

# **TEST REPORT**

Applicant	: PUBLIK DOO
Address	: Vladike Nikolaja 469, 14000 Valjevo, Serbia

# Report on the submitted sample said to be

Sample name	: Thermoses
Model	: PLANET (41.149.XX), PALMA (41.151.XX), DROP (41.156.XX),
	VIVO (41.155.XX) where XX means color range, coded from 00-99
Manufacture	: Asia Gateway Overseas Limited
Address	: 21/F., New World Tower 1, 18 Queen's Road, Central, Hong Kong
Sample received date	: Dec. 28, 2022
Testing period	: Dec. 28, 2022 – Jan. 05, 2023
Test Result(s)	: Please refer to the next pages



Signed for and on behalf o	f Sesting Serve
Bort Fang	service S
Lab Manager : Bet	AYang
Jan. 05, 2023	Approved
Date of issue	



Test Sample	Test Requested:	Conclusion
001	on metals and alloys used in food contact materials and articles. - Specific Release of Heavy Metals 02 In accordance with Council of Europe Resolution AP(2002)1 relating to wood intended to come into contact with foodstuffs. - Sensorial examination odour and taste test - Extractable Heavy Metals - Pentachlorophenol (PCP) Content - Preserving Effect - Fluorescent whitening agents - Specific migration of benzophenone - Specific migration of 4-methylbenzophenone - Extractable formaldehyde - Bisphenol A (BPA) Content	
002		
003		

# **Test Part Description**

Specimen No.	Description
001	Stainless steel
002	Bamboo
003	silica gel



# **Test Result:**

## Specific Release of Heavy Metals

Method: Preparation in Artificial tap water / 0.5% Citric acid at xx°C for xx hours, analyzed by Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES)/ Inductively Coupled Plasma Mass Spectrometer (ICP-MS).

Test Condition: 100℃ 4Hour

15 TESTING ITS TESTING	SRL (n	ng/kg)	Result (mg/kg)		in 15 restine 15 re
Elements	1 <sup>st</sup> + 2 <sup>nd</sup>	3 <sup>rd</sup>	00	D1	Conclusion
resting 115 resting 115 re	1 + 2	Testing IS Testing	1 <sup>st</sup> + 2 <sup>nd</sup>	3 <sup>rd</sup>	S resting ITS resting I
Tin(Sn)	700	100	N.D.	N.D.	15 resting 15 resting
Copper(Cu)	28	4	N.D.	N.D.	8 15 785 10 108 15 7850
Iron(Fe)	280	40	N.D.	N.D.	The The Less rest me the the
Manganese(Mn)	12.6	1.8	N.D.	N.D.	res ins Its resting Its
Zinc(Zn)	35	Trest in 5 15 Trest	N.D.	N.D.	5 restine 115 restine 1 15 restine 115 restine
Aluminum(Al)	35	15 Tes 5 1 15 Te	N.D.	N.D.	I' Testing I's resting
Barium(Ba)	8.4	1.2	N.D.	N.D.	ns LPS Test the LPS Test
Titanium(Ti)	15 10 100 000 110 10 10	stine 115 restine 11	N.D.	N.D.	at the the testine the
Magnesium(Mg)	ting TS testing TS	Testing 15 Testing	N.D.	N.D.	Testing Ins Testing In
Chromium(Cr)	1.750	0.250	N.D.	N.D.	15 rescine 115 restine
Nickel(Ni)	0.98	0.14	N.D.	N.D.	275 Testing TIS Test
Lithium(Li)	0.336	0.048	N.D.	N.D.	Pass
Beryllium(Be)	0.07	0.01	N.D.	N.D.	est ins 215 resting 215
Vanadium(V)	0.07	0.01	N.D.	N.D.	Testing 115 Testing 1
Cobalt(Co)	0.14	0.02	N.D.	N.D.	The resting The resting
Molybdenum(Mo)	0.84	0.12	N.D.	N.D.	ne 15 rest ine 175 rest
Silver(Ag)	0.56	0.08	N.D.	N.D.	at the The testine The Te
Antimony(Sb)	0.28	0.04	N.D.	N.D.	es ins Its restine Its
Lead(Pb)	0.07	0.01	N.D.	N.D.	S Testing 15 Testing
Arsenic(As)	0.014	0.002	N.D.	N.D.	The resting The resting
Cadmium(Cd)	0.035	0.005	N.D.	N.D.	ing ITS rest ing ITS rest
Mercury(Hg)	0.021	0.003	N.D.	N.D.	21 00 115 10 10 10 10 10 10 10 10 10 10 10 10 10
Thallium(TI)	0.0007	0.0001	N.D.	N.D.	Tes ins Its resting Its

Note:

1. "--" = No requirement.

