



TEST REPORT

Applicant : Publik d.o.o.

Address : Vladike Nikolaja 469, 14000 Valjevo, Serbia

Report on the submitted sample said to be

Sample name : lunch box

Model : MISO (41.126.XX) where XX means color range, coded from 00-99

Manufacture : Asia Gateway Overseas Limited

Address : 21F., New World Tower 1, 18 Queen's Road, Central, Hong Kong

Sample received date : Jul. 08, 2021

Testing period : Jul. 08, 2021- Jul. 13, 2021

Test Result(s) Please refer to the next pages

AP

Signed for and on behalf of

Lab Manager: Bert

Jul. 13, 2021

Date of issue



Test Sample	Test Requested:	Conclusion
001	COMMISSION REGULATION	12 Lezigue 1/2 Lezel
	(EU)No.10/2011 on plastic materials and	
	articles intended to come into contact with	
	food Overall migration	
	- Soluble heavy metal	
	- Primary aromatic amines	Pass
	- Specific migration of Bisphenol A (BPA)	
	- Bisphenol A (BPA) Content	
	- Specific migration of Formaldehyde	
	- Specific migration of Melamine	
	- Specific migration of Caprolactam	
002	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.	Pass
	 - Preserving Effect. - Fluorescent whitening agents - Specific migration of benzophenone. - Specific migration of 4-methylbenzophenone. - Extractable formaldehyde. 	esting 122 Leating 12 1 198 125 Leating 12 1 198 125 Leating 12 1 12 Leating 12 Lea 1 12 Leating 12 Lea 1 12 Leating 12 Lea 1 12 Leating 12 Leating 12 12 Leat 1 102

Test Part Description

Specimen No. Description.

001 Wheat straw plastic mixing

002 Bamboo cover



Test Result:

Overall migration

Method: With reference to EN1186-1:2002.

Test Condition: 100°C 4Hour

Test Item(s).	Limit.	Result		Conclusion	
	(mg/dm ₂) (mg/kg)	001	002		
Distilled water	10/60	N.D.	N.D.	Pass	
10% Ethanol(v/v)	10/60	N.D.	N.D.	Pass	
3% Acetic acid(w/v)	10/60	N.D.	N.D.	Pass	
50% Ethanol(v/v)	10/60	N.D.	N.D.	Pass	
Vegetable oil	10/60	N.D.	N.D.	Pass	
Poly(2,6-diphenyl-p-phenylene oxide)	10/60	N.D.	N.D.	Pass	
95% Ethanol(v/v)	10/60	N.D.	N.D.	Pass	
Isooctane	10/60	N.D.	N.D.	Pass	

Note: 1. mg/dm₂ = 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.

Soluble heavy metal

Method: Inductively coupled plasma atomic emission spectrometry (ICP-AES) was used for analysis.

Test Condition: 100°C 4Hour

Elements	Ва	Co	Cu	Fe	705 Li 175	Mn	Zn		
Limit (mg/kg)	15 TEST 178 27	0.05	5	48	0.6	0.6	25	Conclusion	
Material No.	The Learning	The Learing	R	esult (mg	/kg)	E NE Lestin	The Testing		
001	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	Pass	

Note: 1. mg/kg = milligrams of the constituents released per kilogram of foodstuff.

2. The requirement in accordance with the Commission Regulation (EU) No 10/2011.



Primary aromatic amines

Method: With reference to EN 13130-1:2004, was analyzed by Ultraviolet-visible spectrometer (UV-Vis).

Test Condition: 100°C 4Hour

Item	Unit	Result	Limit	Conclusion
Les testing the testing the testing	The state of the s	001	te time the testing	
3% Acetic acid(w/v)	mg/kg	N.D.	0.01	Pass

Note: 1. mg/kg = milligrams of the constituents released per kilogram of foodstuff.

2. The requirement in accordance with the Commission Regulation (EU) No 10/2011.

Specific migration of Bisphenol A (BPA)

Method: With reference to CEN/TS 13130-13:2005, analyzed by High Performance Liquid Chromatograph (HPLC-DAD).

Test Condition: 100℃ 4Hour

162 118 112 182 118 112 182 118 112	10 2 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	Result	The results of the second	Conclusion
Leging The	Unit	001	Limit	621 118 12 1521
3% Acetic acid(w/v)	mg/kg	N.D.	0.6	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 10/2011.

