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OŚRODEK BADAWCZO-ROZWOJOWY PRZEMYSŁU PŁYT DREWNOPOCHODNYCH sp. z o.o.

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Research & Development Centre of Wood-Based Panels
Testing Laboratory
Laboratory for Testing Products





TEST REPORT

Subject: Formaldehyde emission

Test method: PN-EN 717-1:2006

Customer:

Kronospan Mielec Sp. z o.o. ul. Wojska Polskiego 3 39-300 Mielec

Basis of testing:

Order no 236041 from 13.09.2019

Date and location of testing:

Laboratorium Badania Wyrobów OBRPPD, 12.09 ÷ 19.09.2019

Tests results presented in Table 1, refer only to the examined samples. The test report cannot be copied in parts but only in entirely. The test material was used up.

1. Information from customer

Type of the board: Postforming, decor D-4299, structure UE

 Thickness:
 38 mm

 Date of production:
 19.08.2019

 Batch no:
 19.08.2019

 Sampling:
 20.08.2019

Material name: PB E-LE + laminate

Producer: Kronospan Mielec Sp. z o.o.

2. Sample identification

nr 19623

3. Sample delivery

Delivered by: courier

Date of sample delivery: 22.08.2019

Service during the period between delivery to the laboratory and the start of the testing:

- samples were kept wrapped in PE foil until the beginning of the test



4. Test method (conditions and analytic method)

The formaldehyde emission testing was performed according to:

- PN-EN 717-1:2006 Wood-based panels – Determination of formaldehyde release – Part 1: Formaldehyde emission by the chamber method.

Testing conditions:

- chamber volume: 0,225 m³;
- temperature: (23 ± 0.5) °C;
- relative humidity: (45 ± 3)%;
- loading ratio: $(1,0 \pm 0,02) \text{ m}^2/\text{m}^3$;
- air exchange rate: $(1,0 \pm 0,05)/h$;
- air velocity at the surface of the specimen: (0,1 to 0,3) m/s
- formaldehyde concentration in make-up air to test chamber: ≤ 0,006 mg_{HCHO}/m³
- ratio of the length of open narrow planes (unsealed) U to surface A is $U/A = 1.5 \text{ m/m}^2$
- formaldehyde concentration was determined photometrically according to the acetylacetone method.

5. Results of measurements

date	exposure time [h]	HCHO concentration in chamber [mg/m³]	date	exposure time [h]	HCHO concentration in chamber [mg/m³]
16.09.2019	65	0,026	18.09.2019	113	0,026
	68	0,025		116	0,026
17.09.2019	89	0,027	19.09.2019	137	0,027
	92	0,028		140	0,027

6. Emission in steady state

Value of emission in steady state: $0,027 \text{ mg/m}^3$ 0,022 ppm(140 h)

7. Conformity to a specification

Specification	German ChemVerbotsV*	IOS-MAT-0181	
Requirement	0,1 ppm	0,05 ppm	
Result	0,044**	0,022	
Evaluation	YES	YES	

- * German Chemical Prohibition Ordinance (ChemVerbotsV) §1(3) dated 2017-01-20 in connection with the Bekanntmachung analytischer Verfahren. published on 26 November 2018, BAnz AT 26.11.2018 B2
 - Formaldehyde limit value according to ChemVerbotsV = 0,1 ppm (≤ 0,124 mg/m³)
 - Starting from 1.1.2020, the chamber method EN 16516 is designated as the reference procedure. Tests in accordance with the chamber method EN 717-1 can still be performed; however, the test results must be multiplied by a factor of 2; formaldehyde guideline value for test chamber method DIN EN 717-1 (01/2005) = 0,05 ppm (\leq 0,062 mg/m³).

** concentration of EN 717-1 test was multiplied by factor 2

Mirosława Mrozek Authorized

OB - RPPD spółka z o.o. Kierownik

Laboratorium Badawczego mgr inż. Mirosława Mrozek

End of the report