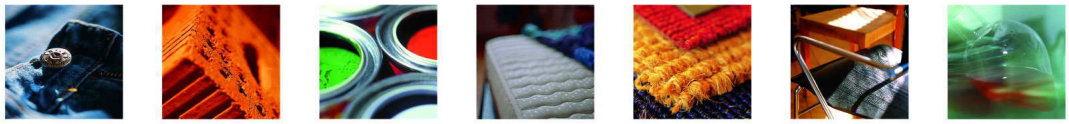

Produktprüfung
Zertifizierung
Qualitätssicherung

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Test Report No. 39890 – 003-004

Client:	Basler Lacke AG, Switzerland
Sample description by client:	**Aqualin 2K-Farbe wässrig** (weiss) / **aqueous** (white), Art-No.: 47-1000-310 **Härter / hardener**, Art-No.: 19-0906-000
Sample no.:	A003
Type of sample:	two-components epoxide paint
Sampled by:	see b) sampling report
Date of arrival of sample:	02.04.2013
Condition of sample:	without objection
Date of report:	4.6.2013
Number of pages of report:	4
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
Testing laboratory:	eco-INSTITUT 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

Not applicable

c) Special remarks

Not applicable

d) Emission test

Preparation of the test specimen	according to DIN EN ISO 16000-11 and DIN EN 717-1	
Date of the manufacture of the test specimen	12.04.2013	
Dimensions	25 cm x 20 cm	
Masking of sample	edges not masked, backside masked	
Test	Start of preconditioning	
	Placing of the test specimen into the test chamber and start of testing (t_0)	12.04.2013
	First sampling (t_{3d})	15.04.2013
	Second sampling (t_{28d})	10.05.2013
	Arrangement of the test specimen in the test chamber	on tripod
	Use of the break-off criteria	not applicable
Test chamber	Type	Emission chamber
	Manufacturer	eco-INSTITUT GmbH, Cologne
	Material and volume	Glass, 0,125 m³
	Details of climate and other conditions	Temperature: 23°C Relative humidity: 50 % Air pressure: normal Air: cleaned Air change rate: 0.5 h^{-1} Air velocity: 0,3 m/s Loading: 0.4 m²/m³ Area specific air flow rate: 1,25 m³/m²*h
Analytics	Analytical system	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: - test chamber following DIN EN ISO 16000-9

	- VOC-analysis following DIN ISO 16000-6 - Aldehydes/Ketones analysis following DIN ISO 16000-3 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 7/28 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. - Thermodesorber (ATD or Turbomatrix) - GC/MS-system with constant pressure program and Quadrupol-analyser - Column: Methylsilicone-phase with 5 % Phenylsilicone, length 60 m, inner diameter 0.25 mm, film thickness 1.0 µm
Special remarks	The test took place without special remarks.
Quality assurance system	- Accredited for chamber tests and VOC-analysis by thermodesorption-GC/MS - Participation in robin round tests - Participation in experience exchange - Application of internal standards - Validation of test chamber with per-meators - Thermo desorber validation with test mixture - Control charts

e) Results

The test results are listed in the excel sheet „ ADAM_2012_08_3_eco.39890.5.A003-A004.xls “.

Cologne, 4.6.2013

Dr. H.-U. Krieg
(Technical Manager)

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 test was not applied for approval by DIBt (German Institute of Structural Engineering). The complete product description and sampling protocol have not been documented.

Cologne, 4.6.2013

Ralph Nitsche
(Project Manager)