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# **TEST REPORT**

APPLICANT : Xindao B.V.

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

**SAMPLE DESCRIPTION** : Swiss Peak Elite copper vacuum mug

**ITEM NO.** : P433.37

COUNTRY OF ORIGIN : China

**COUNTRY OF DESTINATION** : Europe

SAMPLE RECEIVED DATE : 26-Jun-2018

**TURN AROUND TIME** : 26-Jun-2018 to 03-Jul-2018

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

TEST REQUESTED	RESULT
Polycyclic Aromatic Hydrocarbons (PAHs) - REACH Annex XVII, Entry 50	Pass
Polycyclic Aromatic Hydrocarbons (PAHs) - German GS Specification document: AfPS GS 2014:01 PAK (PAK=PAHs)	Pass
Bisphenol A	Pass
Overall Migration	Pass
Specific Migration of Heavy Metal	Pass
Specific Release of Heavy Metals	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 <a href="mailto:info.sh@eurofins.com">info.sh@eurofins.com</a> 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., Ltd. If you happen to have any complaints, please do it by sending email to <a href="mailto:chinacomplaint@eurofins.com">chinacomplaint@eurofins.com</a> and referring to this report number.



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

Rex Yang

Assistant Chemical Lab Manager



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# **SAMPLE PHOTO**



EFSH18062295-CG-01



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## **COMPONENT LIST**

Component No.	Component
1	BLACK PP LID
2	GREY SILICONE
3	STAINLESS STEEL INNER



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## **TEST RESULT**

### Polycyclic Aromatic Hydrocarbons (PAHs)

Test Request: Polycyclic Aromatic Hydrocarbons (PAHs) content as specified in Regulation (EU) 2015/326

amending entry 50 of Annex XVII of REACH Regulation (EC) No 1907/2006.

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.

Tested Item(s)	CAS No.	Unit	Limit	MDL	Result
					1
For rubber or plastic will direct contact with skin and mout	h.				
Benzo(a)anthracene	56-55-3	mg/kg	1	0.2	ND
Chrysene	218-01-9	mg/kg	1	0.2	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	1	0.2	ND
Benzo(j)fluoranthene	205-82-3	mg/kg	1	0.2	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	1	0.2	ND
Benzo(a)pyrene	50-32-8	mg/kg	1	0.2	ND
Dibenzo(a,h)anthracene	53-70-3	mg/kg	1	0.2	ND
Benzo(e)pyrene	192-97-2	mg/kg	1	0.2	ND

#### Remark:

mg/kg = milligram per kilogram MDL = method detection limit ND = Not detected, less than MDL



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## **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		
Benzo(a)pyrene	50-32-8	mg/kg	ND		
Benzo(e)pyrene	192-97-2	mg/kg	ND		
Benzo(a)anthracene	56-55-3	mg/kg	ND		
Benzo(b)fluoranthene	205-99-2	mg/kg	ND		
Benzo(j)fluoranthene	205-82-3	mg/kg	ND		
Benzo(k)fluoranthene	207-08-9	mg/kg	ND		
Chrysene	218-01-9	mg/kg	ND		
Dibenzo(a,h)anthracene	53-70-3	mg/kg	ND		
Benzo(ghi)perylene	191-24-2	mg/kg	ND		
Indeno(1,2,3-cd)pyrene	193-39-5	mg/kg	ND		
Sum of Acenaphthene, Acenaphthylene, Fluorene, Phenanthrene, Pyrene, Anthracene, Fluoranthene	-	mg/kg	ND		
Naphthalene	91-20-3	mg/kg	ND		
Sum 18 PAHs	-	mg/kg	ND		
Conclusion:	For Category 2 (Other products under ProdSG)		Pass		

#### Remark:

mg/kg = milligram per kilogram
ND = not detected, less than 0.2 mg/kg



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## **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		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	

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



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## **TEST RESULT**

### **Bisphenol A (BPA) Content**

Test Requested: In accordance with French Law No. 2012/1442, DGCCRF information notice

2004/64 on materials in contact with foodstuffs.

