediol (Propylene glycol)	200	87.4	75.5	68.8	60.4	49.0
96-48-0	2(3H)-Furanone, dihydro (Butyrolactone)	24.4					
95-47-6	Xylene, ortho ^e	6.6					
128-37-0	2,6-Di-tert-butyl-4-methylphenol (BHT) ^e	5.9	5.5	3.9	3.7	3.2	2.4
541-02-6	Cyclopentasiloxane, decamethyl	4.6					
112-36-7	Ethane, 1,1'-oxybis[2-ethoxy-]*	4.0	2.8				
110-98-5	Dipropylene glycol	3.6					
872-50-4	2-Pyrrolidinone, 1-methyl ^e	3.5					
124-18-5	Decane ^e	3.4					
107-21-1	1,2-Ethanediol (Ethylene glycol) ^e	3.1	2.0		2.5		
116-09-6	2-Propanone, 1-hydroxy*	2.7					
7338-94-5		2.6					
23361-69-5	Butanoic acid, 2,2-dimethylpropyl ester*	2.6					
71-36-3	1-Butanol (N-Butyl alcohol)	2.4					
100-51-6	Benzyl alcohol (Benzenemethanol)	2.3					
112-53-8	1-Dodecanol	2.2	2.7	2.0			
540-97-6	Cyclohexasiloxane, dodecamethyl	2.0					

*Indicates NIST/EPA/NIH best library match only based on retention time and mass spectral characteristics with a probability of > 80%. *Denotes quantified using multipoint authentic standard curve (post-calibration). Other VOCs quantified relative to toluene. Quantifiable level is 0.04 µg based on a standard 18 L air collection volume.

EMISSION FACTORS OF INDIVIDUAL ALDEHYDES $\mu g/m^2 \, \tilde{o} hr$

PRODUCT 16579-010AA; HP PVC FREE WALLPAPER + LATEX PRINT TECHNOLOGIES

CAS NUMBER		ELAPSED EXPOSURE HOUR					
CAS NUMBER		6.0	24.0	48.0	72.0	168.0	
4170-30-3	2-Butenal	BQL	BQL	BQL	BQL	BQL	
75-07-0	Acetaldehyde	6.5	BQL	BQL	BQL	BQL	
100-52-7	Benzaldehyde	BQL	BQL	BQL	BQL	BQL	
5779-94-2	Benzaldehyde, 2,5-dimethyl	BQL	BQL	BQL	BQL	BQL	
529-20-4	Benzaldehyde, 2-methyl	BQL	BQL	BQL	BQL	BQL	
620-23-5/ 104-87-0	Benzaldehyde, 3- and/or 4-methyl	BQL	BQL	BQL	BQL	BQL	
123-72-8	Butanal	BQL	BQL	BQL	BQL	BQL	
590-86-3	Butanal, 3-methyl	BQL	BQL	BQL	BQL	BQL	
50-00-0	Formaldehyde	9.2	6.7	7.0	6.0	5.8	
66-25-1	Hexanal	BQL	BQL	BQL	BQL	BQL	
110-62-3	Pentanal	BQL	BQL	BQL	BQL	BQL	
123-38-6	Propanal	5.6	BQL	BQL	BQL	BQL	

96.0 elapsed exposure hour sample was lost due to instrument malfunction.

BQL = Below quantifiable level of 0.1 µg based on a standard 45 L air collection volume.

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APPENDIX 1



5 - Printed Samples I - Blank Sample. Custody Greenghard Cartification Test.

AQS	Chain	of	Custody
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AQS	Use Only	y					
Project #	165	79	Proposal #			nie zwasta do na na stanie na postoka dani stani za za na	
Product #	010	AA	Rush			h Account Manager ding in sample	CUKCCC013
	******		normalitettiittiittiittiittiittiittiittiittii				
				Te	est Inform	ation	
24 Hr TVO	C Only	2 4 ł	Hr TVOC and IV	'OCs	24	Hr TVOC, IVOCs and	Aldehydes
Other		Explain	: G.G. Medra	. Ce	rtsfrat	ion Test.	
Product C	Category	Printeo	-Media	je V	JAIL F.	- ish	
Subo	category		- Vingl Wa				
			Prod	uct an	d Compa	ny Information	
Product Des	scription	HPPK	FREE WAL	-VAPI	er +	Latex Print Tech	hnologies
Company Su	bmitting	HIP				1	e ADRIAN LIGA
	Sample					Job Title	e ENVIRONMENTAL ENGINEE
			PE CAN GRA			Contact Phone	e +349358 25725
/	Address	SANT C	UGAT DEL V	ALL	Ξ <u>ς</u>	Contact Fax	
		BARCE	LONA 08	172		Contact Emai	1 advian.liga@hp.com
				Colle	ection Info	ormation	
Collecto	or Name		> L(GA			Date Collected	
Collecto	r Phone	+34 9	358 2572	5		Time Collected	d 1930 hrs
Collector Si	ignature	1p			-447	Collection Location	n BARCELONA SITC
				Ship	oping Info	rmation	
	Carrier	DHL					· · · · · · · · · · · · · · · · · · ·
	er Name	1	~ LIGA			Date Shipped	d 17 Feb 2010
Shippe	r Phone	+34 9.	35825725			Time Shipped	
Shipper Si	ignature	<u>l</u> e				Air Bill #	# 7958691985
				Post T	esting Ins	structions	
Return S	amples (i	nformation	must be provid	ed bel	low for san	nple return)	Discard sample(s) after testing
Return	Shipper					Shipper Acct	#