2. mg/kg = milligrams of the constituents released per kilogram of foodstuff.

3. SRL = Specific Release Limit.

## Sensorial examination odour and taste test

Test Method: With reference to DIN 10955:2004

Test media: Deionized Water

Test Item(s)	Limit	Result	Conclusion
2 12 763 100 12 763 100 10 763 100 10 763 100 10 763 100 10 763 100 10 763 100 10 763 100 10 763 100 10 763 100 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763 10 763	P restine 115 res	002	e Cine II - Les Line II - L
Sensorial examination odour (Point scale)	15 3 Int 15	resting The testing The	Pass
Sensorial examination taste (Point scale)	3	S rest ing LTS rest ing	Pass

Note:

Scale evaluation:

- 0: No perceptible odour
- 1: Odour just perceptible (still difficult to define)
- 2: Moderate odour
- 3: Moderately strong odour
- 4: Strong odour

#### **Extractable heavy metals**

Test Method: With reference to EN 645:1993 (cold water extraction),

analysis was performed by UV-Vis and ICP-OES / ICP-MS.

Test Item	Result (mg/dm <sup>2</sup> )	MDL	Maximum	Conclusion	
n Di testini Di testini Ti testini në Di testinë Di testinë Di testi në Di testinë Di testinë Di testi tuë Di testinë Di testinë Di testi	002	(mg/ dm²)	Permissible Limit (mg/dm <sup>2</sup> )	resting 15 rest resting 15 rest 5 resting 15 rest 15 resting 15 rest	
Extractable Lead	N.D.	0.002	0.003	Pass	
Extractable Cadmium	N.D.	0.002	0.002	Pass	
Extractable Mercury	N.D.	0.002	0.002	Pass	

Note:

- 1.  $mg/dm^2$  = milligram per square decimeter
- 2. N.D. = Not Detected (< MDL)
- 3. MDL = Method Detection Limit

#### Pentachlorophenol (PCP)

Test Method: With reference to LFGB § 64 BVL B 82.02.8 - 2001, analysis was performed by GC-MS.

Item	Unit	Result	MDL	Maximum	Conclusion
	e Ching 115 Test ing	002	in the tract	Permissible Limit	
PCP Content	mg/kg	N.D.	0.1	0.15	Pass

Note:

1. mg/kg = ppm



# Preserving effect

Test Method: With reference to EN 1104:2005.

Tested Fungus	Test result	Specification	Conclusion Pass	
Bacillus subtilis ATCC No. 6633	Absent	Absence of zone inhibition		
Aspergillus niger ATCC No.6275	Absent	Absence of zone inhibition	Pass	

Note:

1. Absent denotes absence of Antimicrobic constituents which inhibits the growth of tested bacteria and fungus

#### Fastness of Fluorescent whitening agents

Test Method: As per BS EN 648:2006 procedure B (short time contact).

Item, 12, 12, 12, 12, 12, 12, 12, 12, 12, 12	Test result	Limit	Conclusion	
	002	The tree time The tree time The te	ting The Lesting L	
Deionized Water	No staining	No staining (Grade 5)	Pass	
Aqueous Acetic Acid 3.0% (m/v)	No staining	No staining (Grade 5)	Pass	
Saliva Simulant 5g/L	No staining	No staining (Grade 5)	Pass	
Rectified Olive Oil	No staining	No staining (Grade 5)	Pass	

# Specific migration of benzophenone

Test Method: With reference to EN 13130-1:2004, analysis was performed by GC-MS. .

Item	Unit	Test result	MDL	Limit	Conclusion
2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/		002		P Testing	15 Testine 115 Test
Specific migration of benzophenone	mg/kg	N.D.	0.2	0.6.	Pass

#### Specific migration of 4-methylbenzophenone

Test Method: With reference to EN 13130-1:2004, analysis was performed by GC-MS.

