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Bru/50  
Dresden, 16 December 2020

**Test Report no.  
2520582**

**Client:** Egger Kunststoffe GmbH & Co.KG  
Im Weilandmoor 2  
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Germany

**Date of order:** 26 November 2020

**Order:** Testing of 3 variants laminates regarding:  
○ formaldehyde release following test chamber method DIN EN 717-1

**Contractor:** Entwicklungs- und Prüflabor Holztechnologie GmbH (EPH)  
Laboratory Chemical Testing  
Zellescher Weg 24  
01217 Dresden

**Engineer in charge:** Dipl.-Ing. (FH) S. Hahn



Dipl.-Ing. Martina Broege  
Head of Laboratory Chemical Testing

The test report contains 3 pages. Any duplication, even in part, requires written permission of EPH. These test results are exclusively related to the tested material.

## 1 Assignment

The laboratory chemical testing of the EPH was instructed to determine the formaldehyde release of 3 variants laminates following test chamber method DIN EN 717-1.

## 2 Sample material

Sample delivery EPH: 2020-11-26, airtight wrapped

Sample	Description	Sample Size LWT [mm <sup>3</sup> ]	Number sample pieces
1	EGGER Laminate U963 ST9 t = 0.8 mm	500 x 500 x 0.8	4
2	EGGER Laminate Micro W980 SM	500 x 500 x 0.8	4
3	EGGER Laminate Flamex W1100 ST9 t = 0.8 mm	500 x 500 x 0.8	4

The test material was used up respectively is stored for 3 months.

## 3 Test chamber method DIN EN 717-1

The determination of the formaldehyde release was carried out following the chamber method DIN EN 717-1:2005 (Testing "back to back") under following test conditions:

Sample 1		Sample 3	
Test pieces (TP):	4 TP à 200 x 280 [mm]	Test pieces (TP):	4 TP à 200 x 280 [mm]
Test chamber:	KT-44 (0.225 m <sup>3</sup> )	Test chamber:	KT-46 (0.225 m <sup>3</sup> )
Test period:	2020-11-30 - 2020-12-04	Test period:	2020-11-30 - 2020-12-04
Start tests:	2020-12-01	Start tests:	01.12.2020
Sample 2			
Test pieces (TP):	4 TP à 200 x 280 [mm]		
Test chamber:	KT-45 (0.225 m <sup>3</sup> )		
Test period:	2020-11-30 - 2020-12-04		
Start tests:	2020-12-01		
Temperature (T):	23°C ± 0.5 K	Loading ratio:	1.0 ± 0.02 m <sup>2</sup> /m <sup>3</sup>
Rel. air humidity (RH):	45 ± 3 %	Parameter recording:	T; RH
Air exchange ratio:	1.0 ± 0,05/ h	Edge sealing:	Full

Limit of Detection (LOD) of test method: 0.008 ppm HCHO

#### 4 Test results test chamber method DIN EN 717-1 and Evaluation<sup>1</sup>

Sample	Formaldehyde release DIN EN 717-1			*	Evaluation acc. to German Prohibition of Chemical Ordinance <sup>2</sup> Quality fulfilled	
	Unit	Measured value	Measured value multiplied with factor 2		Yes	No
1	ppm	< LOD	< LOD	I (96 h)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	$\mu\text{g} / \text{m}^3$	< LOD	< LOD			
2	ppm	< LOD	< LOD	I (96 h)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	$\mu\text{g} / \text{m}^3$	< LOD	< LOD			
3	ppm	< LOD	< LOD	I (216 h)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	$\mu\text{g} / \text{m}^3$	< LOD	< LOD			

- \* Cancellation criteria  
DIN EN 717-1:
- I lower detection limit over a testing time of 4 days
  - II linear regression function from the test results of 4 consecutive days does not increase by more than  $2 \mu\text{g}/\text{m}^3$
  - III the decline of the calculated concentration curve is equal or lower than 5% over the testing time of 4 days (within 28 days)
  - IV completely regression curve (max. 28 days)

  
Dipl.-Ing. (FH) S. Hahn  
Engineer in charge

<sup>1</sup>Statements on conformity assessment/classification were made on the basis of the measurement results obtained. Measurement uncertainties are not included in the assessment (ILAC G8 03/2009 " Guidelines on the Reporting of Compliance with Specification" Section 2.7).

<sup>2</sup> German Chemical Prohibition Ordinance appendix 1 of §3 dated 2017-01-20 in connection with „Bekanntmachung analytischer Verfahren für Probenahmen und Untersuchungen für die in Anlage 1 der Chemikalien-Verbotsverordnung genannten Stoffe und Stoffgruppen vom 5. November 2018“ published on 26 November 2018, BAnz AT 26.11.2018 B2  
- Formaldehyde limit value acc. to German Prohibition of Chemical Ordinance 0.1 ppm ( $124 \mu\text{g}/\text{m}^3$ )  
- Test results according to DIN EN 717-1 are multiplied by the factor 2  
- according to UBA correspond to 0,1 ppm  $\hat{=}$   $124 \mu\text{g}/\text{m}^3$ ; <https://www.umweltbundesamt.de/themen/wirtschaft-konsum/produkte/bauprodukte/studien-zur-messung-bewertung-von-schadstoffen/formaldehydmissionen-pruefbedingungen-fuer>, Status 2019-06-12