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Aschaffenburg, 14 June 2024

From: Ils-har
Authorized by: Ils

REPORT

Order No.: 17622/9a **Page 1 of 3 pages**

Client: Guangxi Sun Paper Board Co., Ltd.
No. 1, 5th Floor, Tieshan Port Joint Inspection BLDG
Xinggang Town, Tieshan Port, Beihai City
Guangxi Zhuang Autonomous Region
536017
China

Date of order: 28 March 2024

Receipt of sample material: 24 April 2024

Origin of sample material: From the client

Purpose: Analysis of a board grade for various parameters

(Dr. Derra)
Managing Director

(Ils)
Officially certified
food chemist
Project manager

The present report exclusively refers to the samples mentioned. It meets the requirements of the DIN EN ISO/IEC 17025:2018 for simplified test reports. Additional information and statistical data on the results are available upon request.

DAkkS
Deutsche
Akkreditierungsstelle
D-PL-14160-01-01
D-PL-14160-01-02

Sample Material

For analysis the following sample material was in hand:

IPSUN GC BOARD

Carrying out of the Tests

Examination period: 24 April 2024 to 14 June 2024

1. Determination of the Grammage *

The determination was performed according to DIN EN ISO 536:2012-11 after conditioning of the sample at 23 °C/50 % relative humidity which is prescribed as standard atmosphere with a reduced amount of test specimens.

Result:	301	g/m²	≙	280	g dry matter/m²

2. Determination of the Moisture Content *

The determination was performed as single determination according to DIN EN ISO 638-1:2022-07 in the condition as received.

Result:	6.0	%

3. Preparation of Extracts *

The extract was prepared according to the "Methodensammlung zur Untersuchung von Papier, Karton und Pappe für den Lebensmittelkontakt" (collection of methods for the examination of paper and board for food contact) of the BfR as well as according to DIN EN 645:1994-01. The selection of suitable procedures for simulating the transfer of substances was performed according to the corresponding BfR guideline ("Leitfaden zur Überprüfung der Stoffübergänge von Bedarfsgegenständen aus Papier, Karton und Pappe").

Water:	24 hours at 23 °C

4. Determination of Methanal (Formaldehyde) in the Water Extract *

The determination was performed according to DIN EN 1541:2001-07 photometrically in line with the acetylacetone method.

Result:	not quantifiable	<	0.004	mg/g dry matter

5. Determination of the Transfer of Antimicrobial Constituents *

The determination was made according to DIN EN 1104:2019-01. Test specimens of a diameter of 10 mm were placed onto an inoculated nutrient medium and then incubated. The inhibition zone is indicated as total diameter (including the test specimen).

Result:

with *Aspergillus niger*: Microbial growth up to the edges of the test specimens.
Presence of a modification of the test microorganism *A. niger* growth at the edges of the test pieces.

with *Bacillus subtilis*: Microbial growth up to the edges of the test specimens.

Comment:

The proof of the presence of an inhibition zone is provided by the absence of test microorganism growth in a minimum diameter of 14 mm.

Therefore, a transfer of antimicrobial constituents is considered as not detected.

6. Determination of the Heavy Metals in Packagings *

The determination was performed after microwave disintegration by means of AAS or ICP-OES. It applies to those metals which are restricted according to the European Packaging Directive 94/62/EC as well as to the US American CONEG legislation.

Result:

Lead	(Pb):	not quantifiable	<	5	mg/kg dry matter
Cadmium	(Cd):	not quantifiable	<	0.5	mg/kg dry matter
Mercury	(Hg):	not quantifiable	<	0.25	mg/kg dry matter
Chromium	(Cr):			1.2	mg/kg dry matter

Limit value 100 mg/kg (sum of Pb, Cd, Hg and Cr(VI)).

Comment:

Under the disintegration conditions the total content of chromium including chromium(VI) is detected.

17622/9a ≙ preliminary test report; current state of the tests.

The accreditation applies to the methods marked with * in the test report (Register no. D-PL-14160-01-01).

End of report