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Date
6 September 2012

AgBB Test Report

1 Sample Information

Sample identification	Ash Country 182 x 2266
Batch no.	6110915 1951 3
Production date	Week 23-25 2012
Product type	Parquet flooring
Date when sample was received	2 July 2012
Testing (start - end)	11 July 2012 – 8 August 2012

2 Evaluation of the Results

The tested product complies with the requirements of DIBt (October 2010) and AgBB (June 2012).

Parameter	Test after 3 days		Test after 28 days	
	Concentration, mg/m ³	Limit value, mg/m ³	Concentration, mg/m ³	Limit value, mg/m ³
TVOC	0.087	≤ 10	0.033	≤ 1.0
TSVOC	< 0.005	-	< 0.005	≤ 0.1
R-value (dimensionless)	1.0	-	0.013	≤ 1
Total VOC without NIK	0.053	-	0.022	≤ 0.1
Total Carcinogens	< 0.001	≤ 0.01	< 0.001	≤ 0.001
Formaldehyde	-	-	0.015	≤ 0.12

Table of contents

1	Sample Information	1
2	Evaluation of the Results	1
3	Test Method	2
4	Results	3
4.1	Emissions Test after 3 Days	3
4.2	Emissions Test after 28 Days	4
4.3	Chromatograms	5
4.4	Image of the sample	6
5	Appendices	7
5.1	ADAM report for DIBt	7
5.2	Description of the applied test method	11

3 Test Method

Method	Principle	Parameter	Quantification limit	Uncertainty	
AgBB Method (version June 2012), DIBt (version October 2010)					
Internal method numbers: 9810, 9811, 9812, 2808, 8400	GC/MS	VVOC, VOC, SVOC	1 µg/m ³	22% (RSD) U _m = 2 x RSD = 45 %	
	GC/MS	TVVOC, TVOC, TSVOC	5 µg/m ³		
	HPLC	Volatile Aldehydes	3 µg/m ³		
Test chamber parameter					
Chamber volume, l	238	Temperature, °C	23±1	Relative humidity, %	50±5
Air exchange rate, 1/h	0.5	Loading ratio, m ² /m ³	0.4		
Sample preparation					
Edges and back were covered with aluminium foil and aluminium tape. The parquet was arranged with a T-shaped joint.					
Deviations from the test method:		None			

For detailed method description see page 11: 5.2 Description of the applied test method

4 Results

4.1 Emissions Test after 3 Days

	CAS No.	Retention time min	ID-Cat	Concentration $\mu\text{g}/\text{m}^3$	NIK-value $\mu\text{g}/\text{m}^3$	R- value	Emission rate $\mu\text{g}/(\text{m}^2\cdot\text{h})$	Toluene equivalent $\mu\text{g}/\text{m}^3$
TVOC (C₆-C₁₆)				87	-	-	110	80
VOC with NIK								
Pentanal *	110-62-3	2.33	2	1.5	1700	(<5)	1.9	1.5
Hexanal *	66-25-1	3.74	1	8.2	890	0.0093	10	3.6
Benzaldehyde *	100-52-7	6.79	2	18	90	0.20	23	18
Phenol	108-95-2	7.41	1	8.1	10	0.81	10	5.4
Beta-pinene *	127-91-3	7.49	3	1.2	1500	(<5)	1.5	1.2
R-value = $\sum \text{Conc}_i/\text{NIK}_i$						1.0		
VOC without NIK								
Not identified *	-	6.10	4	1.2	-	-	1.5	1.2
Not identified *	-	8.21	4	1.2	-	-	1.5	1.2
4-Methoxyphenol *	150-76-5	10.38	2	5.3	-	-	6.6	5.3
Not identified *	-	11.11	4	6.4	-	-	8.0	6.4
Methyl benzoylformate *	15206-55-0	11.18	3	10	-	-	13	10
Benzophenone *	119-61-9	14.30	1	31	-	-	39	31
Total VOC without NIK				53	-	-	66	80
Total VVOC (< C₆)				< 5	-	-	< 7	< 5
n.d.	-	-	-	< 5	-	-	< 7	< 5
Total SVOC (> C₁₆)				< 5	-	-	< 7	< 5
Not identified *	-	14.62	4	1.9	-	-	2.4	1.9
Not identified *	-	16.64	4	1.2	-	-	1.5	1.2
Total Carcinogens				< 1	-	-	< 2	< 1
n.d.	-	-	-	< 1	-	-	< 2	< 1

n.d. Not detected

< Means less than

* Not a part of our accreditation. See 5.2.6 Accreditation

(< 5) The R-value is not calculated for compounds with a concentration <5 $\mu\text{g}/\text{m}^3$.

