

UAB Veika  
Baltosios Vokės g. 37  
02243 Vilnius

## Test Report No. 50539-001

DiBt

Client:	UAB Veika Vilnius
Sample description by client:	DECOJET digital Wallpaper printed with Balance Eco series eco-solvent inks; Decosand, Art.-Nr. ER-007
Sample No.:	A001
Type of sample:	digital Wallpaper
Sampled by:	see b) sampling report
Date of arrival of sample:	31.08.2015
Condition of sample	without objection
Date of report:	20.10.2015
Number of pages of report:	5
Test parameter:	Emission test following the "Principles for the Health Assessment of Construction Products", published by the "German Institute of Structural Engineering (Deutsches Institut für Bautechnik DiBt)", status: October 2010 - Volatile Organic Compounds (VOC) after 3 and 28 days - Aldehydes and ketones after 3 and 28 days
Testing laboratory:	eco-INSTITUT Germany GmbH, Cologne

### a) Legal basis of emission test

The emission tests have been performed in accordance with the “Principles for the Health Assessment of Construction Products”, published by German Institute of Structural Engineering (Deutsches Institut für Bautechnik DIBt), status: October 2010. The analysis is based on the LCI-list, issued 2012.

### b) Sampling Report

Produktprüfung Product testing  
 Zertifizierung Certification  
 Beratung Consulting

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#### Sampling Sheet\*

<b>Test laboratory</b>	eco-INSTITUT Germany GmbH Scharzenstr. 6-20, D-51063 Cologne Germany Tel. +49 (0)221 - 931245-0 Fax +49 (0)221 - 931245-33	<b>Sampler (Name, Company, Phone)</b>	UAB "VEIKA"  +370 615 232 11
<b>Name of the producer / distributor at the place of sampling (Address / Stamp)</b>	UAB "VEIKA"  Baltosios Vokes 37, Vilnius Lithuania LT-02243	<b>Producer (if different from the company name at the place of sampling)</b>	UAB "VEIKA"  Baltosios vokes 37, Vilnius Lithuania LT-02243
<b>Product name</b>	DECOJET digital wallpaper printed with Balance Eco series eco-solvent inks.	<b>Product type (e.g. parquet, floor covering)</b>	Digital wallpaper base covered with Balance Eco inks.
<b>Modell / Program / Series</b>	Decosand	<b>Batch</b>	000104
<b>Article number</b>	ER-007	<b>Production date of the batch</b>	2015-08-10
<b>Samples are taken ...</b>	<input checked="" type="checkbox"/> from current production <input type="checkbox"/> storage	<b>Sampling date</b>	24/08/2015
<b>Storage location before sampling</b>	<input checked="" type="checkbox"/> Production <input type="checkbox"/> Storage <input type="checkbox"/> Others	<b>Storage conditions before sampling</b>	<input checked="" type="checkbox"/> open <input type="checkbox"/> packaged
<b>Storage location:</b>		<b>Packaging material:</b>	
<b>Special features</b> (possible negative effects through emissions at the place of sampling (e.g. benzine, exhaust fumes), uncertainties, questions etc.)			
<b>Validation</b> Hereby the signer affirms the accuracy of the above-mentioned statements. The sample was chosen, sampled and packaged according to the guide for taking samples.			
<b>Date</b>	<b>Signature</b> (Company Stamp)		
25/08/2015			

\* Please take one sampling sheet for each sample! The sampling instruction must be strictly maintained.

eco-INSTITUT Germany GmbH / Schwanenstraße 6-20 / Endeverk Kupferweg 5,2 / D-51063 Köln / Germany  
 Tel. +49 221 931245-0 / Fax +49 221 931245-33 / eco-institut.de / Geschäftskunden: Dr. Frank Kallert  
 HRG 17917 / UStID: DE 122621304 / Rail: eco@veika.com, eco@eco-institut.de, eco@eco-institut.de, eco@eco-institut.de

**Remark:** The test result referred to the submitted test sample exclusively. The validity of the report is three years at most and will end immediately at any alternation of material composition or in manufacturing process. Publishing in parts requires authorisation.

