

Pfleiderer Neumarkt GmbH
Werk 3
Dreichlinger Straße 76
92318 Neumarkt
Germany

Fraunhofer Institute for Wood Research
Wilhelm-Klauditz-Institut WKI

Director
Prof. Dr.-Ing. Bohumil Kasal

Head of the Testing, Supervision and
Certifying Body
Dipl.-Ing. Harald Schwab

Bienroder Weg 54 E
38108 Braunschweig | Germany

Bettina Meyer
Project manager formaldehyde analytics
Quality Assessment
Phone +49 (0) 531 2155 375 | Fax +49 (0) 531 2155 907
bettina.meyer@wki.fraunhofer.de
www.wki.fraunhofer.de

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Braunschweig,
25 July 2013

Test Report No. QA - 2013 - 1548

Client:
Pfleiderer Neumarkt GmbH
Werk 3
Dreichlinger Straße 76
92318 Neumarkt
Germany

Objective of the test:
Supervision of uncoated wood based materials according to the Final Regulation Order of "Airborne Toxic Control Measure to Reduce Formaldehyde Emission from Composite Wood Products", 93120-93120.12, title 17, California Code of Regulations, § 93120 - Quarterly perforator test – 2 / 2013

Product name: wodego - P2-EPF-S

WKI-Identity-Number: 4461N

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The test report comprises 3 pages and 1 table.

This test report is not permitted to be published incompletely. A publication in extracts is in any case subject to the previous consent of Fraunhofer-Institut für Holzforschung, Wilhelm-Klauditz-Institut (WKI), Bienroder Weg 54E in 38108 Braunschweig (Germany). The test results exclusively refer to the objects of the test. The test material was used up.



CARB notified TPC 4

Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V., München
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1. Task

Messrs. Pfeleiderer Neumarkt GmbH in 92318 Neumarkt (Germany) assigned WKI to determine by measurements the formaldehyde emission potential of wood based panels according to the requirements published by CARB referring to the Final Regulation Order of "Airborne Toxic Control Measure to Reduce Formaldehyde Emission from Composite Wood Products", 93120-93120.12, title 17, California Code of Regulations, § 93120.

A supervision contract with No. 683 dated 16 August 2010 was signed by the customer.

According to § 93120, Appendix 2 (f)(3)(A) the quarterly chamber test has to be carried out for uncoated wood based panels by using the primary or secondary test method for each production line of each plant - see test report No. QA-2013-1547 dated 25 July 2013.

Additionally the determination of formaldehyde content was carried out according to perforator method EN 120:1992-08 used as factory quality control test method.

A correlation has been established between the quality control test method and the primary, secondary, or alternate secondary test method. The correlation was based on a minimum sample size of five data pairs (Appendix 2 (f)(2)) – see test report No. QA-2011-1815 dated 18 August 2011.

2. Test material and data of receipt

Product:	particleboard,unfaced
Product name:	wodego - P2-EPF-S
Technical class:	EN 312, P2; CARB Phase 2
Plant:	Pfleiderer Neumarkt GmbH in 92318 Neumarkt, Germany
Thickness (mm):	17
Thickness range (mm):	15 ≤ 50
WKI-Identity-Number:	4461N
Production date:	25 June 2013

The sample material was selected by the customer corresponding to WKI's guidelines, marked and sent to the WKI for examination.

The samples arrived at WKI packed separately in polyethylene plastic foil and stored under room conditions. Table 1 shows the data of receipt and test. The test material was used up.

3. Execution of the test

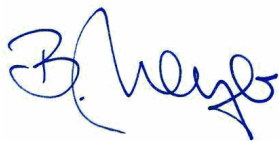
The determination of formaldehyde content was carried out according to the perforator method DIN EN 120:1992-08. Moisture content was determined according to DIN EN 322:1993-08. The determination of formaldehyde content was carried out for samples without a prior conditioning.

4. Test results

In the table enclosed to the test report the data of receipt are mentioned and the formaldehyde content value of the tested samples is specified as a mean value from repeated determinations representing the average value of three boards.

You also find the perforator values calculated at a moisture content of 6.5 %.

A supervision contract exists.



Bettina Meyer
Official in charge



Dipl.-Ing. Harald Schwab
Head of Testing, Supervision and
Certifying Body

Table 1: Test material, data of receipt, test results
- Quarterly perforator test -

Product: particleboard, unfaced
 Product name: wodego - P2-EPF-S
 Technical class: EN 312, P2; CARB Phase 2
 Plant: Pfeleiderer Neumarkt GmbH
 in 92318 Neumarkt, Germany
 Thickness (mm): 17
 WKI-Identity-Number: 4461N
 Production date: 25 June 2013
 Audit date: 21 May 2013

Test material, data of receipt and test			
Sample-ID	Number of boards	Data of receipt	Test date
			Perforator method EN 120:1992-08
4461N	3	5 July 2013	10 July 2013, 15 July 2013

Test results formaldehyde content according to perforator method EN 120					
Sample-ID	Thickness [mm]	Density* [kg/m ³]	Moisture content* [%]	Formaldehyde content* determined [mg HCHO /100 g oven-dry board]	Formaldehyde content* converted to 6.5% MC [mg HCHO /100 g oven-dry board]
4461N	17	654	4.2	2.4	3.1

* average value of 3 boards