



SGS INSTITUT FRESENIUS GmbH · Königsbrücker Landstraße 161 · D-01109 Dresden

BuzziSpace Astrid de Chaffoy Ankerrui 20/5

B-2000- Antwerp

Test report Order No.

4931996 1 4931996

Customer order

Order date

04.04.2019

Customer No 10177950

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Environment, Health and Safety

Dresden, June 20th, 2019

DAkkS Deutsche Akkreditierungsstelle D-PL-14115-02-00 D-PL-14115-03-00 D-PL-14115-06-00 D-PL-14115-07-00

Emission test according to ISO 16000-9 (2008-04) according Label Blue Angel - RAL-UZ 38

Purchaser:

BuzziSpace

Name of producer:

BuzziSpace

Sample no .:

190388015

Sample description:

Wooden table sample BuzziPicNic.

Article number S-000000332

Delivery date of sample:

11.04.2019

Test period:

18.04.2019 - 20.06.2019

Responsible person:

Ramona Eßbach

SGS Institut Fresenius GmbH

Ramona Eßbach Head of Laboratory

Heike Richter

Deputy Laboratory Manager





1. Order content

The emission of VOC (volatile organic compound) and aldehydes according to ISO 16000-9 (2008-04) and according ISO 16000-11 (2006-06) is to be determined on a wooden table sample - component testing on plate-like material.

2. Product description

Identification	Type/Dimension
Wooden table sample Model: Pic Nic white wash	Serial number: NA Batch number: NA
Component testing on plate-like material Figure 1 – delivery condition	Article number: S-000000332 Figure 2 – test samples, size 50 x 50 x 3,5 cm each
DI S	

3. Sampling

The test pieces (4 pieces) were taken by the customer from inventory stocks. On delivery, the test pieces were packed in bubble foil and cardboard.

Date of sampling:

04.04.2019

Place of sampling:

Bergeijk, The Netherlands

Kind of product storage before taking the sample: loose

4. Test conditions

The emission of VOCs was carried out under the following defined conditions:

Temperature	(23 ± 1)	°C
rel.air humidity	(50 ± 5)	%
Exposition period	28	days
Air change rate	0,5	[/h]
Area of product	0,5	[m²]





Test chamber size	1,0	[m³]
Loading factor	0,5	[m ² /m ³]
Area specific air flow rate	1,0	$[m^3/m^2 *h]$

Sampling for the determination of VOCs was carried out at Tenax TA. The analysis was carried out according to ISO 16000-6 (2012-11) with GCMS/FID.

The determination limits are 1 µg/m³ per component.

Quantification is substance-specific. Unidentified compounds, non-calibrated compounds and substances without NIK are calculated as toluene equivalents.

The emission of Aldehydes was carried out according ISO 16000-3 (2013-01) with sampling on DNPH-coated silicagel tubes and analysis by HPLC and UV-/diode array detection.

The determination limit is 2 µg/m³ per component.

5. Experimental procedure

A blank sample of the emission chamber was analyzed before starting the emission test. All parameters to be determined were < LOD (limit of determination).

One test piece was placed in the test chamber with a total area of 0,5 m² on April 18th, 2019 (side edges taped with aluminium tape).

After an exposure period of 3 days, 7 days and 28 days, the samples were taken for VOC and aldehydes.

6. Results

6.1 Measurement results

The following individual compounds have been detected:

	CAS	Parameters	Results 3 days	Results 7 days	Results 28 days
			μg/m³	μg/m³	μg/m³
	50-00-0	Formaldehyde	< 2	< 2	< 2
VOC	108-10-1	4-Methyl-2-pentanone	11	3	4
VOC	110-19-0	Isobutylacetat	1	1	1
VOC	123-86-4	n-Butylacetat	350	280	120
VOC	100-41-4	Ethylbenzene	17	13	8
VOC	106-42-3	m,p-Xylene	68	55	28
VOC	108-65-6	1,2-propylene glycol methyletheracetat	4	2	2
VOC	95-47-6	o-Xylene	18	13	9
VOC	95-63-6	1,2,4-Trimethylbenzene	1	1	1
		Sum TVOC (C6-C16)	470	368	173





6.2 Requirements RAL-UZ 38

Compound or substance	Limit value 3 rd day	Limit value 28 th day
Sum of organic compounds in the retention range C6-C16 (TVOC)	< 3,0 mg/m³	< 0,4 mg/m³
Sum of organic compounds in the retention range >C16-C22 (TSVOC)		< 0,1 mg/m³
Carcinogenic substances	< 10 μg/m³ (sum)	< 1 µg/m³ (per single value)
Sum of all VOCs without NIK		< 0,1 mg/m ³
R-value		<1
Formaldehyde		< 0,05 ppm

6.3 Measurement results - Requirements RAL-UZ 38

Compound or substance	Results 28 days	Limit value 28 th day
Sum of organic compounds in the retention range C6-C16 (TVOC)	0,17 mg/m³	< 0,4 mg/m³
Sum of organic compounds in the retention range >C16-C22 (TSVOC)	< 0,1 mg/m³	< 0,1 mg/m³
Carcinogenic substances 1)	< 1 μg/m³	< 1 µg/m³ (per single value)
Sum of all VOCs without LCI 2)	< 0,1 mg/m³	< 0,1 mg/m³
R-value 3)	0,11	<1
Formaldehyde	< 0,002 ppm	< 0,05 ppm

¹⁾ according to EU legislation degree(EG) Nr. 1272/2008 app. VI Tab. 3.1

2) lowest concentration of interest

VOC - organic compound in the retention range C6-C16

- End of report -

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³⁾ Sum of all quotients (Ci/LCli), Ci= substance concentration in the chamber air, LCli=LCl of the substance

TVOC - Sum of organic compounds in the retention range C6-C16