

Test Report

Report No: TJAFF150100083E-1d-S1

Date: Mar 18 2015

Client name: Jinhui ZhaoLong High Technology Co.,Ltd
Client address: Xiaoyi Economic Development Zone,Shanxi,PR.China
*Sample name: Ecoworld® PBAT
Batch No.: /
Product Date: 2014.11.30
Manufacturer: Jinhui ZhaoLong High Technology Co.,Ltd

Above information and sample(s) was/were submitted and certified by the client, SGS quoted the information with no responsibility as to the accuracy, adequacy and/or completeness.

SGS Sample No.: TJAFF150100083-1
SGS reference No.: TSNFD1500105101
Date of sample received: Jan 08 2015
Testing period: Jan 12 2015 ~ Jan 27 2015

TEST(S) REQUESTED:

In accordance with Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments, to determine overall migration, to determine specific migration of 1,4-Butanediol, to determine specific migration of heavy metal

TEST METHOD(S):

Please refer to the next page(s)

TEST RESULT(S):

Please refer to the next page(s)

Conclusion:

The tested parameters comply with the requirements stated in Commission Regulation (EU) No 10/2011 of 14 January 2011 with amendments and Regulation (EC) No 1935/2004 of the European Parliament and of the Council of 27 October 2004.

Remark: This test report has been drafted in Chinese and maybe translated into other languages, The Chinese version shall prevail.

Remark: * Information was modified by the request of the client after test report/testing summary was issued.

THIS REPORT IS TO SUPERSEDE TEST REPORT TJAFF150100083E-1d.

The results shown in this test summary refer only to the sample(s) tested, and for clients internal use only.



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TEST METHOD(S):

- 1) 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; EN1186-2:2002 olive oil by total immersion method;
- 2) With reference to EN13130-1: 2004, analysis was performed by GC-MS.
- 3) With reference to EN13130-1:2004, analysis was performed by ICP-OES.

TEST RESULT(S):

- 1) Overall migration:

Simulant Used	Time	Temperature	Max. Permissible Limit	Overall Migration
3% Acetic Acid (W/V) Aqueous Solution	1.0hr(s)	100°C	10mg/dm ²	< 3.0mg/dm ²
10% Ethanol (V/V) Aqueous Solution	1.0hr(s)	100°C	10mg/dm ²	< 3.0 mg/dm ²
Rectified Olive Oil	1.0hr(s)	100°C	10mg/dm ²	8.2mg/dm ²

- Remark:**
1. Analytical tolerance of aqueous simulants is 1 mg/dm²
 2. Analytical tolerance of fatty food simulants is 3 mg/dm²
 3. Test condition & simulant were specified by client.

- 2) Specific migration of 1,4-Butanediol:

Simulant Used: 3% Acetic acid (W/V) aqueous solution

Test Condition: 40°C 1hr(s)

Test Item	Max. Permissible Limit	Unit	Method Detection limit	Test Result
Specific migration of 1,4-Butanediol	5	mg/kg	1	Not Detected

Remark: Test condition & simulant were specified by client.

- 3) Specific migration of heavy metal:

Simulant Used: 3% Acetic Acid (W/V) Aqueous Solution

Test Condition: 40°C 1.0hr(s)

Test Item(s)	Max. Permissible Limit	Unit	Method Detection limit(s)	Test Result
Barium	1	mg/kg	0.25	Not Detected
Cobalt	0.05	mg/kg	0.01	Not Detected
Copper	5	mg/kg	0.25	Not Detected
Iron	48	mg/kg	0.25	Not Detected
Lithium	0.6	mg/kg	0.5	Not Detected
Manganese	0.6	mg/kg	0.25	Not Detected
Zinc	25	mg/kg	0.5	Not Detected

Remark: Test condition & simulant were specified by client.



SAMPLE DESCRIPTION: Transparent plastic film



*** End of Report***

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