Categories of Identity:

- 1: Identified and specifically calibrated
- 2: Identified by comparison with a mass spectrum obtained from library and supported by other information. Calibrated as toluene equivalent
- 3: Identified by comparison with a mass spectrum obtained from a library. Calibrated as toluene equivalent
- 4: Not identified, calibrated as toluene equivalent

The results are only valid for the tested sample(s).

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4.2 Emissions Test after 28 Days

	CAS No.	Retention time min	ID-Cat	Concentration $\mu\text{g}/\text{m}^3$	NIK-value $\mu\text{g}/\text{m}^3$	R- value	Emission rate $\mu\text{g}/(\text{m}^2\cdot\text{h})$	Toluene equivalent $\mu\text{g}/\text{m}^3$
TVOC (C₆-C₁₆)				33	-	-	41	27
VOC with NIK								
Pentanal *	110-62-3	2.53	2	1.9	1700	(<5)	2.4	1.9
Hexanal *	66-25-1	4.15	1	11	890	0.013	14	5.0
R-value = $\Sigma \text{Conc}_i/\text{NIK}_i$						0.013		
VOC without NIK								
4-Methoxyphenol *	150-76-5	10.75	2	3.2	-	-	4.0	3.2
Not identified *	-	11.51	4	2.1	-	-	2.6	2.1
Not identified *	-	11.59	4	1.7	-	-	2.1	1.7
Benzophenone *	119-61-9	14.73	1	22	-	-	28	22
Total VOC without NIK				22	-	-	28	22
Total VVOC (< C₆)				< 5	-	-	< 7	< 5
n.d.	-	-	-	< 5	-	-	< 7	< 5
Total SVOC (> C₁₆)				< 5	-	-	< 7	< 5
n.d.	-	-	-	< 5	-	-	< 7	< 5
Total Carcinogens				< 1	-	-	< 2	< 1
n.d.	-	-	-	< 1	-	-	< 2	< 1
Volatile Aldehydes C₁-C₆ measured with DNPH-Method (see 5.2.4)								
Formaldehyde	50-00-0	-	-	15	120	-	19	-
Acetaldehyde	75-07-0	-	-	4.7	-	-	5.9	-
C ₃ – C ₆ Aldehydes	-	-	-	18	-	-	22	-

n.d. Not detected

< Means less than

* Not a part of our accreditation. See 5.2.6 Accreditation

(< 5) The R-value is not calculated for compounds with a concentration <5 $\mu\text{g}/\text{m}^3$.



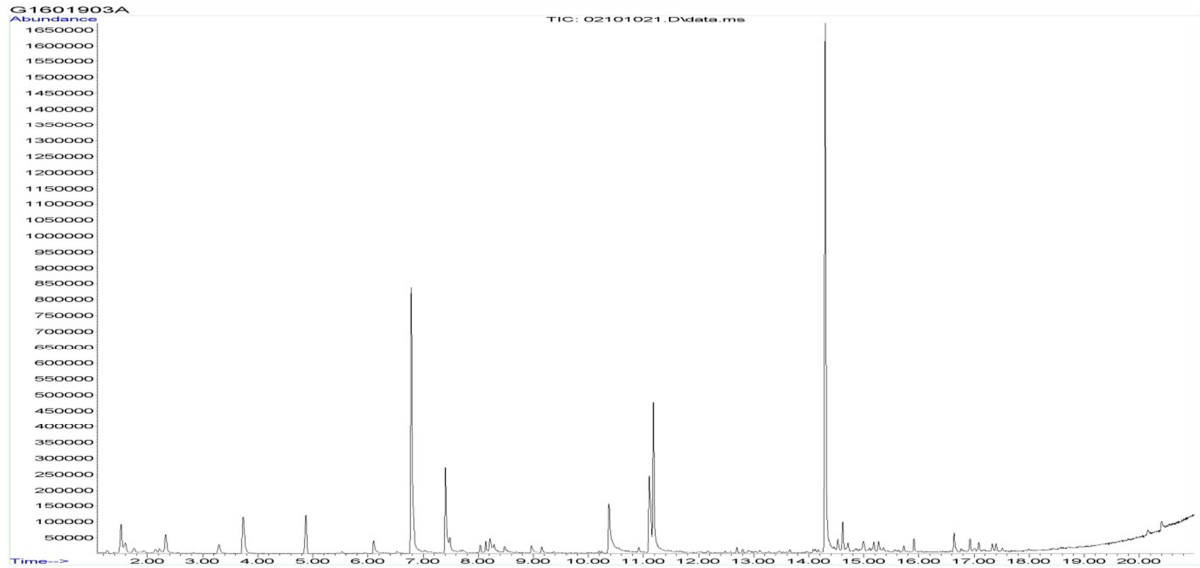
Dr. Arja Valtanen
Analytical Service Manager



