

TEST REPORT

APPLICANT : Xindao B.V.

ADDRESS : P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands

SAMPLE DESCRIPTION : Leakproof AS water bottle

ITEM NO. : P436.87

COUNTRY OF ORIGIN : China

COUNTRY OF DESTINATION : Europe

SAMPLE RECEIVED DATE : 28-Feb-2018

TURN AROUND TIME : 01-Mar-2018 to 15-Mar-2018

The following test item(s) was/were performed on selected sample(s) and/or component(s) appointed by applicant

| TEST REQUESTED | RESULT |
|---|--------|
| Polycyclic Aromatic Hydrocarbons (PAHs) | Pass |
| Bisphenol A (BPA) Content | Pass |
| Overall Migration | Pass |
| Specific Migration of Heavy Metal | Pass |

Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to info.sh@eurofins.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., If you happen to have any complaints, please do it by sending email to chinacomplaint@eurofins.com and referring to this report number. Ltd.

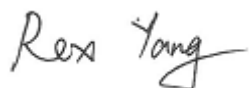
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***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

Signed for and on behalf of
Eurofins Product Testing Service (Shanghai) Co., Ltd



Rex Yang
Assistant Chemical Lab Manager

SAMPLE PHOTO



EFSH18030003-CG-01

TO BE CONTINUED

COMPONENT LIST

| Component No. | Component |
|----------------------|-----------------------------------|
| 1 | Transparent black plastic |
| 2 | Black plastic |
| 3 | Transparent soft plastic (gasket) |

TO BE CONTINUED

TEST RESULT

Polycyclic Aromatic Hydrocarbons (PAHs)

Test Request: 18 Polycyclic Aromatic Hydrocarbons in polymers (PAHs) according to German GS Specification document: AfPS GS 2014:01 PAK (PAK=PAHs)

Test Method: Solvent extraction and quantification by gas chromatography-mass selective detection (GC-MS) with respect to AfPS GS 2014:01 PAK (PAK=PAHs) requirement

Requirement: AfPS GS 2014:01 PAK (PAK=PAHs) requirement: Limits for PAHs in Toys under Directive 2009/48/EC and Other products under ProdSG, see table 1 on next page(s):

| Parameter | CAS No. | Unit | Result | |
|---|----------------|-------|--------|------|
| | | | 1 | 2 |
| Benzo(a)pyrene | 50-32-8 | mg/kg | ND | ND |
| Benzo(e)pyrene | 192-97-2 | mg/kg | ND | ND |
| Benzo(a)anthracene | 56-55-3 | mg/kg | ND | ND |
| Benzo(b)fluoranthene | 205-99-2 | mg/kg | ND | ND |
| Benzo(j)fluoranthene | 205-82-3 | mg/kg | ND | ND |
| Benzo(k)fluoranthene | 207-08-9 | mg/kg | ND | ND |
| Chrysene | 218-01-9 | mg/kg | ND | ND |
| Dibenzo(a,h)anthracene | 53-70-3 | mg/kg | ND | ND |
| Benzo(ghi)perylene | 191-24-2 | mg/kg | ND | ND |
| Indeno(1,2,3-cd)pyrene | 193-39-5 | mg/kg | ND | ND |
| Sum of Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Pyrene, Anthracene, Fluoranthene | - | mg/kg | ND | ND |
| Naphthalene | 91-20-3 | mg/kg | ND | ND |
| Sum 18 PAHs | - | mg/kg | ND | ND |
| Conclusion: | For Category 1 | | Pass | Pass |

Remark:

mg/kg = milligram per kilogram

ND = not detected, less than 0.2 mg/kg

As per client's request, only the appointed materials have been tested.

TO BE CONTINUED

TEST RESULT

Table 1

AfPS GS 2014:01 PAK (PAK=PAHs) requirement: Limits for PAHs in Toys under Directive 2009/48/EC and Other products under ProdSG.

