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Pfleiderer Holzwerkstoffe GmbH  
Ingolstädter Straße 51  
92318 Neumarkt  
Germany

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Our reference  
Mey

Braunschweig, 26 May 2014

**Test report No. QA-2014-1128**

**Customer:**

Pfleiderer Holzwerkstoffe GmbH  
Ingolstädter Straße 51  
92318 Neumarkt  
Germany

**Receipt of sample:**

14 May 2014

**WKI-ID-No.:**

333/14

**Start of JIS desiccator test:**

22 May 2014

**Objective of the test:**

Determination of the formaldehyde release according to JIS A 1460:2001

**Content of the test report:**

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This 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 Braunschweig (Germany).

The test results exclusively refer to the objects of the test. The test material was used up.



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## **1. Task and test material**

The Fraunhofer-Institut für Holzforschung, Wilhelm-Klauditz-Institut (WKI), was entrusted by Messrs. Pfeleiderer Holzwerkstoffe GmbH in 92318 Neumarkt (Germany) with the determination of the formaldehyde release according to the Japanese standard JIS A 1460:2001, description of sample(s) see table(s) enclosed.

The test material was selected, marked by the client and delivered to the WKI for examination.

The test material arrived at WKI packed in polyethylene foil on 14 May 2014, was marked with WKI-ID-No. "333/14" and stored under room conditions (at 23°C / 50 % relative humidity). It was unpacked and cut off on 15 May 2014 and conditioned for seven days at a temperature of 20°C and a relative humidity of 65%. The JIS desiccator test started on 22 May 2014.

## **2. Execution of the test**

The determination of the formaldehyde release was carried out according to the Japanese test method called JIS A 1460:2001.

The sample was cut off into 8 pieces each with the dimension of 150 mm x 50 mm x thickness. They were placed on a grid made out of stainless steel by using metallic holders in a circle above a glass dish containing 300 ml distilled water.

This arrangement was kept for 24 hours at a temperature of 20°C in a desiccator (according to JIS R 3503; inner volume: 11 l). The formaldehyde content of the distilled water (having absorbed formaldehyde evaporated from the specimens) was determined by using the acetylaceton method. The tests were carried out after a prior conditioning of the samples for seven days at a temperature of 20°C and a relative humidity of 65%.

In Germany it is not allowed to use this Japanese test method for the classification of wood based panels according to the German Prohibition Regulation for Chemical Products - "Chemikalien-Verbotsverordnung".

### 3. Test results

The table enclosed to the test report shows the formaldehyde values of the tested sample(s). They are specified as individual values and as a mean value of a repeated determination as well.

Following limit values regarding formaldehyde release are fixed for uncoated and coated particleboards (JIS A 5908:2003) or MDF (JIS A 5905:2003) determined by using the desiccator method JIS A 1460:

formaldehyde grade	average value [mg HCHO/L]	single value [mg HCHO/L]
F☆☆☆☆	mean 0.3 or under	maximum 0.4 or under
F☆☆☆	mean 0.5 or under	maximum 0.7 or under
F☆☆	mean 1.5 or under	maximum 2.1 or under

We draw your attention to the fact that the effected test was made as a material parameter and not as a classifying test.



Bettina Meyer  
Official in charge



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

Table: Determination of formaldehyde release according to the Japanese standard JIS A 1460:2001 of a sample ordered by Messrs. Pfeleiderer Holzwerkstoffe GmbH in 92318 Neumarkt (Germany)

Date of receipt: 14 May 2014  
 Start of conditioning period: 15 May 2014  
 Conditioning period: 7 days  
 Start of JIS desiccator test: 22 May 2014

WKI-ID-No.	Specimen	Thickness mm	Number of test pieces	Formaldehyde release mg / Liter *	
				individual values	average value
333/14	<p><b>"DecoBoard P2 F****</b>                      Production date: 5.5.2014                      Type of board: P2 F****"</p> <p>- particleboard, faced on both sides</p>	18.8	8	0.22 0.20	0.2
	Blank value	-	-	0.02	-

\* Determination was carried out after a prior conditioning of the samples for seven days at a temperature of 20°C and a relative humidity of 65%