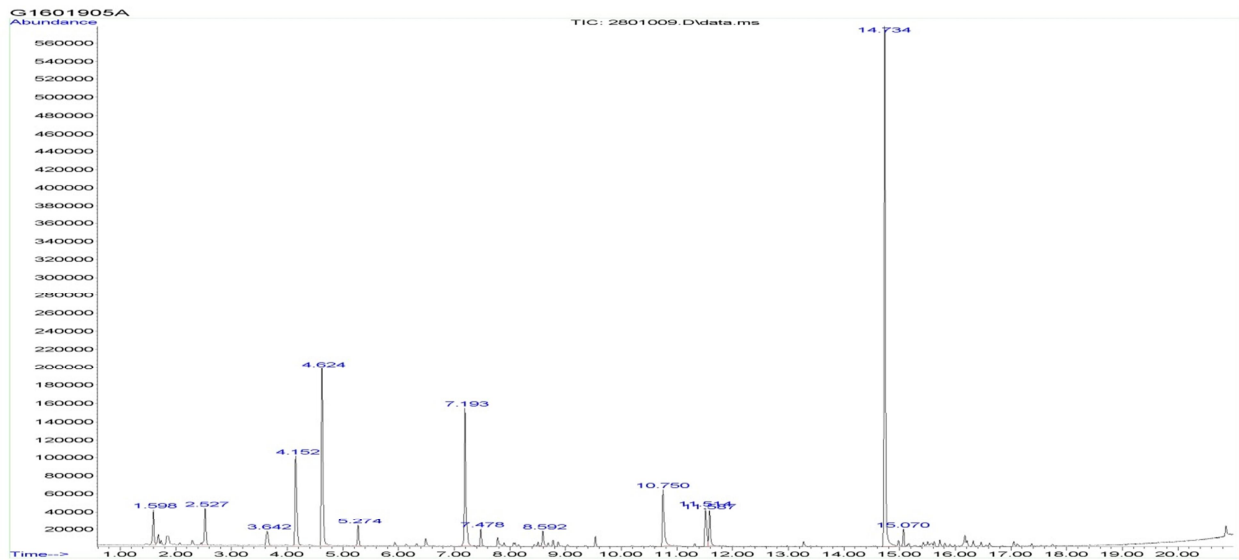
Søren Ryom Villadsen
Analytical Service Manager

4.3 Chromatograms

4.3.1 Chromatogram after 3 days



4.3.2 Chromatogram after 28 days



Please consider the different scales

The results are only valid for the tested sample(s).