| Parameter | Unit | Category 1 Materials indented to be put in the mouth, or materials of toys intended long term skin contact (longer than 30s) | Category 2 Materials not covered by category 1, with foreseeable skin contact for longer than 30 seconds (long-term skin contact) or repeated short-term skin contact | | Category 3 Materials not covered by category 1 or 2 with foreseeable skin contact up to 30 seconds (short term skin contact) | |
|--|-------|---|--|-----------------------------|---|-----------------------------|
| | | - | Toys under Directive 2009/48/EC | Other products under ProdSG | Toys under Directive 2009/48/EC | Other products under ProdSG |
| Benzo(a)pyrene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Benzo(e)pyrene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Benzo(a)anthracene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Benzo(b)fluoranthene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Benzo(j)fluoranthene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Benzo(k)fluoranthene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Chrysene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Dibenzo(a,h)anthracene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Benzo(ghi)perylene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Indeno(1,2,3-cd)pyrene | mg/kg | <0.2 | <0.2 | <0.5 | <0.5 | <1 |
| Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Pyrene, Anthracene, Fluoranthene | mg/kg | <1 Sum* | <5 Sum* | <10 Sum* | <20 Sum* | <50 Sum* |
| Naphthalene | mg/kg | <1 | <2 | | <10 | |
| Sum* 18 PAHs | mg/kg | <1 | <5 | <10 | <20 | <50 |

* = Only those PAH components are taken into account, which have been specified in the material over the 0.2 mg/kg.

TO BE CONTINUED

TEST RESULT

Bisphenol A (BPA) Content

Test Requested : In accordance with French Law No. 2012/1442, and French recommendation DGCCRF
Organic materials from synthetic materials intended for food contact - 10/10/2016.

Test Method: Extraction with organic solvent, analysis by GC-MS and LC-MS

| Tested Item(s) | Unit | Limit | MDL | Result | |
|---------------------------|-------|-------|-----|--------|----|
| | | | | 1 | 2 |
| Bisphenol A (BPA) content | mg/kg | 0.1 | 0.1 | ND | ND |

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

As per client's request, only the appointed materials have been tested.

TO BE CONTINUED

TEST RESULT

Overall Migration

Test Requested : To determine the Overall Migration for compliance with Commission Regulation (EU) No 10/2011 and its amendments relating to plastic materials and articles intended to come into contact with foodstuffs.

Test Method : By reference to EU 10/2011 for selection of test condition;
With reference to EN 1186-1:2002 for selection of test methods;
or EN1186-3:2002 aqueous food simulants by total immersion method;
or EN1186-9:2002 aqueous food simulants by article filling method;
or EN1186-2:2002 olive oil by total immersion method;
or EN1186-8:2002 olive oil by article filling method;
or EN1186-14:2002 substitute test

| Simulant used | Time | Temperature | Max. Permissible Limit (mg/dm ²) | Test Result (mg/dm ²) | | |
|---------------------------------------|------|-------------|--|-----------------------------------|------|------|
| | | | | 1 | 2 | 3 |
| 3% Acetic Acid (W/V) Aqueous Solution | 2hrs | 70°C | 10 | <3.0 | <3.0 | <3.0 |
| 50% Ethanol (V/V) Aqueous Solution | 2hrs | 70°C | 10 | <3.0 | <3.0 | <3.0 |

Note:

- (1) mg/dm²=milligram per square decimeter
- (2) Analytical tolerance of aqueous simulants is 1 mg/dm²
- (3) Analytical tolerance of fatty food simulants is 3 mg/dm²
- (4) Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Specific Migration of Heavy Metal

Test Requested : To determine the Specific Migration of Heavy Metal for compliance with Commission Regulation (EU) No 10/2011 and its amendment Regulation (EU) 2016/1416 on plastic materials and articles intended to come into contact with food.

Test Method : With reference to Regulation (EU) 10/2011 and its amendment Regulation (EU) 2016/1416 for selection of test condition and EN 13130-1:2004 for test preparation method; analysis was performed by ICP-OES.

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

Test Condition : 70°C 2hours

| Test Item(s) | Max. Permissible limit | Unit | MDL | Test Result | |
|--------------|------------------------|-------|------|-------------|----|
| | | | | 1 | 2 |
| Aluminium | 1 | mg/kg | 0.1 | ND | ND |
| Barium | 1 | mg/kg | 0.25 | ND | ND |
| Cobalt | 0.05 | mg/kg | 0.05 | ND | ND |
| Copper | 5 | mg/kg | 0.25 | ND | ND |
| Iron | 48 | mg/kg | 0.25 | ND | ND |
| Lithium | 0.6 | mg/kg | 0.5 | ND | ND |
| Manganese | 0.6 | mg/kg | 0.05 | ND | ND |
| Zinc | 5 | mg/kg | 0.5 | ND | ND |

Note:

- (1) mg/kg = milligram per kilogram
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected(<MDL)
- (4) Test condition & simulant were specified by client.

END OF THE REPORT