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Mey/Pr

Braunschweig,
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Test Report No. QA-2013-2414

Client: Kronospan Schweiz AG
Willisauerstr. 37
6122 Menznau
Switzerland

Method and object of the test: External supervision of wood based materials regarding formaldehyde content

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The test report comprises 3 pages and 1 appendix.

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



1. Task

External supervision of wood based materials according to the "Regulation on the classification and external supervision of wood-based panels regarding formaldehyde emission (DIBt-Richtlinie 100)" version June 1994 resp. to the "Regulation on the Prohibition of Chemicals [Chemikalien-Verbotsverordnung (ChemVerbotsV)]" using the perforator method.

The supervision is done according to the contract 116 dated 7 December 1987 between the client and the WKI; corresponding to this contract the attestation no. 116 is valid for the supervision period mentioned.

2. Material

Type of wood-based panels:	particleboard, unfaced
Technical type:	DIBt 100, E1
Plant category:	SwissSpan E1
Thickness [mm]:	18
Thickness range [mm]*:	≤ 60
Identity No.:	9421

*Reference note:

According to the DIBt-Richtlinie 100 the manufacturer is allowed to differentiate between the following thickness ranges in order to enable him to restrict test and evaluation criteria: up to 12 mm, more than 12 mm up to 25 mm, more than 25 mm up to 40 mm, more than 40 mm up to 60 mm, more than 60 mm.

The boards were sampled on 9 September 2013 by a WKI's representative. Referring to the information given by the customer the samples were produced on 22 August 2013. The sampling was carried out in accordance with the DIBt-Guideline 100. The tests were carried out on 18 November 2013, 19 November 2013, 20 November 2013. The test material was used up.

3. Test methods

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

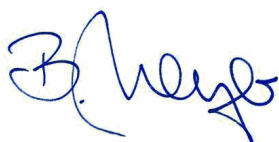
4. Test results

The test results are made up in the following table. The perforator values are mean values of a double testing. Non of the three mean values of the boards may exceed the limit value of 8.0 mg HCHO/100 g dry board by more than 10 %. (General limit values see appendix)

Identity No.	Thickness [mm]	Density [kg/m ³]	Moisture content [%]	Perforator value [mg HCHO/100 g dry board]	
				A	B
9421/1	18	643	5.4	3.7	4.2
9421/2	18	639	5.3	3.4	3.9
9421/3	18	653	5.0	3.3	3.9
\bar{x}		645	5.2	3.5	4.0

A = determined perforator value

B = perforator value converted to 6,5 % moisture content



Bettina Meyer
 Official in charge




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

Appendix (Assessment criterias)

According to the German Prohibition for Chemical Products – “Chemikalien Verbotverordnung” – annex § 1, para 3, in relation with the publication of the Federal Health Office in the journal “Bundesgesundheitsblatt”, issue October 1991 (p. 487 – 489) and the “Regulation on the classification and external supervision of wood-based panels regarding formaldehyde emission (DIBt-Richtlinie 100)” version June 1994 the limit values are as follows:

	Perforator value ^{*)} [mg HCHO/100 g dry board]	
	average value	single value
uncoated particleboard	6,5	8,0
uncoated fibreboard	7,0	8,0

^{*)}the average value is defined as rolling half year value, the single value is defined as 95% percentil

The values are valid after a conversion to a material humidity of 6,5 %.

Uncoated boards with perforator values > 8 and < 10 mg HCHO/100 g dry board may only be put in circulation with special labeling.