	AQS Use Only -	- Receiving Information	
AQS Receive Date	- 2.2. ihre and	AQS Receive Time	en e
Sample Condition Upon Arrival	Acceptable Not Acceptat	ble Sample Condition Notes	1.0
AQS Receiver Name	S. Hawk	Receiver Signature	S. Her
Completed By	Based On		Date

2211 Newmarket Parkway, #106, Marietta, Georgia 30067 Phone: 770-933-0638 Fax: 770-933-0641

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APPENDIX 2

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APPENDIX 2 FOR GREENGUARD EMISSIONS TEST

The following chemicals as identified in the emissions from the wall finish product identified as `HP PVC Free Wallpaper + Latex Print Technologies_were found to exist on certain regulatory lists. This addendum only provides a statement regarding possible health effects associated with this compound and not the relative risks of exposure. Proper interpretation of the risks associated with exposure to a given regulated compound requires a more detailed evaluation of toxicological activity. You may be required to submit this information for certain purchasing programs. You may also use this information to assist in further product development efforts.

COMPOUND	✓() = FOUND IN LISTING (CLASS)				
COMPOUND	CAL PROP. 65	NTP	IARC		
2(3H)-Furanone, dihydro (Butyrolactone)			√ (3)		
2,6-Di-tert-butyl-4-methylphenol (BHT)			√ (3)		
2-Pyrrolidinone, 1-methyl	√(2)				
Acetaldehyde	√ (1)	√(2B)	√(2B)		
Formaldehyde	✓(1)	√(2B)	✓(1)		
Xylene, ortho			√(3)		

CAL Prop. 65: California Health and Welfare Agency, Proposition 65 Chemicals

1 = known to cause cancer

2 = known to cause reproductive toxicity

NTP: National Toxicology Program

2A = known to be carcinogenic to humans

2B = reasonably anticipated to be carcinogenic to humans

IARC: International Agency on Research of Cancer

1 = carcinogenic to humans

2A = probably carcinogenic to humans

2B = possibly carcinogenic to humans

3 = unclassifiable as to carcinogenicity to humans

4 = probably not carcinogenic to humans

Materialprufanstalt Hannover Bauwesen und Produktionstechnik



Raport klasyfikacji reakcji na ogień nr 185893

1. wydanie z dnia 7 grudnia 2018 r

Raport klasyfikacji reakcji na ogień winylowych tapet ściennych produkowanych przez ArtGrand LLC o masie na jednostkę powierzchni < 380g/m²

Sponsor:

ArtGrand Limited Liability Company Zhurnalistov Str. 9 49051 Dniepr Ukraina

Zamówienie od: 18.09.2018 - Katharina Seidenzahl (WTL GmbH)

Niniejszy raport klasyfikacji określa klasyfikację przypisaną do winylowych tapet ściennych produkowanych przez ArtGrand LLC o masie na jednostkę powierzchni < 380g/m² zgodnie z procedurami podanymi w EN 13501-1:2007+A1:2009

Niniejszy raport klasyfikacji reakcji na ogleń zawiera 4 strony.

PBT Podgórstia Biuro Tłumoczań spółka z ograniczoną odpowiedzialnością Spółka Jawna ul. Kielecka 298, 31-523 Kraków NIP 6751750667 REGON 308838797 KRS 0000890049 MPA HANNOVER - strona 1 raportu klasyfikacji reakcji na ogień nr 185893 z dnia 7 grudnia 2018 r.



1 Szczegóły sklasyfikowanych produktów

1.1 Charakter i zastosowanie końcowe

Produkowane przez ArtGrand LLC winylowe tapety ścienne o masie na jednostkę powierzchni < 380 g/m² są fabrycznie wykonanymi tapetami ściennymi zgodnie z normą EN 15102: 2007+A1: 2011 i są zdefiniowane jako przeznaczone do ścian wewnętrznych, ścianek działowych i sufitów.

