



**TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p.**  
**Technical and Test Institute for Construction Prague**

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Certification Body  
Branch 0600 - Brno

# EVALUATION REPORT

**No. 060-044386**

Trade name:

**Non-woven Wallpaper**

type / variation: **MKE-9093**

Manufacturer:

**Shanghai Qiangshang Industrial Co., Ltd**

Address: No. 5 Building, No. 818 Shuhai Road, Songjiang District, Shanghai, China

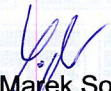
Plant: Shanghai Qiangshang Industrial Co., Ltd

Address: No. 5 Building, No. 818 Shuhai Road, Songjiang District, Shanghai, China

Order: Z060160159

Number of pages including the front page: 2      Annexes: 2

The person taking responsibility for the content of the report:

  
Ing. Marek Sopko  
Chief Assessor

The person taking overall responsibility for the report:

Brno, December 13, 2016



  
Ing. Miroslav Procházka  
Deputy Manager of the Certification Body

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Bank Name: KB Praha 1 Czech Republic, Account Number: 1501-931/0100, INo: 000 15679, VAT: CZ00015679



## 1. Information about the product and its intended use

Description and intended use of the product: wallpaper product, Trade Name: Non-woven Wallpaper, type: MKE-9093, thickness: 0,5 - 0,8 mm, weight: 165 g.m<sup>-2</sup>. Intend use: wall decorating

Technical specification: EN 15102:2007+A1:2011

## 2. Evaluation of the results of tests and assessment of the product

### 2.1 Determination of reaction to fire

Test procedure	Parameter	Result	Criteria compliance
EN ISO 11925-2	$F_s \leq 150$ mm up to 60 sec.	30 mm	Yes
EN ISO 11925-2	filter paper ignition	no ignition	Yes

Reaction to fire	B – s1, d0
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This classification has been carried out in accordance with Article 11.3 of the standard EN 13501-1:2007+A1:2009 and it is valid for products with the thickness of 0,5-0,8 mm and the weight 165 g.m<sup>-2</sup>.

### 2.2 Results of dangerous substances release

Parameters	Units	Results	Requirement	criteria compliance
- formaldehyde	mg/kg	0,06	120	yes
- vinylchloride	mg/kg	< 0,1	0,2	yes
- Sb	mg/m <sup>3</sup>	< 5	no limit	yes
- As	mg/m <sup>3</sup>	< 1	25	yes
- Ba	mg/m <sup>3</sup>	< 5	500	yes
- Cd	mg/m <sup>3</sup>	< 0,2	25	yes
- Cr	mg/m <sup>3</sup>	< 5	60	yes
- Pb	mg/m <sup>3</sup>	< 1	90	yes
- Hg	mg/m <sup>3</sup>	< 0,01	20	yes
- Se	mg/m <sup>3</sup>	< 5	165	yes

## 3. Evaluation of the product

The tested product meets the requirements of EN 15102:2007+A1:2011.

## 4. Annexes

Test protocol on dangerous substances detection No. 100-058208, issued 17.10.2016.

Classification report on reaction to fire in accordance with EN 13501-1:2007+A1:2009 No. PK1-01-16-085-E-0, issued on 07.12.2016



# TEST PROTOCOL

Number: 100-058208

dated: 2016-10-17

**Name and address of the customer:** Shangai Qiangshang Industrial Co., Ltd  
No. 5 Building, No. 818 Shuhai Road  
Songjiang District, Shanghai, China

**Product name:** Non-woven Wallpaper, type: MKE-9093

**Test subject and method:**

Determination of formaldehyde - formaldehyde emissions:

- stated by spectrophotometer

method No. 100607

Determination of certain elements migration:

- AAS

method No. 100608-01

(EN 71-3 +A1:2014)

Determination of Hg migration:

- AMA

method No. 100608-02

(EN 71-3 +A1:2014)

Determination of vinylchloride:

- GC-MS

method No. 100663

**Test legal basis:** EN 15102:2007 +A1:2011 - Decorative wallcoverings - Roll and panel form products.

**Date of sample receipt for testing:** 2016-09-29

**Tests were carried out:** from: 2016-09-29 to: 2016-10-17

**Test was carried out by the laboratory:** Analytic Chemistry Laboratory

**Name and function of the person entitled to sign this Test Protocol:**



Libuše Pražáková, M.Sc.  
Technical Head of Laboratory



**Description and identification of the sample:** Non-woven Wallpaper, type: MKE-9093

**Devices used:** spectrophotometer Specord 210, AAS PU 9400, AAS UNICAM 939, mercurymer AMA 254, gas chromatograph GC-MS FOCUS

