



**Test Report**

Number: SHAH00398460

Applicant: NEOFLAM INC.  
#887-6,HWAGOK-DONG,GANGSEO-GU,SEOUL,  
KOREA  
Attn: JULIE LEE

Date: JUL 31, 2013

Sample Description:

Two(2) groups of submitted samples said to be :

**(A) Large White plastic lunch box with transparent lid and green silicone gasket (Tested).**

**(B) Small White plastic lunch box with transparent lid and green silicone gasket.**

Tested components:

(1) White plastic box body.

Material: PP

(2) Green plastic spoon.

Material: PP

(3) Transparent plastic lid.

Material: Tritan

(4) Green silicone gasket.

Material: Silicone

Item Name : Lunch Box.

Goods Exported To : Europe.

Country Of Origin : China.

Tests Conducted:

As requested by the applicant, for details refer to attached page(s).

Conclusion:

According to the test results of below test parameters, the food contacting components of submitted sample complied with the suggested food contacting testing parameters for German § 30 and § 31 LFGB and also complied with general requirement of regulation EC 1935/2004 article 3,paragraph 1.

Tests conducted:

Based on the assessment of the submitted sample and the information provided, the following tests had been conducted:

- (1) Sensory test on finished product
- (2) Global migration on plastic
- (3) Total polycyclic aromatic hydrocarbons on plastic and silicone rubber
- (4) Specific migration of metal
- (5) Total lead and cadmium content on plastic and silicone rubber
- (6) Extractable compounds on silicone rubber
- (7) Volatile organic matter and peroxide residues silicone rubber
- (8) Total phthalates content on silicone rubber.

To be continued

Authorized By:  
For Intertek Testing Services Ltd., Shanghai

Jacob Lin  
General Manager



Tests Conducted

1 Sensory Evaluation

With reference to §64 LFGB 100.90-6.

Test procedure:

Sample was thoroughly rinsed with distilled water and then filled with distilled water to capacity. Filled sample was kept at ambient temperature 100 and relative humidity (40-80%) for 2 hours. Off-odour and off-taste was evaluated with 5 panelists using control sample of distilled water.

Result:

Appearance: clear, colourless  
Odour: no perceptible odour/  
Taste: no perceptible off-taste/

Date Sample Received: Jul.25, 2013  
Testing Period: Jul.25, 2013 To Jul.30, 2013

2 Migration Test For Plastic Food Contacting Materials/Articles

As per §64 LFGB B80.30-1, B80.30-2 and B80.30-3.

I. Condition of contact in actual use:

Temperature: ≤ 150 °C Time : ≤ 30 minutes

II. Test result:

<u>Food simulant</u>	<u>Result (mg/dm<sup>2</sup>)</u>			<u>Limit (mg/dm<sup>2</sup>)</u>
	(1)	(2)	(3)	
(B) 3% (w/v) acetic acid	1.8	1.7	1.3	10
(D) Fatty food simulant	3.2	3.0	2.3	10

Tested components:

- (1) White plastic box body.  
Material: PP
- (2) Green plastic spoon.  
Material: PP
- (3) Transparent plastic lid.  
Material: Tritan

Date Sample Received: Jul.25, 2013  
Testing Period: Jul.25, 2013 To Jul.30, 2013

\*\*\*\*\*  
To be continued

Tests Conducted

3 Polycyclic aromatic hydrocarbons (PAHs) content

By solvent extraction and determined by Gas Chromatography - Mass Spectrometry Detector (GC-MSD).

Test results:

Compound	Result (ppm)			
	(1)	(2)	(3)	(4)
Naphthalene	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	0.3
Anthracene	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND
Benzo[a]anthracene	ND	ND	ND	ND
Benzo[b]fluoranthene	ND	ND	ND	ND
Benzo[k]fluoranthene	ND	ND	ND	ND
<b>Benzo[a]pyrene</b>	ND	ND	ND	ND
Dibenzo[a,h]anthracene	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	ND	ND	ND	ND
Benzo[g,h,i]perylene	ND	ND	ND	ND
Benzo[j]fluoranthene	ND	ND	ND	ND
Benzo[e]pyrene	ND	ND	ND	ND
<b>Sum of PAHs</b>	ND	ND	ND	0.3

Remarks: Detection Limit = 0.2 ppm  
 ppm = Parts per million = mg/kg  
 ND = Not Detected

Tested Components:

- (1) White plastic box body.  
Material: PP
- (2) Green plastic spoon.  
Material: PP
- (3) Transparent plastic lid.  
Material: Tritan
- (4) Green silicone gasket.  
Material: Silicone

Date Sample Received: Jul.25, 2013  
 Testing Period: Jul.25, 2013 To Jul.29, 2013

\*\*\*\*\*  
 To be continued

Tests Conducted

4 Specific Migration Of Metal For Plastic Food Contacting Materials/Articles

As per commission regulation (EU) NO. 10/2011, selection of test condition & food simulants by 82/711/EEC, 85/572/EEC and its amendment and EN13130-1.