### c) Special remarks

Not applicable

### d) Emission test

Preparation of the test specimen	according to DIBt requirements	
Date of the manufacture of the test specimen	08.09.2015	
Dimensions	35,3 cm x 35,3 cm	
Masking of sample	edges: not applicable, backside: yes	
Details of additional material	adhesive aluminium band, producer: 3M	
Test	Start of preconditioning	not applicable
	Placing of the test specimen into the test chamber and start of testing (t <sub>0</sub> )	08.09.2015
Test chamber	First sampling (t <sub>3d</sub> )	11.09.2015
	Second sampling (t <sub>28d</sub> )	06.10.2015
	Arrangement of the test specimen in the test chamber	on tripod
	Use of the break-off criteria	not applicable
	Type	Emission chamber
	Manufacturer	eco-INSTITUT GmbH, Cologne
	Material and volume	Glass, 0.125 m <sup>3</sup>
Analytics	Analytical system	Details of climate and other conditions
		Temperature: 23°C
		Relative humidity: 50 %
		Air pressure: normal
		Air: cleaned
		Air change rate: 0.5 h <sup>-1</sup>
		Air velocity: 0.3 m/s
		Loading: 1 m <sup>2</sup> /m <sup>3</sup>
		Area specific air flow rate: 0.5 m <sup>3</sup> /m <sup>2</sup> *h
		The emission tests have been performed in accordance with the "Principles for the Health Assessment of Construction Products", published by German Institute of Structural Engineering (Deutsches Institut für Bautechnik DIBt), October 2010 considering additional decisions and cited test methods:
<ul style="list-style-type: none"> <li>- test chamber following DIN EN ISO 16000-9</li> <li>- VOC-analysis following DIN ISO 16000-6</li> <li>- Aldehydes/Ketones analysis following DIN ISO 16000-3</li> </ul>		
The emission test of the volatile organic compounds has been performed under realistic conditions in a testing chamber under standardized testing conditions for loading, air exchange rate, humidity, temperature and air flow velocity of the chamber air.		
Air samples were collected after 3 and 28 days under continuous testing conditions. Samples volumes were 5 l chamber air with		

	100 ml/min on Tenax and 100 l with 0.8 l/min on DNPH. Tenax samples have been analyzed with GC/MS. Limit of consideration was 5 µg/m³. The collected aldehydes and ketones on DNPH were analyzed with liquid desorption / HPLC. Limit of consideration was 5 µg/m³. <ul style="list-style-type: none"><li>- Thermodesorber (ATD or Turbomatrix)</li><li>- GC/MS-system with constant pressure program and Quadrupol-analyser</li><li>- Column: Methylsilicone-phase with 5 % Phenylsilicone, length 60 m, inner diameter 0.25 mm, film thickness 1.0 µm</li></ul>
Special remarks	The test took place without special remarks.
Quality assurance system	<ul style="list-style-type: none"><li>- Accredited for chamber tests and VOC-analysis by thermodesorption-GC/MS</li><li>- Participation in robin round tests</li><li>- Participation in experience exchange</li><li>- Application of internal standards</li><li>- Validation of test chamber with permeators</li><li>- Thermo desorber validation with test mixture</li><li>- Control charts</li></ul>

## e) Results

The test results are listed in the excel sheet „ADAM\_2012\_08\_3\_eco.50539.4.A001.xls“.

Cologne, 20.10.2015



Michael Stein, Dipl.-Chem.  
(Technical Manager Representative)

**Assessment of the emission test following the “Principles for the Health Assessment of Construction Products”, published of the “German Institute of Structural Engineering (Deutsches Institut für Bautechnik DIBt)”, status: October 2010**

3 day emission ..... fulfilled  
7 day emission ..... not tested  
28 day emission ..... fulfilled

The assessment is subject to the confirmation by the “German Institute of Structural Engineering (Deutsches Institut für Bautechnik DIBt)”.

This test report does not replace a general technical approval by DIBt.

Cologne, 20.10.2015



Alexandra Kühn  
(Project manager)