GT Floor Co Ltd Dhr. Ad Postma No 319 Chuan Hsing Road Taishan District 24341 NEW TAIPEI CITY Taiwan



Your notice of Your reference Date
10-04-2014 20-05-2014

## Analysis Report 14.01866.03

### Modification of analysis report 14.01866.02, made on 13-05-2014

### Required tests:

EN 13501-1 (2007) + A1 (2009)

Identification number	Information given by the client	Date of receipt
T1406456	Green-Flor ® Modular Resilient Flooring, range 2.0/0.3, distributed amongst other under the following collection names: Young Living, Makalu 30, Pure Plaza	10-04-2014

### Petra Wittevrongel

### Order responsible

This report runs to 7 pages and may be reproduced, as long as it is presented in its entire form, without written permission of Centexbel.

The results of the analysis cover the received samples. Centexbel is not responsible for the representativeness of the samples. In assessing compliance with the specifications, we did not take into account the uncertainty on the test results.

VAT BE 0459.218.289

Fin. Acc. 210-0472965-45

IBAN BE44 2100 4729 6545

**Date** 20-05-2014 **Page** 2/7

Reference: T1406456 - Green-Flor ® Modular Resilient Flooring, range 2.0/0.3,

distributed amongst other under the following collection names: Young

Living, Makalu 30, Pure Plaza

### Information given by the client

Product standard EN 13501-1 (2007) + A1 (2009)

Floor covering type Homogeneous and heterogeneous polyvinyl chloride floor

coverings

EN product standard EN 649

FR treated no

Notified body No: 0493

**Date** 20-05-2014 **Page** 3/7

Reference: T1406456 - Green-Flor ® Modular Resilient Flooring, range 2.0/0.3,

distributed amongst other under the following collection names: Young

Living, Makalu 30, Pure Plaza

<u>Reaction to fire tests – Ignitability of building products subjected to direct impingement of flame - Single-flame source test</u>

Product standard

EN 13501-1 (2007) + A1 (2009)

Classification of resilient floor coverings in accordance with EN 14041 (2004) § 4.1.4 "The resilient floor coverings listed in Table 3, in the end uses identified in the table, are classified without further testing (CWFT) in the classes shown and do not require testing in respect of these end uses and classes".

Table 3 – Classes of reaction to fire for resilient floor coverings, classified without further testing

Floor covering type <sup>1</sup>	EN product standard	Minimum mass (kg/m²)	Maximum mass (kg/m²)	Minimum overall thickness (mm)	Class <sup>2</sup> Floorings
Plain and decorative Linoleum	EN 548	2.3	4.9	2	Efl
Homogeneous and heterogeneous polyvinyl chloride floor coverings	EN 649	2,3	3,9	1,5	$\mathrm{E}_{\mathrm{fl}}$
Polyvinyl chloride floor coverings with foam layer	EN 651	1.7	5.4	2	E <sub>fl</sub>
Polyvinyl chloride floor covering with cork-based backing	EN 652	3.4	3.7	3.2	E <sub>fl</sub>
Expanded (cushioned) polyvinyl chloride floor coverings	EN 653	1,0	2,8	1,1	Efl
Semi-flexible polyvinyl chloride tiles	EN 654	4.2	5.0	2	E <sub>fl</sub>
Linoleum on corkment backing	EN 687	2.9	5.3	2.5	E <sub>fl</sub>
Homogeneous and heterogeneous smooth rubber floor coverings with foam backing	EN 1816	3.4	4.3	4	E <sub>fl</sub>
Homogeneous and heterogeneous smooth rubber floor coverings	EN 1817	3.0	6.0	1.8	Eff
Homogeneous and heterogeneous relief rubber floor coverings	EN 12199	4.6	6.7	2.5	Eff

Floor covering loose laid over any wood based substrate of at least Class D-s2,d0 or any substrate of at least Class A2-s1,d0.

<sup>&</sup>lt;sup>2)</sup> Class as provided for in Table 2 in the Annex to Decision 2000/147/EC.

Analysis Report 14.01866.03

**Date** 20-05-2014 **Page** 4/7

Classification Class E<sub>fl</sub>

**Date** 20-05-2014 **Page** 5/7

Reference: T1406456 - Green-Flor ® Modular Resilient Flooring, range 2.0/0.3,

distributed amongst other under the following collection names: Young

Living, Makalu 30, Pure Plaza

# <u>Reaction to fire tests for floorings - Determination of the burning behaviour using a radiant heat source</u>

Date of ending the test 07-05-2014

Standard used EN ISO 9239-1 (2010)

Product standard EN 13501-1 (2007) + A1 (2009)

Deviation from the standard -

Conditioning 23°C, relative humidity 50%

Minimum 14 days or until constant mass is achieved

The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test: they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

### **Test specimen**

Substrate Fibre cement board - density (1800  $\pm$  200) kg/m<sup>3</sup>

Mounting Stuck down with

UZIN UZ 57 / Unipro - low emission, solvent-free

dispersion adhesive – "EC1 very low emission"

Cleaning Specimens have not been cleaned Joint In length direction: in the middle

In width direction: each 18.5 cm

**Date** 20-05-2014 **Page** 6/7

### Radiant heat flux

	Flame spread distance (cm)		Flame time	Heat flux *	
	10 min	20 min	30 min		kW/m²
Width					
#1	<11	<11	<11	12 min 00 s	≥ 11.0
Length					
#1	<11	<11	<11	12 min 00 s	≥ 11.0
#2	<11	<11	<11	12 min 00 s	≥ 11.0
#3	<11	<11	<11	12 min 00 s	$\geq 11.0$
Average					≥ 11.0

<sup>\*</sup> Heat flux at the time of flame extinguishment or after a test duration of 30 minutes.

Fire classification in accordance with EN 13501-1 (2007) + A1 (2009)		
Class	EN ISO 11925-2 or CWFT	EN ISO 9239-1 (test duration = 30 min)
${ m B_{fl}}$	E <sub>fl</sub>	heat flux $\geq 8.0 \text{ kW/m}^2$
$ ho_{ m fl}$	$\mathrm{E}_{\mathrm{fl}}$	heat flux $\geq 4.5 \text{ kW/m}^2$
$\mathrm{D}_{\mathrm{fl}}$	E <sub>fl</sub>	heat flux $\geq 3.0 \text{ kW/m}^2$

Smoke production: Light attenuation

	Maximum (%)	Total (%.min)
Width		
#1	20	68
Length		
#1	23	67
#2	24	70
#3	25	80
Average		72

Additional classification in accordance with EN 13501-1 (2007) + A1 (2009)		
smoke production ≤ 750%.min	s1	
smoke production > 750%.min	s2	

**Date** 20-05-2014 **Page** 7/7

### Reaction to fire classification: B<sub>fl</sub>/s1

glued on a non-combustible substrate\*

\* End use substrates of classes A1 or A2-s1,d0 (ISO 13238:2010 § 5.2.2)

### Limitations

This classification document does not represent type approval or certification of the product.

"The classification assigned to the product in this report is appropriate to a declaration of performance by the manufacturer within the context of system 3 of assessment and verification of constancy of performance and CE marking under the Construction Products Regulation.

The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate.

The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested."

Performed under accreditation in the fire lab under the responsibility of Filip Ghekiere