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4.4 Image of the sample



5 Appendices

5.1 ADAM report for DIBt

1. Allgemeine Angaben - General information						
Prüfstelle Testing laboratory	Eurofins Product Testing A/S					
Verantwortlicher Prüfer Responsible laboratory staff	Dr. Arja Valtanen					
Prüfberichts-nr. Number of the test report	G16019Arev					
Kunde/Antragsteller Client/Applicant	Karelia-Upofloor Oy					
Produktname und Artikelnr. Name of the product and material number	Ash Country 182 x 2266					
Aktenzeichen beim DIBt File number at DIBt	Stellen- zeichen	SVA-Nr.	Sachgebiet	lfd. Nr.	Jahr (2 Ziffern)	Unter- sachgebiet
	1147	156	607	30	11	
Art der Prüfung Type of testing	A	S _C	S _C	S _{CL}		
	28					
Probenbezeichnung Name of the sample	Ash Country 182 x 2266					
Datum des Probeneingangs bei der Prüfstelle Date of receipt of the sample	2 July 2012					
Lagerung der Probe bis zur Prüfung Storage of the sample until testing	Warehouse, sealed, in room temperature					
2. Beschreibung des Bauprodukts - Description of the construction product						
Bitte auswählen! Choose, please!	<input type="checkbox"/> Textile Bodenbeläge - Textile floor coverings <input type="checkbox"/> Laminate und Paneele - Laminates and panels <input checked="" type="checkbox"/> Parkette und Holzfußböden - Parquet and wood floorings <input type="checkbox"/> Elastische Bodenbeläge - Resilient floor coverings <input type="checkbox"/> Beschichtungen - Coatings <input type="checkbox"/> Korkbodenbeläge - Cork floor coverings <input type="checkbox"/> Sportbodenbeläge - Surfaces for sport areas <input type="checkbox"/> Oberflächenbeschichtungen - Surface coatings <input type="checkbox"/> Bodenbelagskleber - Adhesives for floor coverings <input type="checkbox"/> Verlegeunterlagen - Underlayers <input type="checkbox"/> Sonstige Produkte - Other products					
	Parkette und Holzfußböden - Parquet and wood floorings		Herstellerangaben Manufacturer's data		Prüfstellenangaben Testing laboratory's data	
	Allgemeine Produktbeschreibung General description of the product		Parquet flooring		Parquet flooring	
	Abmessung der gelieferten Probe [mm x mm] Dimensions of the delivered sample [mm x mm]		182 x 2266		182 x 2266	
	Originalabmessung eines Elements [mm x mm] Original dimension of an element [mm x mm]					
	Gesamtdicke [mm] Total thickness [mm]				14,14	
	Flächengewicht [g/m ²] Area weight [g/m ²]				7730	
	Konstruktion / Aufbau (Massiv, 2-Schicht, 3-Schicht...) Construction (massive, 2-layer, 3-layer...)					
	Holzart des Deckbelags Timber species of the top layer		Ash			
	Oberflächenbeschichtung (falls vorhanden) Surface coating (if relevant)		UV Laquer Bona Gloss 35			
		Chemische Basis Chemical basis				
		Auftragsmenge [g/m ²] Applied quantity [g/m ²]				
Behandlungen aus ästhetischen Gründen (Räucherung, Thermo-Behandlung, Färbung, Bleichung) Treatments for aesthetic reasons (smoking, thermal treating, coloration, bleaching)						
Ammoniakbestimmung bei Räucherholz? Emission test for ammonia?				no		
Art der Verbindung der Parkettstäbe oder Holzfußbodenelemente untereinander (z.B. Clickverbindung, Nut & Feder) Joint structure of the parquet elements or wood flooring elements (e.g. click-connection, slot & key)						
Kantenabdeckung? Verhältnis der offenen zu den abgedeckten Kanten? Covering of the edges? Ratio of covered edges to uncovered edges?				all edges covered, sample arranged with a T-shaped joint		
3. Bemerkungen (z.B. Produktbesonderheiten, Abweichungen von "Grundsätzen zur gesundheitlichen Bewertung von Bauprodukten in Innenräumen" etc.) (neue Zeile mit [ALT] + [RETURN])						
Comments (e.g. particularities on the product, variation of the "Principles for health assessment of construction products used in interiors" etc.) (new line with [ALT] + [RETURN])						
Glue: Casco 1274 + 2581						

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Produktname - Name of the product		Ash Country 182 x 2266	
Datum der Prüfkörperherstellung Date of the manufacture of the test specimen		11 July 2012	
Herstellung des Prüfkörpers durch Preparation of the test specimen by		Laborant/laboratory technician	
verwendete Hilfsmaterialien used auxiliary materials		aluminum foil	

Prüfung - Testing		Datum date	Uhrzeit time
Beginn der Vorkonditionierung Start of preconditioning	t_{0-x}		
Einbringen der Probe in die Prüfkammer und Beginn der Prüfung Placing of the test specimen into the test chamber and start of testing	t_0	11.07.2012	9.16
erste Probenahme first sampling	t_{3d}	14.07.2012	8.06-10.08
zweite Probenahme second sampling	t_{7d}		
dritte Probenahme third sampling	t_{28d}	08.08.2012	8.02-10.13
Prüfkörperanordnung in der Prüfkammer Arrangement of the test specimen in the test chamber			
Anwendung der Abbruchkriterien Use of the break-off criteria	3d/7d		

