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Cologne, 08.11.2022

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**Analysis report 22006348-02-1**

**Sample name:** Paper Composite Sheet, english report to  
sample 22005686

**Reason for replacement:** Designation supplemented  
**Sample number:** 22006348  
**Arrival of sample:** 01.09.2022, 08:30 via courier  
**Number of samples:** 1  
**Sample temperature [°C]:** 20  
**Package:** cardbox  
**Scope of analysis:** chemical analysis  
**Sample description:** Boards  
**Start of analysis:** 05.09.2022  
**End of analysis:** 26.09.2022

**Basis of evaluation:**

- Regulation (EC) No 1935/2004, last amended on June 20, 2019
- German food law, last amended on September 27, 2021
- Commission regulation (EU) No 10/2011, last amended on September 02, 2020



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**Test conditions**

Parameter	Test Conditions	Method
Conditions for migration	Immersion of the test object; simulant A, 10%ethanol and simulant B, 3%acetic acid: 2h, 70°C; simulant D2-replacement 1, 95%ethanol: 4h, 60°C; simulant D2-replacement 2, iso-octane: 30 min 40°C; specific migration formaldehyde: 3%acetic acid, 2h 70°C; specific migration phenol: 10%ethanol, 2h 70°.	DIN EN 1186 (2002)

**Analysis migrat**

Parameter	1st migrat	2nd migrat	3rd migrat	Reference value	Unit	Method
Overall migration 3rd contact 3-fold,simulant A(ethanol 10%)	4,2	2,4	2,4	10	mg/dm <sup>2</sup>	IK6179, ASU 80.30 (DIN EN 1186), Evaporation residue
Overall migration 3rd contact 3-fold, (ethanol 10%)	25	14	14	60	mg/kg	IK6179, ASU 80.30 (DIN EN 1186), Evaporation residue
Overall migration 3rd contact 3-fold, (Acetic acid 3%)	6,8	2,8	2,4	10	mg/dm <sup>2</sup>	IK6179, ASU 80.30 (DIN EN 1186), Evaporation residue
Overall migration 3rd contact 3-fold, (Acetic acid 3%)	41	17	14	60	mg/kg	IK6179, ASU 80.30 (DIN EN 1186), Evaporation residue
Overall migration 3rd contact 3-fold, (ethanol 95%)	3,5	1,2	1,0	10	mg/dm <sup>2</sup>	IK6179, ASU 80.30 (DIN EN 1186), Evaporation residue
Overall migration 3rd contact 3-fold, (ethanol 95%)	21,0	7,2	6,0	60	mg/kg	IK6179, ASU 80.30 (DIN EN 1186), Evaporation residue
Overall migration 3rd contact 3-fold, (Isooctan)	< 0,5	< 0,5	< 0,5	10	mg/dm <sup>2</sup>	IK6179, ASU 80.30 (DIN EN 1186), Evaporation residue
Overall migration 3rd contact 3-fold, (Isooctan)	1,2	< 1,0	< 1,0	60	mg/kg	IK6179, ASU 80.30 (DIN EN 1186), Evaporation residue
Specific migration: Formaldehyde	< 10,0	< 10,0	< 10,0	-	mg/kg	IK6180, DIN EN 13130-23 photometric
Specific migration: Phenol	< 0,5	< 0,5	< 0,5	-	mg/kg	IK6181, DIN EN 13130-23, HPLC

"<": value is equal to the limit of quantification

The analysis results do apply exclusively to the specific samples analyzed.

The methods marked with "+" are accredited test methods. The tests marked with "++" were carried out at the accredited partner site. This report may only be reproduced unchanged and as a whole, not in part or modified.

**Evaluation:**

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**Overall migration**

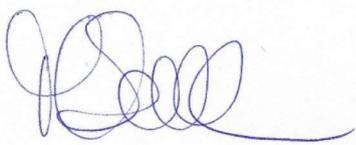
The requirement of Regulation 10/2011 regarding overall migration ( $\leq 10$  mg/dm<sup>2</sup> or for children's articles  $\leq 60$  mg/kg) is met for the simulants used.

**Formaldehyde**

The specifications of Regulation 10/2011 regarding the release of formaldehyde (SML: 15 mg/kg) are fulfilled.

**Phenol**

The requirements of Regulation 10/2011 regarding the release of phenol (SML: 3 mg/kg) are met.

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke at the end.

Minka Schleifenbaum  
Food Chemist

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## Attachment



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