I. Condition of contact in actual use:

Temperature : ≤ 100 °c                      Time : ≤ 2 hours

II. Test result:

<u>Food simulant</u>	<u>Element</u>	<u>Result (mg/kg)</u>			<u>Limit (mg/kg)</u>
		(1)	(2)	(3)	
3% (w/v) acetic acid In aqueous solution	Barium	<0.1	<0.1	<0.1	1 (max.)
	Cobalt	<0.03	<0.03	<0.03	0.05 (max.)
	Copper	<1	<1	<1	5 (max.)
	Iron	<5	<5	<5	48 (max.)
	Lithium	<0.1	<0.1	<0.1	0.6 (max.)
	Manganese	<0.1	<0.1	<0.1	0.6 (max.)
	Zinc	<5	<5	<5	25 (max.)

Tested components:

- (1) White plastic box body.  
Material: PP
- (2) Green plastic spoon.  
Material: PP
- (3) Transparent plastic lid.  
Material: Tritan

Date Sample Received: Jul.25, 2013  
Testing Period: Jul.25, 2013 To Jul.30, 2013

5 Total Lead (Pb) And Cadmium (Cd) Content

By microwave digestion and followed by Inductively Coupled Plasma (ICP) Spectrophotometric analysis.

<u>Tested elements</u>	<u>Result (ppm)</u>				<u>Requirement (ppm)</u>
	(1)	(2)	(3)	(4)	
Lead (Pb)	<10	<10	<10	<10	100
Cadmium (Cd)	<10	<10	<10	<10	100

Remark: ppm = Parts per million = mg/kg

Tested Components:

- (1) White plastic box body.  
Material: PP
- (2) Green plastic spoon.  
Material: PP
- (3) Transparent plastic lid.  
Material: Tritan
- (4) Green silicone gasket.  
Material: Silicone

Date Sample Received: Jul.25, 2013  
Testing Period: Jul.25, 2013 To Jul.30, 2013

\*\*\*\*\*

To be continued

**Test Report**

Number: SHAH00398460

Tests Conducted

6 Extractable Substances Of Silicone Rubber

As per LFGB, Plastic Recommendation XV.

<u>Food Simulant</u>	<u>Result (%)</u> (4)	<u>Limit (%)</u>
3% (w/v) acetic acid	<0.10	0.5
10% (v/v) ethanol	<0.10	0.5

Tested Component : (4) Green silicone gasket.  
Material: Silicone

Date Sample Received: Jul.25, 2013  
Testing Period: Jul.25, 2013 To Jul.30, 2013

7 Volatile Organic Matter Of Silicone Rubber

As per LFGB plastic recommendation BII XV.

<u>Tested component</u> (4)	<u>Result (% (w/w))</u> <0.10
--------------------------------	----------------------------------

Requirement: 0.5% (w/w) (max.)

Tested Component: (4) Green silicone gasket.  
Material: Silicone

Date Sample Received: Jul.25, 2013  
Testing Period: Jul.25, 2013 To Jul.30, 2013

8 Peroxide Residues Of Silicone Rubber

As per LFGB plastic recommendation BII XV.

<u>Tested Component</u> (4)	<u>Result (% (w/w))</u> No positive reaction
--------------------------------	---

Requirement: No positive reaction to peroxides

Tested Component: (4) Green silicone gasket.

Date Sample Received: Jul.25, 2013  
Testing Period: Jul.25, 2013 To Jul.30, 2013

\*\*\*\*\*  
To be continued

Tests Conducted

9 Phthalate Content Test

By solvent extraction and followed by Gas Chromatographic - Mass Spectrometric (GC-MS) analysis.

	<u>Result (%. w/w)</u>
	(4)
Dibutyl phthalate (DBP)	<0.01
Di(2-ethyl hexyl) phthalate (DEHP)	<0.01
Benzylbutyl phthalate (BBP)	<0.01
Diisononyl phthalate (DINP)	<0.01
Diisodecyl phthalate (DIDP)	<0.01

Tested Component: (4) Green silicone gasket.

Material: Silicone



Picture of sample

Date Sample Received: Jul.25, 2013

Testing Period: Jul.25, 2013 To Jul.30, 2013

\*\*\*\*\*  
End of report

*This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct.*