

# **TEST REPORT**

Applicant : PUBLIK DOO

Address : Vladike Nikolaja 469, 14000 Valjevo, Serbia

Report on the submitted sample said to be

Sample name : Lunch boxes

Model : SNACK (41.150.XX), SALMON (41.154.XX), FUNGHI (41.153.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

AP

Signed for and on behalf of

Bowling Service

Lab Manager: Best Yang

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Jan. 05, 2023

Date of issue



# **Test Part Description**

Specimen No.	Description
001	Stainless steel
002	Bamboo string to restring to
003	STORY Glass To testing the resulting the res
004	Aluminium

Test Sample	Test Requested:	Conclusion
001 004	COMMISSION REGULATION (EU) No.10/2011 and (EC) No 1935/2004 on metals and alloys used in food contact materials and articles.  - Specific Release of Heavy Metals	Pass
	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	
003	The European Council Directive 84/500/EEC and its amendment 2005/31/EC  - Ceramic Articles intended to Come into Contact with Foodstuffs  - migration Lead and Cadmium	Pass



#### **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°C 4Hour

15 108 12 108 118 12 108	SRL (n	ng/kg)	Result	(mg/kg)	Tresting ITS Testing I
Elements	1 <sup>st</sup> + 2 <sup>nd</sup>	3 <sup>rd</sup>	001	004	Conclusion
The resting the resting to	1, + 2	108 112 (524 108 112) 18 112 (52 110) 112 (5	1 <sup>st</sup> + 2 <sup>nd</sup>	3 <sup>rd</sup>	10 Lesting 1/2 Lest
Tin(Sn)	700	100	N.D.	N.D.	ing The Leading The La
Copper(Cu)	28	4	N.D.	N.D.	see the Tie Lesting Tie
Iron(Fe)	280	40	N.D.	N.D.	is certical lie Learing L
Manganese(Mn)	12.6	1.8	N.D.	N.D.	The Leafing Alp Leafin
Zinc(Zn)	35	175 T 5 T 18	N.D.	N.D.	100 12 160 100 12 160 1
Aluminum(Al)	35	ering The Seering The	N.D.	N.D.	The Learning Lie
Barium(Ba)	8.4	1.2	N.D.	N.D.	Lesting ILZ Lesting ILZ
Titanium(Ti)	resting The Teating T	12 Leging 12 Legi	N.D.	N.D.	12 Learing 112 Learing
Magnesium(Mg)	S Testing 12 Testing	12 Lage 100 122 La	N.D.	N.D.	The Learning The Learn
Chromium(Cr)	1.750	0.250	N.D.	N.D.	100 12 Lesting 12 Les
Nickel(Ni)	0.98	0.14	N.D.	N.D.	12 Lest 14 14 14 14 14 14 14 14 14 14 14 14 14
Lithium(Li)	0.336	0.048	N.D.	N.D.	Pass
Beryllium(Be)	0.07	0.01	N.D.	N.D.	The Legitur N. Legitur
Vanadium(V)	0.07	0.01	N.D.	N.D.	The Lear The Tile Lear
Cobalt(Co)	0.14	0.02	N.D.	N.D.	115 Testing 115 Tes
Molybdenum(Mo)	0.84	0.12	N.D.	N.D.	Les THE TIE LESTING TIE
Silver(Ag)	0.56	0.08	N.D.	N.D.	2 Learling Lie Learling Li
Antimony(Sb)	0.28	0.04	N.D.	N.D.	The Learning The Learning
Lead(Pb)	0.07	0.01	N.D.	N.D.	The Tip Lear line Tip Lear
Arsenic(As)	0.014	0.002	N.D.	N.D.	File I'm Legitus I'm
Cadmium(Cd)	0.035	0.005	N.D.	N.D.	Les ting Tip Lesting Tip
Mercury(Hg)	0.021	0.003	N.D.	N.D.	to resting the resting
Thallium(TI)	0.0007	0.0001	N.D.	N.D.	17 Test 10 175 Test

# 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
ring his leading his leading his leading his leading his leading his lead	148 112 LEZ (148 112)	002	Lesting The Lesting The
Sensorial examination odour (Point scale)	2 Cins 175 3 Carling 17	12 Les 148 112 Les 148	Pass
Sensorial examination taste (Point scale)	Learing 3 Learing	The Leading The Leading	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	m Result (mg/dm²)		Maximum	Conclusion
The Tize Legitum Tize Tize Tize Tize Tize Tize Tize Tize	002	(mg/ dm²)	Permissible Limit (mg/dm²)	Lesting 112 Lesting 12
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<sup>2</sup> = 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
Lesting Its Lesting Its Lesting Its	Le Ling The Lest the	002	200 112 152 118 112 1620	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
Bacillus subtilis ATCC No. 6633	002 Absent	Absence of zone inhibition	Pass
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	Test result	es the to test Limit test the to	Conclusion
	002	Sering 12 Learing 12 Learing 12	12 Lesting 112 Lest
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
12 Lest time IL2 Lest time IL2 Lest time IL2 Lest time		002		Testing IT	Regular Tip Legit
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 1/2 resting 1/2 resting 1/2 resting	Unit	Test result	MDL	Limit	Conclusion
	12 Lesting 12 Les	002		testing 122 Les	e Tiun 112 Leerium Fium 112 Leerium 1
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.

Item	Unit	Test result	MDL	Limit	Conclusion
The resting the resting the resting the	Leging Lig Leging L	002	12 Les 144 14	STESTING TO	Lating The Leaving
Extractable formaldehyde	mg/dm <sup>2</sup>	N.D.	0.1	1 To 10 1 To 1	Pass



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

Method: Solvent extraction, analyzed by High Performance Liquid Chromatograph (HPLC-DAD)..

Test Condition: 100℃ 4Hour

Unit	Result	Limit	Conclusion
THE TESTINE TESTINE TO TE	002	Lie Lear Link Lie Lear Link Lie Lea	
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.

## migration Lead and Cadmium

Method: With reference to 84/500/EEC ANNEX II, analyzed by Atomic Absorption Spectrometer(AAS)/ Inductively Coupled Plasma Atomic Emission Spectrometer (ICP-AES).

Material No.	Description	Location	Depth(mm)	
003	Lunch boxes	Glass	70	

Material No.	Test Item	Limit (mg/L)	Result(mg/dm²) (mg/L)				Conclusion
			108 17 7856 11 108 17 7856	1 2 C ST	15 3 stim	1 4	12 Lear 100 12 Lear
003	Lead(Pb)	4.0	<0.1	<0.1	<0.1	<0.1	PASS
	Cadmium(Cd)	0.3	<0.01	<0.01	<0.01	<0.01	

#### Note:

- 1. Volume of 4% Acetic acid used 370 mL.
- 2. mg/L = milligram per liter.
- 3. Permissible limits for articles.
- 4. mg/dm2 = milligram per square decimetre of surface area of material or article.



# Picture of sample



Photo 1



Photo 2

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