Prüfkammer - Test chamber			
Hersteller/Typ der Prüfkammer Manufacturer/type of the test chamber		Eurofins Product Testing A/S	
Material der Prüfkammer Material of the test chamber		Edelstahl/Stainless steel	
Volumen der Prüfkammer Volume of the test chamber	[m ³]	0,24	
Fläche der Probe Area of the test specimen	[m ²]	0,10	
Luftwechselrate Air exchange rate	[h ⁻¹]	0,50	
flächenspezifische Luftdurchflussrate q Area specific air flow rate	[mh ⁻¹]	1,25	
Temperatur Temperature	[°C]	23,0	
relative Luftfeuchte relative humidity	[%]	50,0	

Berücksichtigungsgrenzen - Limits of consideration	C_i [µg/m ³]	Auswahl NIK-Liste/AgBB-Schema (choice of LCI list/AgBB scheme)
Substanzen mit NIK-Wert Substances with LCI value	5	*) mit Ausnahme aller cancerogenen Substanzen, hier gilt Nachweisgrenze with exception of all carcinogenic substances, detection limit applies here
alle anderen Substanzen*) all other substances	5	
LCI list 2012 AgBB scheme 2012		

Anmerkungen zur Prüfung (neue Zeile mit [ALT] + [RETURN]) Comments on testing (new line with [ALT] + [RETURN])

ADAM_2012_08

Emissionen nach 3 Tagen Emission after 3 days				Retentionsbereich Retention range	Quantifizierung Quantification	Identifikation Identification	C _i [µg/m³]	SER _i [µg/m³h]	Zuordnung Classification [canc./NIK/o.NIK] [carc./LC/no LC]	R _i	lfd. Nr Serial number	ADAM_2012_08	legend VVOC = < C6 VOC = C6 - C16 SVOC = C16 - C22 a = substanzspezifisch substance-specific b = substanzähnlich substance-like c = Toluoläquivalent toluene equivalent d = DNPH 1 = Klasse 1 class 1 2 = Klasse 2 class 2 3 = Klasse 3 class 3
Ash Country 182 x 2266	Kommentar Comment	CAS-No.	RT [min]										
gefundene Substanzen Detected substances													Daten nur über den Button "Messergebnisse eingeben/löschen" in diese Tabelle eintragen Data to be entered only via the button "enter/delete results"
Pentanal		110-62-3	2,33	VOC	c	2	2	2,51	1700	0,001	7-2	1	
Hexanal		66-25-1	3,74	VOC	a	1	8	10,02	890	0,009	7-3	1	
Benzaldehyd		100-52-7	6,79	VOC	c	2	18	22,55	90	0,200	7-19	1	
Phenol		108-95-2	7,41	VOC	a	1	8	10,02	10	0,800	5-1	1	
beta-Pinen		127-91-3	7,49	VOC	c	2	1	1,25	1500	0,001	3-3	1	
Not identified			6,10	VOC	c	3	1	1,25	ohne NIK			0	
Not identified			8,21	VOC	c	3	1	1,25	ohne NIK			0	
4-Methoxyphenol		150-76-5	10,38	VOC	c	2	5	6,26	ohne NIK			0	
Not identified			11,11	VOC	c	3	6	7,52	ohne NIK			0	
Alpha.-oxo-Benzeneacetic acid methyl ester		15206-55-0	11,18	VOC	c	2	10	12,53	ohne NIK			0	
Benzophenone		119-61-9	14,30	VOC	a	1	31	38,83	ohne NIK			0	
Not identified			14,62	SVOC	c	3	2	2,51	ohne NIK			0	
Not identified			16,64	SVOC	c	3	1	1,25	ohne NIK			0	

Emissionen nach 28 Tagen Emission after 28 days				Retentionsbereich Retention range	Quantifizierung Quantification	Identifikation Identification	C _i [µg/m³]	SER _i [µg/m³h]	Zuordnung Classification [canc./NIK/o.NIK] [carc./LC/no LC]	R _i	lfd. Nr Serial number	ADAM_2012_08	legend VVOC = < C6 VOC = C6 - C16 SVOC = C16 - C22 a = substanzspezifisch substance-specific b = substanzähnlich substance-like c = Toluoläquivalent toluene equivalent d = DNPH 1 = Klasse 1 class 1 2 = Klasse 2 class 2 3 = Klasse 3 class 3
Ash Country 182 x 2266	Kommentar Comment	CAS-No.	RT [min]										
gefundene Substanzen Detected substances													Daten nur über den Button "Messergebnisse eingeben/löschen" in diese Tabelle eintragen Data to be entered only via the button "enter/delete results"
Pentanal		110-62-3	2,53	VOC	c	2	2	2,51	1700	0,001	7-2	1	
Hexanal		66-25-1	4,15	VOC	a	1	11	13,78	890	0,012	7-3	1	
4-Methoxyphenol		150-76-5	10,75	VOC	c	2	3	3,76	ohne NIK			0	
Not identified			11,51	VOC	c	3	2	2,51	ohne NIK			0	
Not identified			11,59	VOC	c	3	2	2,51	ohne NIK			0	
Benzophenone		119-61-9	14,73	VOC	a	1	22	27,56	ohne NIK			0	
Formaldehyd		50-00-0					15	18,79					

