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

Dresden, 24/05/2023
MPET

Test Report
Order No. 2708003/2[redacted]

Client: [redacted]

Order: Testing of an Engineered Wood Flooring according to EN 14342:2013 for CE-labelling

Contractor: EPH - Laboratory Unit Surface Testing

Engineer in charge: Dipl.-Ing. (FH) M. Peter

Dipl.-Ing. Andreas Möschner
Head of Laboratory Unit Surface Testing

The test report contains 4 pages. Any duplication of extracts requires the written permission of EPH. The test results refer exclusively to the material tested.

1 Task

The accredited Entwicklungs- und Prueflabor Holztechnologie GmbH (EPH) was instructed by Tongxiang Shenggong Timber Industry Co., Ltd. in Zhejiang / CHINA to carry out selected tests of an Engineered Wood Flooring according to EN 14342:2013 for CE-labelling.

NOTE: All numerical values within this document are given with a comma as decimal.

2 Test material

The following Engineered Wood Flooring was selected for testing by the client and sent to the contractor with receipt at EPH laboratory on: 20/04/2023.

Engineered Wood flooring	
Surface treatment :	UV-lacquered
Top layer:	European Oak 4 mm
Core layer:	Eucalyptus 14,8 mm
Back layer:	Eucalyptus 1,2 mm
Total thickness:	20 mm

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

3 Test performance

3.1 Determination of the formaldehyde emission according to the test chamber method EN 717-1:2004-10

The determination of the formaldehyde release was carried out by the test chamber method according to EN 717-1:2004-10 (Testing "back to back") under the following test conditions:

Test pieces:	4 test pieces à 200 mm x 280 mm	Temperature:	23 °C ± 0,5 K
Test chamber:	KT-61 (0,225 m^3)	Rel. air humidity:	(45 ± 3) %
Test period:	08/05/2023 - 12/05/2023	Air exchange ratio:	(1,0 ± 0,05) h^{-1}
Start test:	09/05/2023	Loading ratio:	(1,0 ± 0,02) m^2/m^3
Edge sealing:	Full	Parameter recording:	Temperature; Air humidity

Limit of Detection (LOD) of test method: *0,008 ppm HCHO*
Limit of Quantitation (LOQ) of test method: *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 16979:2003-05.

Limit of Quantitation (LOQ) for 2 g of sample: 0,05 mg/kg

Performance of the test: 09/05/2023

4 Results

4.1 Formaldehyde emission according to EN 717-1:2004-10 (the test chamber method)

Formaldehyde emission in	
mg/m³	ppm
< LOD (96 h)*	< LOD (96 h)*

*Abort criterion following EN 717-1:2004-10: lower detection limit over a testing time of 4 days
LOD = Limit of Detection

Additional Information - Test results EN 717-1:2004-10 and evaluation regarding German Prohibition of Chemical Ordinance (ChemVerbotsV)

Formaldehyde emission in			Requirements fulfilled[1,2,**]	
ppm	µg/m³	µg/m³ (multiplied by factor 2)	Yes	No
< LOD (96 h)*	< LOD (96 h)*	< LOD (96 h)*	X	

* Abort criterion following EN 717-1:2004-10: lower detection limit over a testing time of 4 days
LOD = Limit of Detection

Valuation basis Formaldehyde:
[1] Limit value for formaldehyde class E1 according to EN 14342:2013: 0,124 mg/m³
[2] German Chemical Prohibition Ordinance §1 (3) dated 20/01/2017 in connection with *"Bekanntmachung analytischer Verfahren"* published on 26/11/2018, BAnz AT 26/11/2018 B2 - Test results according to EN 717-1:2004-10 are multiplied by the factor 2; formaldehyde guideline value for test chamber method EN 717-1:2004-10 - 0,05 ppm (62 µg/m³); - according to UBA correspond to 0,1 ppm ≙ 124 µg/m³; https://www.umweltbundesamt.de/themen/wirtschaft-konsum/produkte/bauprodukte/studien-zur-messung-bewertung-von-schadstoffen/formaldehydemissionen-pruefbedingungen-fuer, Status 12/06/2019
**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
3,8

LOQ = Limit of Quantitation

5 Evaluation

The tested variant of Engineered Wood Flooring can be classified regarding to the 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 717-1:2004-10	< LOD (96 h)	class E1
Content of PCP according to CEN/TR 14823:2004	3,8 mg/kg	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

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