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Werzalit Lemn Tech S.C.S.
Drumul Olosagului nr. 16
Romania

Your reference

Your message dated

Our reference
Mey/Pr

Test Report No. QA-2015-2522

Client: Werzalit Lemn Tech S.C.S.
Drumul Olosagului nr. 16
305500 Lugoj
Romania

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

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The test report comprises 3 pages and 1 appendix.

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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 gas analyse method.

The supervision is done according to the contract 0392 dated 27 October 2003 between the client and the WKI; corresponding to this contract the attestation no. 392 is valid for the supervision period mentioned.

2. Material

Type of wood-based panels:	sprung slats, unfaced
Technical type:	DIBt 100, E1
Plant category:	sprung slats (Lugoj)
Thickness [mm]:	8
Thickness range [mm]*:	≤ 25
Identity No.:	3316

*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 20 July 2015 by a WKI's representative. Referring to the information given by the customer the samples were produced on 20 July 2015. The sampling was carried out in accordance with the DIBt-Richtlinie 100. The tests were carried out on 18 August 2015, 19 August 2015. The test material was used up.

3. Test methods

The determination of release was carried out according to gas analysis method DIN EN 717-2:1995-01. Coated boards were tested without a prior conditioning. Uncoated plywood were tested after a four weeks storage in norm climate DIN 50 014 - 20/65-1. The sample size was 400 mm x 50 mm x thickness. The edges of the test pieces were coated with self-adhesive aluminium tape before testing. Moisture content was determined according to DIN EN 322:1993-08.

4. Test results

The test results are made up in following table. The gas analysis values are mean values of a double testing. The total mean value must be less or equal to the limit value of ≤ 3.5 mg HCHO/(h·m²). Non of the three mean values of the boards may exceed the limit value by more than 10 %. (General limit values see appendix)

Identity-No.	Thickness [mm]	Moisture content [%]	Gas analysis value ^{*)**} [mg HCHO/(h·m ²)]
3316/1	8	8.8	1.1
3316/2	8	9.0	2.0
3316/3	8	9.9	1.6
\bar{x}		9.2	1.6

^{*)} tested with sealed edges without a prior conditioning

Concerning the formaldehyde release the requirements were fulfilled.



Bettina Meyer
Officer 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), the limit value are as follow:

Table 1: Gas analysis values for uncoated plywood

	Gas analysis values ^{*)} [mg HCHO/(h·m ²)]	
	average value	single value
immediately testing (max. 3 days after production)	5.0	6.0
Testing after a four weeks storage in norm climate DIN 50 014 - 20/65-1	2.5	3.5

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

Table 2: Gas analysis values for coated boards. The used uncoated wood based panel (particleboard or MDF) has to fulfil the requirements as well.

	single values [mg HCHO/(h·m ²)]	
	coated boards	PF (of core board)
particleboards	≤ 3.5	≤ 10
fibreboards	≤ 3.5	≤ 10
plywood	≤ 3.5	**

** single values of core board look at table1