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Probenbezeichnung Name of the sample	Ash Country 182 x 2266		Wichtige Informationen (important information)		Tabellenblätter schützen protect worksheets		
Aktenzeichen beim DIBt File number of DIBt	II 47-1.156.607-30/11						
Prüfinstitut Testing laboratory	Eurofins Product Testing A/S				Blattschutz aufheben unprotect worksheets		
Ergebnisüberblick General view of the results ADAM_2012_08	3 Tage (days)			7 Tage (days) Keine Daten vorhanden - No data available		28 Tage (days)	
	Ergebnisse results	AgBB Anforderungen requirements	Abbruchkriterien break-off criteria	Ergebnisse results	Abbruchkriterien break-off criteria	Ergebnisse results	AgBB Anforderungen requirements
	µg/m ³	mg/m ³	mg/m ³	µg/m ³	mg/m ³	µg/m ³	mg/m ³
[A] TVOC (C₆ - C₁₆)	86	0 ≤ 10 mg/m ³	0,1 ≤ 0,3 mg/m ³	0	0,0 ≤ 0,5 mg/m ³	33	0,0 ≤ 1,0 mg/m ³
[B] Σ SVOC (C₁₆ - C₂₂)	0	keine none	0,00 ≤ 0,03 mg/m ³	0	0,00 ≤ 0,05 mg/m ³	0	0,0 ≤ 0,1 mg/m ³
[C] R (dimensionlos/dimensionless)	1,009	keine none	1,0 !! ≤ 0,5	0,000	0,0 ≤ 0,5	0,012	0 ≤ 1
[D] Σ VOC o. NIK without LCI	52	keine none	0,05 ≤ 0,05 mg/m ³	0	0,00 ≤ 0,05 mg/m ³	22	0,0 ≤ 0,1 mg/m ³
[E] Σ Cancerogene	0	0,00 ≤ 0,01 mg/m ³	0,000 ≤ 0,001 mg/m ³	0	0,000 ≤ 0,001 mg/m ³	0	0,000 ≤ 0,001 mg/m ³
Dieser Block liefert zusätzliche Information This part gives some additional information							
[F] VVOC (< C₆)	0			0		0	
[G] VOC (C₆ - C₁₆) als Toluoläquivalent as toluene equivalent	80	← Wert manuell eingeben! Enter value manually!		← Wert manuell eingeben! Enter value manually!		27	← Wert manuell eingeben! Enter value manually!
[H] Formaldehyd Formaldehyde	n.n.	keine none	≤ 0,060 mg/m ³	n.n.	≤ 0,060 mg/m ³	15	0,015 ≤ 0,120 mg/m ³

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5.2 Description of the applied test method

5.2.1 Test Chamber

The test chamber is made of stainless steel. A multi-step air clean-up is performed before loading the chamber, and a blank check of the empty chamber is performed. The operation parameters are 23 °C, 50 % relative air humidity in the supply air.

5.2.2 Sampling, Desorption, Analysis

Testing for Carcinogens

The presence of carcinogens (EU Categories C1 and C2, as per the latest publication on the homepage of German BGIA Institute) was tested by drawing sample air from the chamber outlet through 2 Tenax TA tubes (main tube and backup tube). Analysis was performed by thermal desorption (Perkin Elmer) and gas chromatography / mass spectroscopy (30 m column, 0.25 mm ID, 0.25 µm HP-1 film, Agilent) (internal methods no.: 9812 / 2808). The absence of a listed carcinogen was stated if the specific combination of fragment ions was absent at the specific retention time in the chromatogram. If no listed carcinogens were found but the required detection limit was exceeded, the identity was checked by comparing full scan sample mass spectra with full scan standard mass spectra.