1.2

Opis

Produkty są w pełni opisane w raportach z badań dostarczonych na poparcie klasyfikacji wymienionej w sekcji 2.1. Testy reakcji na ogień zostały przeprowadzone w odniesieniu do następującej europejskiej specyfikacji produktu: EN 15102: 2007+A1: 2011 - Tapety dekoracyjne - Wyrób w postaci zwoika i panela

2 Raporty z badań i wyniki badań na poparcie tej klasyfikacji

2.1 Raporty z badań

Nazwa laboratorium	Nazwa sponsora	Nr raportu z badań	Metoda badań
		185056	EN 13823:2010+A1:2014
MPA HANNOVER	ArtGrand LLC	185877	EN ISO 11925-2:2010-11

2.2 Wyniki badań

2.2.1 Badania wg EN ISO 11925-2

				ki
Metoda badań	Parametr	llość badań	Parametr ciągły (średnio)	Parametr zgodności
EN ISO 11925-2 Ekspozycja - 30 s				
Atak płomienia na powierzchnię Punkt 7 3 3 1	Fs < 150 mm	18	-	zgodny
Atak płomienia na krawędź Punkt 7.3.3.2.2	Fs < 150 mm	18	-	zgodny
Płonące krople/cząsteczki	Zapalenie bibuły filtracyjnej	36	-	niezgodny

PBT Podgórskie Diuro Tranaczeń Spółka z ograniczeną odpowiedzielnością Spółka Jatuna ul. Kielecka 298, 31-523 Kraków NIP 6751750567 REGON 305838797 KRS 0000001049 MPA HANNOVER - strona 2 raportu klasyfikacji reakcji na ogień nr 185893 z dnia 7 grudnia 2018 r.

2.2.2 Badania wg EN 13823

			Wyniki	
Metoda badań	Parametr	llość badań	Parametr ciągły (średnio)	Parametr zgodności
EN 13823	FIGRA _{0,2MJ} (W/s)	3	174	
	FIGRA0,4MJ (W/S)	3	88	-
	LFS < krawędź	3	-	zgodny
	THReoos (MJ)	3	1,3	u
	SMOGRA (m ² /s ²)	3	3	
	TSP ₆₀₀ s (m ²)	3	40	-
	Płonące krople/cząsteczki	3	-	niezgodny

HANNOVER

2

3 Klasyfikacja i bezpośredni obszar zastosowania

3.1 Referencja

Niniejsza klasyfikacja została przeprowadzona zgodnie z klauzulami 11.5 i 14.1 normy EN 13501-1:2007+A1:2009.

3.2 Klasyfikacja

Produkowane przez ArtGrand LLC winylowe tapety ścienne o masie na jednostkę powierzchni < 380 g/m w odniesieniu do ich reakcji na ogień są klasyfikowane: C Dodatkowa klasyfikacja w odniesieniu do wytwarzania dymu jest następująca: s1 Dodatkowa klasyfikacja w odniesieniu do płonących kropel/cząstek jest następująca: d0

Format klasyfikacji reakcji na ogień dla wyrobów budowlanych jest następujący:

Zachowanie w czasie pożaru	Wytwarzanie dymu		Płonące krople/cząsteczki	
С	S	1	d	0

Klasyfikacja reakcji na ogień: C - s1, d0

MPA HANNOVER - strona 3 raportu klasyfikacji reakcji na ogień nr 185893 z dnia 7 grudnia 2018 r.

3.3 Zakres zastosowań

Ta klasyfikacja jest ważna dla następujących warunków użytkowania końcowego:

- Podłoże: Klasa A1 lub A2-s1, dO zgodnie z normą EN 13501-1

- Klej: Klej zawierający skrobię (ilość na mokro < 200 g/m²)

Klasyfikacja ta dotyczy również następujących parametrów produktu:

- Grubość nominalna: 0,4 mm - 0,6 mm Masa na obszar powierzchni: < 380 g/m²

4 Ograniczenia

4.1 Ostrzeżenie

Niniejszy dokument nie stanowi zatwierdzenia typu ani certyfikacji produktu.

Klasyfikacja przypisana do produktu w niniejszym raporcie jest odpowiednia dla deklaracji zgodności producenta w kontekście zaświadczenia zgodności systemu 3 i oznakowania CE zgodnie z rozporządzeniem w sprawie wyrobów budowlanych.

Producent złożył oświadczenie, które jest przechowywane w aktach. Potwierdza to, że projekt produktu nie wymaga żadnych szczególnych procesów, procedur lub etapów (np. bez dodawania środków zmniejszających palność, ograniczania zawartości organicznej lub dodawania wypełniaczy), które mają na celu zwiększenie odporności ogniowej w celu uzyskania osiągniętej klasyfikacji. W rezultacie producent stwierdził, że atestacja systemu 3 jest odpowiednia.

Laboratorium badawcze nie brało zatem udziału w pobieraniu próbek produktu do badań, chociaż posiada odpowiednie referencje dostarczone przez producenta, aby zapewnić identyfikowalność badanych próbek.

Hanower, 7 grudnia 2018 r. Kierownik laboratorium pożarowego

(inż. dypl. ORR Restorff)



Technik

(inż. dypl. Kielinski)

