

TFI Report 451065-05

Formaldehyde EN 717-1

Customer LG Hausys Ltd.
One IFC, 20 Yeouido-gong, Yeongdeungpo-gu
150-876 Seoul
SOUTH KOREA

Product resilient floor covering
Decoclick 4.0 T

Responsible at TFI Dipl.-Ing. Gerd Bittner
Tel: +49 241 9679 213
g.bittner@tfi-online.de

This report includes 2 pages and 1 annex(es).

Aachen, 24 August 2015



Dr. Ernst Schröder

The present document is provided with a qualified electronic signature and is valid without autograph signature.

This report only applies to the tested specimens and has been established to the best of our knowledge. Only the entire report shall be reproduced. Under no circumstances, extracts shall be used. Furthermore, we apply the "General Terms and Conditions for the Execution of Contracts" of the Textiles & Flooring Institute GmbH, also with regard to the order execution.

1 Transaction

Test order	Formaldehyde EN 717-1
Order date	15 June 2015
Your reference	Dan Bi Choi
Product designation	Decoclick 4.0 T, article no. 39181090, batch no. 20150611B
TFI sample number	15-06-0156-01
Date of manufacture	11 June 2015
Date of sample receipt	15 June 2015
Sampling performed by	customer; cf. sampling report

2 Product Specification *

Use surface	not tested
Construction	heterogeneous
Structure	grained
Pattern	multicoloured, patterned
Colour of the use surface	light brown, beige
Type of delivery	tiles
Total mass per unit area [g/m ²]	7200
Total thickness [mm]	4.0

*customer information

3 Results

Formaldehyde EN 717-1	requirements of the German Chemicals Prohibition Order § 1 (3) [Chemikalienverbotsverordnung] fulfilled
	requirements of the emission category (class) E1 according to EN 14342 fulfilled

4 Annexes

Formaldehyde EN 717-1 ^a	FOR 451065-05
Sampling report	

The annexes marked ^a are based on tests accredited in accordance with EN ISO/IEC 17025.

Annex FOR - Formaldehyde EN 717-1

1 Transaction

Product designation Decoclick 4.0 T, article no. 39181090, batch no. 20150611B
 TFI sample number 15-06-0156-01
 Testing period 30 June 2015 – 28 July 2015

2 Test Method / Requirements¹

Determination of formaldehyde EN 717-1
 Chamber method
 volume test chamber 0.1 m³
 chamber load 1 m²/m³
 air exchange rate 1/h
 temperature 23 °C ± 0.5 °C
 relative humidity 45 % RH ± 3 % RH

Detection limit 0.01 ppm formaldehyde (1 ppm = 1.24 mg/m³)

Deviation - none -

3 Results¹

Parameter	CAS No.	Emission of formaldehyde after 96 h (4 days)		Requirement ² [ppm]	Fulfilled
		Steady-state concentration [mg/m ³]	Steady-state concentration [ppm]		
Formaldehyde	50-00-0	< 0.01	< 0.01	0.1	Yes

¹ The test is performed by an accredited subcontractor.

² Chemikalienverbotsverordnung [German Chemicals Prohibition Order] § 1 (3), EN 14342

Sampling Report for floor coverings according to EN 14041

Testing laboratory:	Textiles & Flooring Institute GmbH (TFI) Charlottenburger Allee 41 52068 Aachen Germany
Sampler: (Organisation and name of person)	Tile Technology Team Mr. Zhang Tao
Manufacturer / Contractor:	LG Hausys, Ltd.
Production site (factory):	Tianjin Plant

Product name:	DECOCLICK	Article number:	39181090
Group/product range:	<input checked="" type="checkbox"/> CE: <input type="checkbox"/> DIBt: <input type="checkbox"/> TFI-TÜV:	Sample type:	<input type="checkbox"/> textile floor covering <input checked="" type="checkbox"/> resilient floor covering <input type="checkbox"/> laminate <input type="checkbox"/> wood flooring <input type="checkbox"/> surface for sports areas <input type="checkbox"/> _____
Batch no.:	20150611B	Production date of batch:	20150611

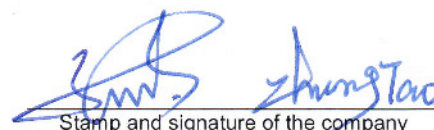
Sampling date and time:	2015-6-11 / 14:40PM		
Sample taken from:	<input checked="" type="checkbox"/> production <input type="checkbox"/> stock	Storage mode:	<input type="checkbox"/> exposed <input checked="" type="checkbox"/> packed
Storage location:		Packaging material:	Aluminum foil & PE foil

Particular remarks: (Possible negative impacts caused by emissions at the sampling site, problems, questions etc.)	<input type="checkbox"/> gas driven forklift <input checked="" type="checkbox"/> taken as retain sample according to DIBt instructions
--	--

Fire class:	<input checked="" type="checkbox"/> unglued <input type="checkbox"/> glued with:	<input type="checkbox"/> despatch of the report's duplicate directly to DIBt-contact:
--------------------	---	---

<input checked="" type="checkbox"/> technical datasheet will be submitted to TFI within 3 days	<input type="checkbox"/> technical datasheet is attached
--	--

Hereby the signatory confirms the correctness of the above information. The sample was hand selected and packed in accordance with the sampling instructions.


 Stamp and signature of the company