

TEST REPORT

<u>APPLICANT</u>	: Xindao B.V.
<u>ADDRESS</u>	: P.O. Box 3082, 2280 GB, Rijswijk, The Netherlands
<u>SAMPLE DESCRIPTION</u>	: Bogota food flask with ceramic coating
<u>ITEM NO.</u>	: P432.97
<u>P.O. NO.</u>	: PU031678
<u>COUNTRY OF ORIGIN</u>	: China
<u>COUNTRY OF DESTINATION</u>	: Europe
<u>SAMPLE RECEIVED DATE</u>	: 23-Aug-2019
<u>TURN AROUND TIME</u>	: 23-Aug-2019 to 06-Sep-2019
<u>CONCLUSION</u>	: When tested as specified, the submitted sample(s) comply with the permissible safety limit of test item(s) as specified in LFGB, Section 30 and 31, Commission Regulation (EU) No 10/2011 and its amendments and (EC) No 1935/2004.

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

TEST REQUESTED	RESULT
Specific Release of Heavy Metals	Pass
Overall Migration	Pass
Specific Migration of Heavy Metal	Pass
Volatile Organic Matter	Pass
Extractable Component	Pass
Peroxide Value	Pass
Leachable Lead and Cadmium content	Pass

Samples are obtained by express delivery. 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., Ltd. If you happen to have any complaints, please do it by sending email to china.complaint@eurofins.com and referring to this report number.

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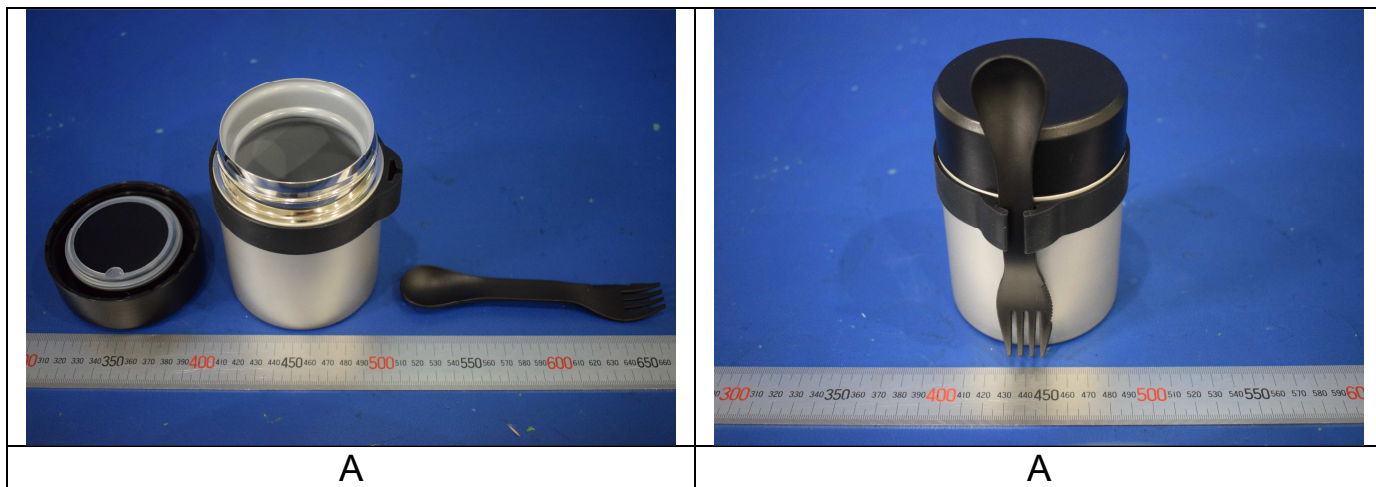
***** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) *****

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



Lemon Zhang
Chemical Lab Supervisor

SAMPLE PHOTO(S)



EFSH19082146-CG-01

TO BE CONTINUED

COMPONENT LIST

Component No.	Component
1	Black PP lid
2	Silver stainless steel with ceramic coating
3	Transparent silicone ring

END OF THE REPORT

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% Artificial tap water

Test Condition: 100°C 2hours

Test Item(s)	Unit	MDL	Result			
			2			
			1 st + 2 nd Migration		3 rd 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 (Tl)	mg/kg	0.00005	ND	0.0007	ND	0.0001

Remark:

- (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.

TO BE CONTINUED

TEST RESULT

Overall Migration

Test Requested : In accordance with Commission Regulation (EU) No. 10/2011 and its amendments, German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, and BfR recommendation.

