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AB 053

Test report

No. DBL-2024-2095-01-BLS

Dated 28.06.2024

	NAME AND SURNAME POSITION	DATE, SIGNATURE
Authorized by	Magdalena Czajka, PhD. Eng. Area Leader - Deputy Head of Environmental Testing Laboratory	28.06.2024

SUBJECT OF THE ORDER

Testing of formaldehyde emission by the chamber method according to EN 717- 1:2006 standard from bent strip for the frame samples produced by SHYK.

ORDER NO.

A/DBL/BLS/2095/2024

NAME AND ADDRESS OF THE CUSTOMER**CUSTOMER**

FUR & B Sp. z o.o.

ul. Al. Jana Pawła II 27, 00-867 Warszawa.

IDENTIFICATION OF THE TEST SAMPLE**TEST SAMPLE**

Name	Bent strip for the frame
Sample No.	-

DELIVERY DATE OF SAMPLE

03.06.2024

PERFORMANCE DATE

11 – 28.06.2024

PLACE OF TESTING

Laboratory headquarters

OPERATORS

Justyna Dolska, M.Sc.Eng.

Beata Wojkiewicz, M.Sc.Eng.

Anna Tymek, M.Sc.Eng.

1. TEST METHODS

Name of the test	Document	Method status (A/NA)*
Wood-based panels – Determination of formaldehyde release – Part 1: Formaldehyde emission by the chamber method	PN-EN 717-1:2006	A

*A – accredited method; NA – non-accredited method

2. EQUIPMENT OF THE TEST STANDS

Name	Type	Producer	ID No.
Glass chamber	0.225 m ³	ITEE Radom	F12/52
Analytical balance	A-5000	AXIS Sp. z o. o.	F1/2
Air pump	ASP 3II	LAT Sp. z o. o. Katowice	F12/53
Spectrophotometer	Aqua Mate Plus UV VIS	Thermo Fisher Scientific USA	F4/47
Water bath	PURA22	JULABO GmbH	F4/34

3. DESCRIPTION OF TEST SAMPLE

The object of the assessment was a sample of straight frame strip. The sample was described by the Customer as:

- Bent strip for the frame;
- Producer: SHYK, Str. Spartaka 15B, 48-201 Husiatyn, Ukraina.

The sample was taken by the customer and delivered to the laboratory of Łukasiewicz Research Network - Poznań Institute Of Technology on 03.06.2024.

4. TEST RESULTS

Type of material/product				Bent strip for the frame		
Test date				11 – 28.06.2024		
Sample identification : DBL-2024-2095-01-BLS				Chamber No. 18 capacity 0.225 m ³		
Time of sample exposure in the chamber [24 h]	Date of the test	Climatic conditions in the chamber		Test number	Chamber concentration of formaldehyde	
		Temperature	Relative humidity		[mg/m ³]	[ppm]
1	11.06.2024	(23±0.5) °C	(45±3)%	1	0.219	0.176
				2	0.223	0.180
2	12.06.2024			1	0.173	0.140
				2	0.179	0.145
3	13.06.2024			1	0.138	0.111
				2	0.138	0.111
4	14.06.2024			1	0.119	0.096
				2	0.118	0.095
7	17.06.2024			1	0.093	0.075
				2	0.094	0.076
8	18.06.2024			1	0.082	0.066
				2	0.077	0.062
9	19.06.2024			1	0.076	0.061
				2	0.077	0.062
10	20.06.2024			1	0.069	0.056
				2	0.068	0.055
11	21.06.2024			1	0.068	0.055
				2	0.068	0.055
14	24.06.2024	1	0.055	0.044		
		2	0.062	0.050		
15	25.06.2024	1	0.057	0.046		
		2	0.058	0.047		
16	26.06.2024	1	0.059	0.048		
		2	0.057	0.046		
17	27.06.2024	1	0.055	0.044		
		2	0.053	0.043		
18	28.06.2024	1	0.053	0.043		
		2	0.053	0.043		
Average equilibrium concentration of formaldehyde in the air of the chamber					0.056	0.045
Confidence interval of the actual formaldehyde concentration with probability of 95%:					(0.056± 0.002) mg/m ³ (0.045 ± 0.001) ppm	

5. ADDITIONAL INFORMATION

1. Test results presented in this Report refer to the tested samples only.
2. In the case of samples taken by the client, the Laboratory is not responsible for the identification and representativeness of the object, method and place of collection.
3. The expanded uncertainty was determined for coverage factor $k = 2$ and 95% confidence level. The measurement uncertainty does not take into account the uncertainty component associated with the sampling.
4. Without written consent of the Laboratory the Report may not be reproduced in any other form than in its entirety.

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