**Test results:**

Determination of formaldehyde release by the flask method according to the standard EN 12149:1997:  
Formaldehyde release was determined by hanging samples tested above distilled water in a shut bottle at the temperature of 40°C for the period of twice 24 hours. Formaldehyde absorbed by distilled water during second 24 hours period was determined with spectrophotometer against a blank solution, using acetyl acetone as an agent.

Sample No.	Sample name	Units	Formaldehyde	Max. value acc. to ČSN EN 15102
704	Non-woven Wallpaper	mg/kg	0.06	120
Extended uncertainty in % rel.			6	-

Determination of certain element migration according to the standard EN 12149:1997:

By measuring an extract of hydrochloric acid with AAS method using PU 9400 following values of given migration elements were measured. Mercury was determined using mercury-meter AMA 254.

Results are given in mg of element/kg of material:

Sample No.	Sample name	Sb	As	Ba	Cd	Cr	Pb	Hg	Se
704	Non-woven Wallpaper	<5	<1	<5	<0.2	<5	<1	< 0.01	< 5
Maximum migration acc. to ČSN EN 15102		No upper limit	25	500	25	60	90	20	165

Determination of vinylchloride to the standard EN 12149:1997:

Sample No.	Sample name	Units	Vinylchloride	Max. value acc. to ČSN EN 15102
704	Non-woven Wallpaper	mg/kg	< 0.1	< 0.2
Extended uncertainty in % rel.			-	-



**Conclusion:**

Tested Non-woven Wallpaper, type:MKE-9093 **comply** with requirements of the standard EN 15102:2007 +A1:2011 Decorative wallcoverings - Roll and panel form products, regarding formaldehyde release - point 4.2 and regarding dangerous substances release - heavy metals and certain elements - point 4.3.1 and regarding monomeric vinylchloride (VCM) - point 4.3.2.

The uncertainty mentioned is the extended uncertainty calculated by using the extension coefficient equalling 2 and so it corresponds to the significance level by approx. 95%.

Tests carried out by: J. Motis, M.Sc., S. Kučerová, P. Vodrážka, M.Sc.  
Protocol completed by: T. Salivarová

Note:

*This Test Protocol can be copied as the whole only, in case of using its part, a written approval is necessary of the testing laboratory.*

*Test results are valid for the sample tested only and this Test Protocol does not replace any other documents.*

- **END OF TEST PROTOCOL** -



**PAVUS, a.s.**

AUTHORIZED BODY 216  
NOTIFIED BODY 1391  
ACCREDITED CERTIFICATION BODY FOR  
PRODUCTS N° 3041

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## REACTION TO FIRE CLASSIFICATION REPORT

**The object of  
classification:**

*Construction products excluding floorings and linear  
pipe thermal insulation products in accordance with  
ČSN EN 13501-1+A1:2010, clause 11*

**Issue number:**

**PK1-01-16-085-E-0**

**Product name and type:**

*Non-woven Wallpaper MKE-9093*

**Sponsor:**

*Technický a zkušební ústav stavební Praha, s.p.  
Branch Brno  
Hněvkovského 228/77  
617 00 Brno  
Czech Republic*

**For company:**

*Shanghai Qiangshang Industrial Co., Ltd  
No.5 Building, No.818 Shuhai Road  
Songjiang District  
201612 Shanghai  
China*

**Issuing organization:**

*PAVUS, a.s.  
Authorized Body 216  
Notified Body 1391  
Accredited certification body for products No 3041  
- Accreditation issued by Czech Accreditation Institute, Public  
Service Company  
- Certificate of Accreditation N° 353/2016  
Prosecká 74  
190 00 PRAHA 412/9  
Order no. Z210160063*

**Date of issue:**

*2016-12-07*

**Copies in total:**

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**Pages in total:**

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## 1. INTRODUCTION

- 1.1. This Classification Report specifies classification method for *non-woven wallpaper* in conformity with the procedures set forth in ČSN EN 13501-1+A1:2010.
- 1.2. This Classification Report has 3 pages and it can be used or reproduced as a whole only.