Test Method : By reference to EU 10/2011 for selection of test condition;
With reference to EN1186-1:2002 for 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)	Result (mg/dm ²)
				1
3% Acetic Acid (W/V) Aqueous Solution	2hrs	100°C	10	<3
10% Ethanol (V/V) Aqueous Solution	2hrs	100°C	10	<3
95% Ethanol (V/V) Aqueous Solution (Rectified Olive Oil Substitute)	3.5hrs	60°C	10	<3
Isooctane (Rectified Olive Oil Substitute)	1.5hrs	60°C	10	6.9

Remark:

- (1) mg/kg =milligram per kilogram
- (2) mg/dm² =milligram per square decimeter
- (3) Analytical tolerance of aqueous simulants is 6mg/kg or 1mg/dm²
- (4) Analytical tolerance of fatty food simulants is 20mg/kg or 3mg/dm²
- (5) 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 amendments, German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, and BfR recommendation.

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 : 100°C 2hours

Test Item(s)	Max. Permissible limit	Unit	MDL	Test Result
				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	5	mg/kg	0.5	ND
Aluminium	1	mg/kg	0.1	ND
Nickel	0.02	mg/kg	0.01	ND

Remark:

- (1) mg/kg = milligram per kilogram
- (2) ND = not detected, less than MDL
- (3) MDL = method detection limit
- (4) Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Peroxide Value

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, BfR recommendation.

Test Method : With reference to European Pharmacopoeia 8.0 part 2.5.5. Peroxide Value method A.

Test Item(s)	Limit	Test Result
		3
Peroxide Value	Absent	Absent

Volatile Organic Matter

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, BfR recommendation.

Test Method : With reference to 61st Communication on testing of silicon in Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz 46 (2003) 362.

Test Condition : 100°C, 2 hours

Test Item(s)	Limit	Unit	MDL	Test Result
				3
Volatile Organic Matter	0.5	%(w/w)	0.1	<0.1

Remark:

- (1) %w/w = percentage of weight by weight
- (2) MDL = method detection limit

Extractable Component

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31, BfR recommendation.

Test Method : With reference to 61st Communication on testing of plastics in Bundesgesundheitsbl 46 (2003) 362

Simulant Used	Time	Temperature	Max. Permissible Limit	Test Result
				3
10% Ethanol	5.0hr	reflux temperature	0.5%(w/w)	<0.1%(w/w)
3% Acetic Acid	5.0hr	reflux temperature	0.5%(w/w)	<0.1%(w/w)

Remark:

%w/w =percentage of weight by weight

TO BE CONTINUED

TEST RESULT

Leachable Lead and Cadmium Content

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005(LFGB), Section 30, 31 and DIN 51032:2017-07.

For material: Glass/Ceramic/Glass ceramic- Leachable Lead and Cadmium Content

Test Method : With reference to EN 1388-1/2:1995 -Determination of release of Lead and Cadmium from ceramic ware or silicate surfaces.
Analysis was performed by Inductively Coupled Plasma Optical Emission Spectrometer.

Hollow-ware

	Vol. of 4% Acetic acid used (ml)	Depth(mm)	Diameter (mm)
	A	A	A
Specimen 1	500	100	75
Specimen 2	500	100	75
Specimen 3	500	100	75
Specimen 4	500	100	75

	Leachable Lead (mg/l)	Leachable Cadmium (mg/l)
	A	A
Specimen 1	<0.1	<0.01
Specimen 2	<0.1	<0.01
Specimen 3	<0.1	<0.01
Specimen 4	<0.1	<0.01
Limit	4.0	0.3

Note:

(1) < = Less than

(2) Permissible limit of Lead and Cadmium is quoted from DIN 51032:2017-07

Table 1--Permissible limits for articles made from ceramics, glass and glass ceramics

Items	Flatware		Hollow-ware	
	Lead mg/dm ²	Cadmium mg/dm ²	Lead mg/l	Cadmium mg/l
Tableware and kitchenware, Ceramic, Glass and Glass ceramic	0.8*)	0.07*)	4.0*)	0.3*)
Cooking & baking utensils, receptacles also used as packaging storage container	0.4	0.05	1.5*)	0.1*)

Remark: *) In agreement with EC Directive.

(3) Requirement information quoted from DIN 51032:2017-07.

If measurements on an article give values exceeding those specified in "Note(2) Table 1", but by not more than 50%, the article concerned shall nevertheless be deemed to comply with the standard if at least three other articles identical to this one in material, shape, dimensions, decoration and glazing are tested ...with the result that the arithmetic mean of lead and cadmium release for these articles does not exceed the permissible limits and none of these articles exceeds the permissible limits by more than 50%.

END OF THE REPORT