UNIVERSITEIT GENT

FACULTEIT **INGENIEURSWETENSCHAPPEN**
Vakgroep **TEXTIELKUNDE**
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TYPE EXAMINATION CERTIFICATE

No. 06-746 C/ AP-1421/015/06

of 30/11/06

Name of organization: **UGent, Department of Textiles** issue this certificate.

1. Product name: PVC floor coverings PVC
2. Product type: gauge 4.0 mm, 0.5 mm wear layer, density: 1750 kg/m³
3. Numerical code of product classification:
   a) fire behaviour: $B_{fl}s1$
   b) formaldehyde: E1
4. Manufacturer: Zhangjiagang Elegant Plastics Co., Ltd
5. Place of manufacturing: Hexing Street, Jinfeng Town, Zhangjiagang City, Jiangsu Province, China

This certificate assures the compliance of properties of the product, which complies with the technical requirements referenced in EN 14041.

The results of tests and findings on conformity of the properties of the given type with technical requirements given in EN 14041 – EN 9239-1 – EN 717-1 are referenced in Final Test Report 06-746C/ AP-1421/015/06.

CE

Date of issuing: 30/11/06

Valid until: 2011

Department of Textiles of Ghent University is recognized as notified laboratory 1611 for the European Products directive 89/106/EC.

Didier Van Daele
Head of floorcoverings/fire tests

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Shanghai Pavereign Commerce Consulting Co. Ltd
Room 715 A, n° 201 Xinjinqiao Road
Pudong District, Shanghai
201206 China

contact	**e-mail**	**date**
Didier Van Daele	didier.vandaele@UGent.be	21/11/2006

TEST REPORT 06-746 C

Samples received :

PVC floor coverings PVC: gauge 4.0 mm, 0.5 mm wear layer, density: 1750 kg/m³
Manufacturer: Zhangjiagang Elegant Plastics Co., Ltd
Received on 17/10/06

Aim of the test : determination of the initial type testing of fire behaviour

Test conditions :

Standard:	**EN ISO 9239-1 (2002)***
Method:	A floorcovering is put (loose laid) on an eternit plate (Eflex). During the test, the specimen is irradiated by a gas radiator at an angle of 30°. A small flame is used to ignite the specimen. The specimen is ignited during 10 minutes. In case of inflammable specimens, the test lasts until the flame is extinguished, but 30 minutes at the most. The criterion is the burned length, from which the critical radiant flux is deduced using a calibration curve.
Number of tests:	3
Conditioning samples:	23 ± 2 °C and 50 ± 5 % R.H.

BELAC ISO/IEC17025 055-test

Classification according to EN 13501 –1 (2002)

Classification	EN ISO 11925-2 (ignition time = 15 s)	EN ISO 9239-1 (test period = 30 min)
B_{fl}	Fs ≤ 150 mm in 20 s	Critical flux ≥ 8.0 kW/m²
C_{fl}	Fs ≤ 150 mm in 20 s	Critical flux ≥ 4.5 kW/m²
D_{fl}	Fs ≤ 150 mm in 20 s	Critical flux ≥ 3.0 kW/m²
E_{fl}	Fs ≤ 150 mm in 20 s	No demand
F_{fl}	No demand	No demand

Additional classification smoke development according to EN 13501-1 (2002)

Smoke development ≤ 750%.min	s1
Smoke development > 750%.min	s2

The tests were performed in week 42/2006

OBTAINED RESULTS

- **PVC floor: gauge 4.0 mm, 0.5 mm wear layer, density: 1750 kg/m³**

a) Critical Flux :

Sample	Burned length (mm)		
	after 10 min	after 20 min	after 30 min
width	215	215	215
length	230	230	230
length	215	215	215
length	185	185	185
average (of length)	**210**	**210**	**210**

Sample	Burned length maximum (mm)	Extinction (min.s)	Critical Flux (kW/m²)
width	215	12'15"	9.0
length	230	12'25"	8.7
length	215	12'05"	9.0
length	185	12'05"	9.5
average (of length)	**210**	-	**9.1**

b) Smoke development:

Sample	Smoke development (%min)			Smoke development (%min)
	after 10 min	after 20 min	after 30 min	Maximum
width	384	507	603	603
length	331	575	687	687
length	310	454	539	539
length	293	425	498	498
average (of length)	**311**	**485**	**575**	**575**

CLASSIFICATION

Since the radiation intensity is **higher** than 8.0 kW/m^2 and the smoke development is lower than 750 %min, the quality **PVC floor: gauge 4.0 mm, 0.5 mm wear layer, density: 1750 kg/m^3** meets the demands of **class B_{FL} s1** according to EN 13501-1.