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

Test item(s)	Limit	Unit	MDL	Result
rest item(s)	Lillit	-iiiiit Oiiit		1
Bisphenol A (BPA) content	0.1	mg/kg	0.1	ND

#### Note:

(1) mg/kg =milligram per kilogram

- (2) MDL = method detection limit
- (3) ND = not detected (<MDL)



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## **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 EN 1186-14:2002 substitute test

Simulant used	Time	Temperature	Max. Permissible Limit	Result 1
3% Acetic Acid (W/V) Aqueous Solution	2hours	70℃	10 mg/dm <sup>2</sup>	<3.0 mg/dm <sup>2</sup>
50% Ethanol (V/V) Aqueous Solution	2hours	70℃	10 mg/dm <sup>2</sup>	<3.0 mg/dm <sup>2</sup>

Simulant used	Time	Temperature	Max. Permissible Limit	Result 2
3% Acetic Acid (W/V) Aqueous Solution	2hours	70℃	10 mg/dm <sup>2</sup>	<3.0 mg/dm <sup>2</sup>
50% Ethanol (V/V) Aqueous Solution	2hours	70℃	10 mg/dm <sup>2</sup>	<3.0 mg/dm <sup>2</sup>

### Note:

- (1) mg/dm<sup>2</sup>=milligram per square decimeter
- (2) mg/kg = milligram per kilogram
- (3) °C=degree Celsius
- (4) <= less than
- (5) Analytical tolerance of aqueous simulants is 1 mg/dm<sup>2</sup> or 6mg/kg
- (6) Analytical tolerance of fatty food simulants is 3 mg/dm2 or 20mg/kg
- (7) Test condition & simulant were specified by client.



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### **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 amendments on plastic

materials and articles intended to come into contact with food.

Test Method: With reference to Regulation (EU) 10/2011 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 2 hours

Test Item(s)	Max. Permissible limit	Unit M	MDL	Test Result	
rest item(s)	Max. Permissible illilit		MIDE	1	
Barium	1	mg/kg	0.25	ND	
Cobalt	0.05	mg/kg	0.05	ND	
Copper	5	mg/kg	0.25	ND	
Iron	48	mg/kg	0.25	ND	
Lithium	0.6	mg/kg	0.5	ND	
Manganese	0.6	mg/kg	0.05	ND	
Zinc	25	mg/kg	0.5	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.



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## **TEST RESULT**

### **Specific Release of Heavy Metals**

Test In accordance with CM/Res (2013)9 on metals and alloys used in food contact

Requested: materials and articles.

Test Method: Samples were prepared at specific condition, analysed by using ICP-OES/ICP-MS.

Simulant Used: 0.5% citric acid
Test Condition: 70°C 2hours

			Result 3				
Test Item(s)	Unit	MDL	1st + 2nd Migration		3rd Migration		
			Result	7xSRL*2	Result	SRL*1	
Aluminum (Al)	mg/kg	0.5	ND	35	ND	5	
Antimony (Sb)	mg/kg	0.01	ND	0.28	ND	0.04	
Chromium (Cr)	mg/kg	0.05	ND	1.75	ND	0.25	
Cobalt (Co)	mg/kg	0.005	ND	0.14	ND	0.02	
Copper (Cu)	mg/kg	0.5	ND	28	ND	4	
Iron (Fe)	mg/kg	5	ND	280	ND	40	
Manganese (Mn)	mg/kg	0.2	ND	12.6	ND	1.8	
Molybdenum (Mo)	mg/kg	0.01	ND	0.84	ND	0.12	
Nickel (Ni)	mg/kg	0.01	ND	0.98	ND	0.14	
Silver (Ag)	mg/kg	0.01	ND	0.56	ND	0.08	
Tin*3 (Sn)	mg/kg	5	ND	700	ND	100	
Vanadium (V)	mg/kg	0.001	ND	0.07	ND	0.01	
Zinc (Zn)	mg/kg	0.5	ND	35	ND	5	
Arsenic (As)	mg/kg	0.0005	ND	0.014	ND	0.002	
Barium (Ba)	mg/kg	0.1	ND	8.4	ND	1.2	
Beryllium (Be)	mg/kg	0.001	ND	0.07	ND	0.01	
Cadmium (Cd)	mg/kg	0.001	ND	0.035	ND	0.005	
Lead (Pb)	mg/kg	0.001	ND	0.07	ND	0.01	
Lithium (Li)	mg/kg	0.005	ND	0.336	ND	0.048	
Mercury (Hg)	mg/kg	0.0005	ND	0.021	ND	0.003	
Thallium (TI)	mg/kg	0.00005	ND	0.0007	ND	0.0001	

#### Note:

- (1) mg/kg =milligram per kilogram
- (2) MDL = method detection limit
- (3) ND = not detected (<MDL)
- (4) SRL = Specific Release Limit
- (5) \*1 Compliance is established on the result from the third migration test for repeated used articles.
- (6) \*2 Meantime, the sum of the results of the first and second tests should not exceed 7 times the SRL
- (7) \*3 Except in field of application under Regulation (EC) No.1881/2006.(canned food container)
- (8) Test condition & simulant were specified by client.

\*\*\*END OF THE REPORT\*\*\*