## 2. DETAILS OF CLASSIFIED PRODUCT

### 2.1. General

The product non-woven Wallpaper MKE-9093 is made by the company *Shanghai Qiangshang Industrial Co., Ltd, No.5 Building, No.818 Shuhai Road, Songjiang District, 201612 Shanghai, China*. It is used as wallpaper.

### 2.2. Product description

Non-woven Wallpaper MKE-9093 is made in the thickness of 0,5-0,8 mm and density of 0,165 kg/m<sup>3</sup>. The product composites from non-woven paper fiber.

## 3. REPORTS AND RESULTS IN SUPPORT OF THIS CLASSIFICATION

### 3.1. Reports

Name of the Laboratory Address Accreditation number:	Name of sponsor of the Test Report	Report number Date of issue	Test method
PAVUS, a. s. Veseli nad Luznici Accr. T.Lab. No. 1026	Technický a zkušební ústav stavební Praha, s.p. Branch Brno Hněvkovského 228/77 617 00 Brno Czech Republic	Pr-16-1.303 2016-12-07	ČSN EN 13823+A1:2010
		Pr-16-1.304 2016-12-07	ČSN EN ISO 11925-2:2011

### 3.2. Results

Test method	Parameter	Number of tests	Results	
			Continuous parameter- mean	Compliance with parameters
CSN EN 13823 Pr-16-1.303	FIGRA <sub>0.2 MJ</sub> (W/s)	3	113,9	≤ 120 (B)
	THR <sub>600s</sub> (MJ)		1.1	≤ 7.5 (B)
	LFS < edge of specimen		-	yes (B)
	SMOGRA (m <sup>2</sup> /s <sup>2</sup> )		0	≤ 30 (s1)
	TSP <sub>600s</sub> (m <sup>2</sup> ) <sup>1)</sup>		34,8	≤ 50 (s1)
	non-occurring of flaming droplets/particles		-	yes (d0)

Test method	Parameter	Number of tests	Results	
			Continuous parameter-mean	Compliance with parameters
CSN EN ISO 11925 – 2 Pr-16-1.303 Surface exposure – clause 7.3.3.1	$F_s \leq 150 \text{ mm up to } 60 \text{ s}$ Filter paper non-ignition	6	30 -	yes yes

#### 4. CLASSIFICATION AND FIELD OF APPLICATION

##### 4.1. Reference of classification

This classification has been carried out in accordance with clause 11 ČSN EN 13501-1+A1:2010.

##### 4.2 Classification

The product non-woven Wallpaper MKE-9093 in relation to its reaction to fire behaviour is classified:

**Reaction to fire classification: B – s<sub>1</sub>,d<sub>0</sub>**

##### 4.3. Field of application

This classification applies for the following parameters of the product:

Parameters of the product noticed in the clause 2.2.

This classification applies for the following end-use applications:

The product non-woven Wallpaper MKE-9093 is determined for use as a wall covering with gypsum plasterboard substrates and any substrates with class of A1 and A2-s<sub>1</sub>,d<sub>0</sub> with density at least of 450 kg/m<sup>3</sup>.

#### 5. LIMITATIONS

This Classification Report does substitute neither the type approval nor the product certificate.


This classification is valid, unless the conditions, under which it was issued, have been changed. The sponsor may request the issuing authority to review the influence of changes to the classification validity.

Therefore the Testing Laboratory has no part in preparing the product specimens for tests although the Laboratory provides, on manufacturer's request, a suitable certification that the Laboratory took part in monitoring the preparation of specimens for tests.

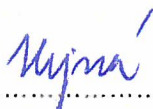
Elaborated by:

Inspected by:

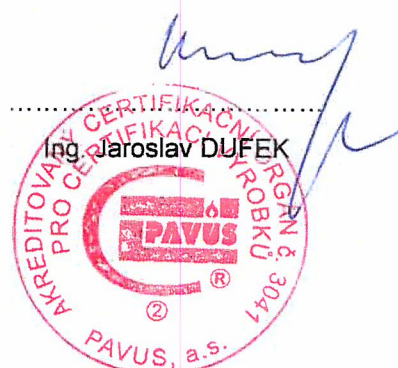
Approved by:



Ing. Ondřej FOHL  
Fire testing laboratory



Ing. Pavla HEJNÁ  
Fire testing laboratory




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