

Entwicklungs- und Prueflabor Holztechnologie GmbH · Zellescher Weg 24 · 01217 Dresden · Germany

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> Dresden, 28/11/2019 MPET

Test Report Order No. 2708003/160

Client:

Date of order:

28/10/2019

Order:

Testing of a Wood veneer floor covering

according to EN 14342:2013 for CE-labelling

Contractor:

EPH - Laboratory Surface Testing

Engineer in charge:

Dipl.-Ing. (FH) M. Peter

Dr.-Ing. Rico Emmler

Head of Laboratory Surface 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 Task

The Notified Body (No. 0766) Entwicklungs- und Prüflabor Holztechnologie GmbH (EPH) was instructed by to carry out selected tests of a Wood veneer floor covering according to EN 14342:2013 for CE-labelling.

2 Test material

For testing, the following Wood veneer floor covering was selected by the client and sent to the contractor with receipt at EPH laboratory on:

28/10/2019.

Engineered wood flooring (Product name according to client's specifications)

UV lacquer

Top layer:

Oak 1.2 mm

Core layer:

Eucalyptus 13.5 mm

Back layer:

Beech 0.5 mm

Thickness:

15 mm

Furthermore a manufacture information report with an overview about the collection was sent.

3 Test performance

3.1 Determination of the formaldehyde emission according to the test chamber method DIN EN 717-1:2005

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

Test pieces

4 test pieces à 200 x 280 mm

Temperature:

23°C ± 0,5 K

Test chamber:

 $KT 60 (0.225 \text{ m}^3)$

Rel. air humidity:

45 ± 3 %

Test period:

11/11/2019 - 22/11/2019

Air exchange ratio:

 $1.0 \pm 0.05/h$

Start tests:

12/11/2019

Loading ratio:

 $1.0 \pm 0.02 \text{ m}^2/\text{m}^3$

Edge sealing:

Full

Parameter recording:

Temperature;

air humidity

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

 $0.02 ppm HCHO (1 ppm = 1.24 mg/m^3)$

3.2 Determination of the PCP content according to CEN/TR 14823:2004

The determination of the chloro-organic pesticide PCP was conducted in compliance with CEN TR 14823:2004 and the IHD-standard IHD-W-409 (2017-04) after derivatisation with acetic anhydride with a gas chromatograph using ECD-detection (GC-ECD). External calibration was performed with commercial calibration standards.

The test results are average values of a double determination related to dry mass, measured following ISO 16979:2003.

Limit of quantitation (LOQ) for 2 g of sample:

0.05 mg/kg

Performance of the test:

13/11/2019.

4 Results

4.1 Formaldehyde emission according to EN 717-1:2005 (the test chamber method)

Formaldehyde emission in				
mg/m³	ppm			
< LOD (264 h)*	< LOD (264 h)*			

^{*}Abort criterion following DIN EN 717-1:2005: lower detection limit over a testing time of 4 days LOD = Limit of Detection

Additional Information - Test results DIN EN 717-1 and evaluation regarding German Prohibition of Chemical Ordinance (ChemVerbotsV)

Formaldehyde emission in		Quality fulfilled ¹				
ppm	μg/m³ (μg/m³ (multiplied by factor 2)	up to 2019-12-31		from 2020-01-01	
			Yes	No	Yes	No
0.02 (264 h)*	23 (264 h)*	46 (264 h)*	Х		Х	-

^{*}Abort criterion following DIN EN 717-1:2005: lower detection limit over a testing time of 4 days

Valuation basis Formaldehyde:

¹ Limit value for formaldehyde class E1 according to EN 14342: 0.124 mg/m³

² German Chemical Prohibition Ordinance §1 (3) dated 2017-01-20 in connection with "Bekanntmachung analytischer Verfahren" published on 26 November 2018, BAnz AT 26.11.2018 B2

⁻ Test results according to DIN EN 717-1 are multiplied by the factor 2; formaldehyde guideline value for test chamber method DIN EN 717-1(01/2005) 0.05 ppm (62 $\mu g/m^3$);

⁻ according to UBA correspond to 0,1 ppm \triangleq 124 µg/m³; https://www.umweltbundesamt.de/themen/wirtschaft-konsum/produkte/bauprodukte/studien-zur-messung-bewertung-von-schadstoffen/formaldehydemissionen-pruefbedingungenfuer, Status 2019-06-12

^{*}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).

4.2 PCP content according to CEN/TR 14823:2004

PCP content in mg/kg		
	< LOQ	

LOQ = Limit of quantitation

5 Evaluation

The tested variant of Wood veneer floor covering can be classified regarding to both properties according to EN 14342:2013 for the CE-labelling as follows:

Property	Results	Declaration* according to EN 14342:2013	
Formaldehyde emission according to EN 717-1:2005	< LOD (264 h)	class E1	
Content of PCP according to CEN/TR 14823:2004	< LOQ	PCP ≤ 5 x 10 ⁻⁶ⁿ	

^{*} Statements on conformity assessment/classification are 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).

LOD = Limit of Detection

LOQ = Limit of quantitation

Dipl.-ing. (FH) M. Peter Engineer in charge