

Test Report

No. NGBEC1806667003 A01

Date: 10 Jan 2019

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HONGCAI GREEN PACK INTERNATIONAL LTD

360#B3,YOUZHAN, 258# LVDI ROAD, HUAQIAO, KUNSHAN CITY, JIANGSU PROVINCE, CHINA

THIS REPORT IS TO SUPERSEDE TEST REPORT No. NGBEC1806667001 DATE: 2018/12/26

The following sample(s) was/were submitted and identified on behalf of the clients as : CPLA CUTLERY(KNIFE,FORK,SPOON)

SGS Job No. : NP18-004536 - NB
 Model No. : CPLA-07/06
 Date of Sample Received : 19 Dec 2018
 Testing Period : 19 Dec 2018 - 26 Dec 2018
 Test Requested : Selected test(s) as requested by client.
 Test Method : Please refer to next page(s).
 Test Results : Please refer to next page(s).

Result Summary :

Test Requested	Conclusion
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendations-Overall migration	PASS
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments and BfR recommendation-Sensorial examination odour and taste test	PASS
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendations-Specific migration of heavy metal	PASS
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendations-Lead(Pb) and cadmium(Cd)	PASS
German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendations-Polynuclear aromatic hydrocarbons (PAHs)	PASS



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Signed for and on behalf of
SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch



Iris Xiao
Approved Signatory



SGS-CSTC Standards Technical Services Co., Ltd.
Ningbo Branch Chemical Laboratory

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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description	Material (claimed by the client)
SN1	NGB18-066670.001	White plastic	CPLA

Remarks :

- (1) mg/dm² = milligram per square decimeter
- (2) mg/kg = milligram per kilogram
- (3) °C= degree Celsius
- (4) < = less than
- (5) MDL = Method Detection Limit
- (6) ND = Not Detected (< MDL)

German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendations-Overall migration

Test Method : With reference to Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex III and Annex V for selection of condition and EN 1186-1:2002 for selection of test methods;
EN1186-3:2002 aqueous food simulants by total immersion method;
EN 1186-14:2002 substitute test.

<u>Simulant Used</u>	<u>Time</u>	<u>Temperature</u>	<u>Max. Permissible Limit</u>	<u>Result of 001 Overall Migration</u>
10% Ethanol (V/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²
3% Acetic Acid (W/V) Aqueous Solution	2.0hr(s)	70°C	10mg/dm ²	<3.0mg/dm ²
95% Ethanol (V/V) Aqueous Solution (Rectified Olive Oil Substitute)	2.0hr(s)	60°C	10mg/dm ²	<3.0mg/dm ²
Isooctane (Rectified Olive Oil Substitute)	0.5hr(s)	40°C	10mg/dm ²	<3.0mg/dm ²

Notes :

- (1) Analytical tolerance of aqueous simulants is 2 mg/dm²
- (2) Analytical tolerance of fatty food simulants is 3 mg/dm²
- (3) Test condition & simulant were specified by client.
- (4) The migration results are based on the first migration.



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German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments and BfR recommendation-Sensorial examination odour and taste test

Test Method : With reference to DIN 10955:2004
Test media: Deionized water
No. of panelist: 6

<u>Test Item(s)</u>	<u>Limit</u>	<u>001</u>
Test time(hr)	-	2
Temperature(°C)	-	70
Sensorial examination odour (Point scale)	2.5	0
Sensorial examination taste (Point scale)	2.5	0

Notes :

Scale evaluation:

- 0 – no perceptible difference
- 1 – just perceptible difference
- 2 – slight difference
- 3 – marked difference
- 4 – strong difference

German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendations-Specific migration of heavy metal

Test Method : With reference to EN13130-1:2004, analysis was performed by ICP-OES.

Sample 001

Simulant Used : 3% Acetic Acid (W/V) Aqueous Solution
Test Condition : 70 °C 2.0 hr(s)

<u>Test Item(s)</u>	<u>Max. Permissible Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>Test result</u>
Migration times	-	-	-	1st
Area/volume	-	dm ² /kg	-	6.0
Aluminium (Al)	1	mg/kg	0.1	ND
Barium	1	mg/kg	0.25	ND
Cobalt	0.05	mg/kg	0.01	ND
Copper	5	mg/kg	0.25	ND
Iron	48	mg/kg	0.25	ND



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Lithium	0.6	mg/kg	0.5	ND
Manganese	0.6	mg/kg	0.25	ND
Zinc	5	mg/kg	0.5	ND
Nickel	0.02	mg/kg	0.02	ND

Notes :

(1) Test condition & simulant were specified by client.

German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendations-Lead(Pb) and cadmium(Cd)

Test Method : Total lead and cadmium: Acidic digestion, analysis was performed by ICP-OES.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Total Lead	★	mg/kg	2	ND
Total Cadmium	★	mg/kg	2	ND

Notes :

(1) ★= Absent.

German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, European Commission Regulation (EU) No 10/2011 with amendments and BfR recommendations-Polynuclear aromatic hydrocarbons (PAHs)

Test Method : With reference to AfPS GS 2014:01 PAK, analysis was performed by GC-MS.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>
Sum of 18 PAHs	1	mg/kg	-	ND
Sum of Acenaphthylene, Acenaphthene, Fluorene, Phenanthrene, Pyrene, Anthracene, Fluoranthene	1	mg/kg	-	ND
Naphthalene(NAP)	1	mg/kg	0.1	ND
Acenaphthylene(ANY)	-	mg/kg	0.1	ND
Acenaphthene(ANA)	-	mg/kg	0.1	ND
Fluorene(FLU)	-	mg/kg	0.1	ND
Phenanthrene(PHE)	-	mg/kg	0.1	ND
Anthracene(ANT)	-	mg/kg	0.1	ND
Fluoranthene(FLT)	-	mg/kg	0.1	ND
Pyrene(PYR)	-	mg/kg	0.1	ND



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Test Item(s)	Limit	Unit	MDL	001
Benzo(a)anthracene(BaA)	0.2	mg/kg	0.1	ND
Chrysene(CHR)	0.2	mg/kg	0.1	ND
Benzo(k)fluoranthene(BkF)	0.2	mg/kg	0.1	ND
Benzo(a)pyrene(BaP)	0.2	mg/kg	0.1	ND
Benzo(e)pyrene(BeP)	0.2	mg/kg	0.1	ND
Indeno(1,2,3-c,d)pyrene(IPY)	0.2	mg/kg	0.1	ND
Dibenzo(a,h)anthracene(DBA)	0.2	mg/kg	0.1	ND
Benzo(g,h,i)perylene(BPE)	0.2	mg/kg	0.1	ND
Benzo(b)fluoranthene(BbF)	0.2	mg/kg	0.1	ND
Benzo(j)fluoranthene(BjF)	0.2	mg/kg	0.1	ND

Sample photo:



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