This test covered only substances that can be adsorbed on to Tenax TA and that can be thermally desorbed. If other emissions occurred, then these substances cannot be detected (or with limited reliability only).

VOC Emissions Testing

The emissions of organic compounds were tested by drawing sample air from the chamber outlet through 2 Tenax TA tubes (main tube and backup tube). Analysis was performed by thermal desorption (Perkin Elmer) and gas chromatography / mass spectroscopy (30 m column, 0.25 mm ID, 0.25 µm HP-1 film, Agilent) (internal methods no.: 9812 / 2808).

All single substances that are listed with a NIK value in the latest AgBB publication were identified. Quantification was done with the respective response factor and the TIC signal or in case of overlapping peaks by calculating with fragment ions. All other single substances, as well as all non-identified substances, were quantified as toluene equivalent.

The results of the individual substances were calculated in three groups depending on their appearance in a gas chromatogram when analysing with a non-polar column (HP-1):

- Volatile organic compounds VOC: All substances appearing between these limits.
- Semi-volatile organic compounds SVOC: All substances appearing after n-hexadecane (n-C16).
- Very volatile organic compounds VVOC: All substances appearing before n-hexane (n-C6).

Calculation of the TVOC (Total Volatile Organic Compounds) was performed according to the AgBB/DIBt test method, by addition of the results of all individual substances with concentrations $\geq 5 \mu\text{g}/\text{m}^3$ in the retention time interval C6-C16. Furthermore the TVOC was calculated as the toluene equivalent, as defined in ISO 16000-6.

Calculation of the TSVOC (Total Semi-Volatile Organic Compounds) was performed by addition of the results of all substances with concentrations $\geq 5 \mu\text{g}/\text{m}^3$ between C16 and C22 as toluene equivalent, as defined in ISO 16000-6.

Calculation of the TVVOC (Total Very Volatile Organic Compounds) was performed by addition of the results of all substances with concentrations $\geq 5 \mu\text{g}/\text{m}^3$ appearing before C6 as toluene equivalent, as defined in ISO 16000-6.

This test covered only substances that can be adsorbed on Tenax TA and that can be thermally desorbed. If other emissions occurred then these substances cannot be detected (or with limited reliability only).

5.2.3 Calculation of R Values with the German NIK List

The concentrations of all substances $\geq 5 \mu\text{g}/\text{m}^3$ in the interval between n-C6 and n-C16 were divided by their respective NIK value (if given). The sum of the quotients gives the R value:

$$R = \sum_{i=1}^n \left(\frac{c_i}{\text{NIK}_i} + \dots + \frac{c_n}{\text{NIK}_n} \right)$$

In addition, all results were summed up for the substances without published NIK value, but in the interval between n-C6 and n-C16, when concentrations were $\geq 5 \mu\text{g}/\text{m}^3$

5.2.4 Testing of Aldehydes after 28 Days

The presence of aldehydes was tested by drawing air samples from the chamber outlet through DNPH-coated silicagel tubes. Analysis was done by solvent desorption, HPLC and UV-/diode array detection (ISO 16000-3, internal methods no.: 9812 / 8400).

The absence of formaldehyde was stated if the specific wavelength UV detector response was lacking at the specific retention time in the chromatogram. Otherwise it was checked whether the detection limit was exceeded. In this case the identity was finally checked by comparing full scan sample UV spectra with full scan standard UV spectra.

5.2.5 Quality assurance

Before loading the chamber a blank check of the empty chamber was performed and compliance with background concentrations in accordance with ISO 16000-9 was determined. Sampling at the chamber outlet and subsequent analysis was performed in duplicate. For monitoring any breakthrough or overloading of the tubes, two Tenax TA tubes were used in series.

In each sequence stability of GC system was checked by a general function test of device and column, and by use of control charts for monitoring mean values and standard deviations for individual VOCs. Reproducibility of the method was monitored for two selected VOCs per sequence.

5.2.6 Accreditation

The testing methods described above are accredited to EN ISO/IEC 17025:2005 by DANAK (no. 522). Not all parameters are covered by this accreditation. At present the accreditation does not cover the parameters marked with a note *, however analysis was performed for these parameters at the same level of quality as for the accredited parameters.

5.2.7 Uncertainty of the test method

The relative standard deviation of the test method amounts to 22% (RSD). The expanded uncertainty U_m is 45% and equals 2 x RSD%. For further information please visit www.eurofins.dk/uncertainty.