Item	Unit	Test result	MDL	Limit	Conclusion
118 15 100 118 15 100 118 15 100 115 100 15 100 15 100 15	Testing 15 Testing D	002		The Testine I	to resting 115 rest
Specific migration of 4-methylbenzophenone	mg/kg	N.D.	0.2	0.2	Pass



# Extractable formaldehyde

Test Method:With reference to EN 645:1994 (cold water extraction) and EN 1541:2001, analysis was

performed by UV-Vis.	erformed	bv I	UV-Vis.
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Item	Unit	Test result	MDL	Limit	Conclusion
	Test ins Its Test in	002	sting LLS Lesting	LIS resting LI	5 Test ins 15 Tes
Extractable formaldehyde	mg/dm <sup>2</sup>	N.D.	0.1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Pass

# **Bisphenol A (BPA) Content**

Method: Solvent extraction, analyzed by High Performance Liquid Chromatograph (HPLC-DAD).. Test Condition: 100°C 4Hour

Unit	Result	Limit	Conclusion
15 The resting The resting	002	10 108 112 105 108 115 105 108 115 105 108 115 105 108	P resting 10 resting 10 resting 10 resting 10 re-
mg/kg	N.D.	N.D.	Pass

Note:

- 1. mg/kg = milligrams of the constituents released per kilogram of foodstuff.
- 2. N.D. = Not Detected (< RL).
- 3. RL (Reporting Limit) = 0.1 mg/kg.
- 4. The requirement in accordance with the Commission Regulation (EU) No 321/2011.

#### **Overall migration**

Method: With reference to EN1186-1:2002.

Test Condition: 100℃ 4Hour

Test Item(s)	Limit. (mg/dm <sup>2</sup> ) (mg/kg)	Result 003	Conclusion
Distilled water	10/60	N.D.	Pass
10% Ethanol(v/v)	10/60	N.D.	Pass
3% Acetic acid(w/v)	10/60	N.D.	Pass
50% Ethanol(v/v)	10/60	N.D.	Pass
Vegetable oil	10/60	N.D.	Pass
Poly(2,6-diphenyl-p-phenylene oxide)	10/60	N.D.	Pass
95% Ethanol(v/v)	10/60	N.D.	Pass
Isooctane	10/60	N.D.	Pass

**Note:** 1. mg/dm<sup>2</sup> = milligram per square decimetre of surface area of material or article.

- 2. mg/kg = milligrams of the constituents released per kilogram of foodstuff.
- 3. The requirement in accordance with the Commission Regulation (EU) No 10/2011.
- 4. The requirement in accordance with the Resolution AP (2004)1.
- 5. The requirement in accordance with the Resolution AP (2004)4.
- 6. The requirement in accordance with the Resolution AP (2004)5.



# **Specific migration of Heavy Metals**

Simulant Used: 20% Ethanol (V/V) Aqueous Solution

Test Condition:  $70.^{\circ}C$  0.5.hr(s).

Test Item(s)	Max. Permissible	Unit	MDL	Result	
	Limit	restine 115 restine	The rest ing The I	003	
Migration times	108 175 1 254 108 175 1 254 108 175 1 254 10 10 10 10 10 10 10 10 10 10 10 10 10	5 Test ins 175 Test	Ine ITS restine Its	3rd	
Area/Volume	the TC restine TC restine TC restine	dm²/kg	sting 115 resting	6.0	
Barium	100 110 10 10 10 10 10 10 10 10 10 10 10	mg/kg	0.25	N.D.	
Cobalt	0.05	mg/kg	0.01	N.D.	
Copper	The reaction of the reaction of the reaction of the	mg/kg	0.25	N.D.	
Iron	48	mg/kg	0.25	N.D.	
Lithium	0.6	mg/kg	0.5	N.D.	
Manganese	0.6	mg/kg	0.25	N.D.	
Zinc	The rest into the set into 5 the into 15	mg/kg	0.5	N.D.	
Alumium	6 15 (est ins 15 (est ing 15 (est ing 15 (est ins 15	mg/kg	0.1	N.D.	
Nickel	0.02	mg/kg	0.01	N.D.	
Comment	estime The restine The restine The rest	ing The Lest ing The L	resting The Lestin	Pass	

Note : 1. mg/kg = milligram per kilogram of foodstuff in contact with

2. MDL=Method Detection Limit

3. N.D. = Not Detected(less than MDL)

4. The limits of nickel according to Commission Regulation (EU) 2017/752 shall be applied from 19 May 2019.



#### **Picture of sample**



Photo 1

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