Didier Van Daele
Head of floorcoving/fire tests

Prof. Lieva Van Langenhove

Prof. Dr. Paul KIEKENS, dr. h. c.
Head of Department

CE

06

1611-CPD

Manufactured by

Zhangjiagang Elegant Plastics Co., Ltd

Hexing Street, Jinfeng Town,

Zhangjiagang City, Jiangsu Province,

China 215626

EN14041:2004

B_{fl}-s1 E1 HCHO

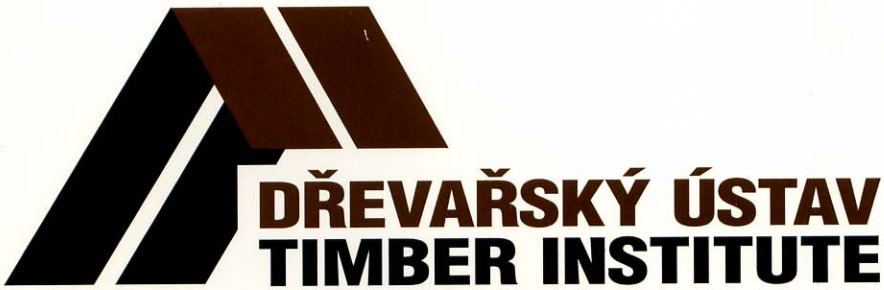
EN649:1996

thickness: 4.0mm

wear layer: 0.5mm

density: 1750kg/m^3

PVC FLOOR


DŘEVAŘSKÝ ÚSTAV
TIMBER INSTITUTE


DŘEVAŘSKÝ ÚSTAV
HOLZINSTITUT

VÝZKUMNÝ A VÝVOJOVÝ ÚSTAV DŘEVAŘSKÝ, PRAHA, S.P.
(THE TIMBER-WOOD RESEARCH AND DEVELOPMENT INSTITUTE, PRAGUE, STATE ENTERPRISE)

PHYSICS AND CHEMISTRY LABORATORY

TEST LABORATORY NR. 1031.1 ACCREDITED BY ČIA

Na Florenci 7-9, 111 71 Praha 1, **tel. +420 221 773 717**
+420 221 773 722
fax +420 224 222 844

ilac-MRA

L 1031.1

Test report

Customer: Zhangjiagang Elegant Plastics Co., Ltd
Hexing Street, Jinfeng Town, Zhangjiagang City
Jiangsu Province, China 215626

Object of the test:

DETERMINATION OF THE CONTENT OF FORMALDEHYDE

Date	:	13.11.2006
Record nr.	:	AP – 1421/015/06
Number of pages	:	3
Number of annexes	:	0
Copies	:	2

Distribution list: 1 copy customer
(copy in English)
1 copy archive PCHL

1. OBJECT AND PURPOSE OF THE TEST

The object of the test was the determination of the content of formaldehyde in the suplied sample of elastic floor covering.

2. TEST SAMPLES

- *sample name* : PVC elastic floor covering
- *producer* : Zhangjiagang Elegant Plastics Co., Ltd, Hexing Street Jinfeng Town, Zhangjiagang City, Jiangsu Province, China 215626
- *date of production* : unknown
- *sample codes* : sample nr. 3
- *nominal thickness* : 4,0 mm
- *quantity, size* : 3 pieces, (305 x 305) mm

3. RECEIPT OF SAMPLES

- *date of receipt* : November 3. 2006
- *place of receipt* : VVÚD Praha
- *received by* : VVUD Mr. Roll
- *submitted by* : Textilní zkušební ústav, s.p. by mail

4. TEST METHOD

TP-VVÚD-2.64.001 (EN 717-1) – Determination of formaldehyde in test chamber of VVÚD

- **volume of the chamber** **0,225 m^3**
- **determination of emission value** **by the acetylacetone method**

Test method **TP-VVÚD-2.64.001** is available in laboratory VVÚD.

5. TEST DEVICES

a) test chamber VVÚD
b) Monitoring Comet (key. nr. 83)
c) Spektrofotometr Helios (key nr. 105)
d) Water bath Memmert (key nr. 73)
e) Minute clock (key nr. 101)

6. DATE OF TEST

November 8. – 10. 2006

AKREDITOVANÁ ZKUŠEBNÍ LABORATOŘ Fyzikální a chemická laboratoř Praha
TEXTILNÍ ZKUŠEBNÍ ÚSTAV
č. 1031-1