Bisphenol A (BPA) Content

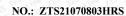
Method: Solvent extraction, analyzed by High Performance Liquid Chromatograph (HPLC-DAD)..

Test Condition: 100°C 4Hour

Unit	Result	Limit	Conclusion	
	001	10 12 100 100 175 100 175 100 175 100 175 100 175 100 175 100 175 100 175 100 175 100 175 100 175 100 175 100 1	108 1/2 102/11/18 1/2 10	
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.





Specific migration of Formaldehyde

Method: With reference to CEN/TS 13130-23:2005, analyzed by Ultraviolet visible Spectroscopy (UV-Vis).

Test Condition: 100°C 4Hour

ltem	17 19 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	Result	Limit	Conclusion	
Les les lus Te les lus Ne les lus 2 les lus Les lus Me les lus	Unit	001	esting The Lesting	12 Leg 148 142 Leg	
3% Acetic acid(w/v)	mg/kg	N.D.	15	Pass	

Note: 1. mg/kg = milligrams of the constituents released per kilogram of foodstuff.

2. The requirement in accordance with the Commission Regulation (EU) No 10/2011.

Specific migration of Melamine

Method: With reference to CEN/TS 13130-27:2005, analyzed by High Performance Liquid Chromatograph (HPLC-DAD).

Test Condition: 100°C 4Hour

Lesting The Lesting The Lesting	Unit		Limit	Conclusion	
The results have been some the results and the results and the results are such as the results are suc	OR TO LESS THE TO	001	12 108 12 162 108 15 108 12 162 108 1	12 Lezcius 12 Lez Lezcius 12 Lez	
3% Acetic acid(w/v)	mg/kg	N.D.	2.5	Pass	

Note: 1. mg/kg = milligrams of the constituents released per kilogram of foodstuff.

2. The requirement in accordance with the Commission Regulation (EU) No 1282/2011.

Specific migration of Caprolactam

Method: With reference to CEN/TS 13130-16:2005, analyzed by High Performance Liquid Chromatograph (HPLC-DAD).

Test Condition: 100°C 4Hour

12 Leg 1118 112 Leg 1118 112 Leg 1118 1	The Mait We less	Unit		Conclusion
5 12 25 14 12 15 15 14 14 15 15 11 11 11 11 11 11 11 11 11 11 11	The Log Time 12	001	Limit	5 Testing 175 Test
3% Acetic acid(w/v)	mg/kg	N.D.	15	Pass

Note: 1. mg/kg = milligrams of the constituents released per kilogram of foodstuff.

2. The requirement

NO.: ZTS21070803HRS



Sensorial examination odour and taste test.

Test Method: With reference to DIN 10955:2004

Test media: Deionized Water

Test Item(s).	Limit.	Result	Conclusion
	Le Lesting 112 Lesting	002	112 122 152 1108 112 1
Sensorial examination odour (Point scale)	2.5.	N.D.	Pass
Sensorial examination taste (Point scale)	2.5.	N.D.	Pass

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/ dm²)	MDL	Maximum	Conclusion
The Lip Les The Size Les The Size Les The Size Les The Size Les The Size Les The Lip Les The Size Les The Size Les Size Les The Size Les The Size Les	002	(mg/ dm ²)	Permissible Limit (mg/dm²)	2 Lear 148 172 Lear 148 Lear 1
Extractable Lead	Test in Uts Test N.D. Test in Ut	0.002	0.003	Pass
Extractable Cadmium	Te stine IT TE N.D. IT TESTINE	0.002	0.002	Pass
Extractable Mercury	N.D. 15 Testing ITS N.D. 18 Testing	0.002	0.002	Pass

Note: 1. mg/dm² = 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
18 Lesting 12 Lesting 12 Lesting	115 Test 118 175	002	Tie lear the Ti	Permissible Limit	Learling Tile Lea
PCP Content	mg/kg	N.D.	0.1	0.15	Pass

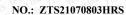
Note: mg/kg = ppm

Preserving effect.

Test Method: With reference to EN 1104:2005.

Tested Fungus	Test result.	Specification	Conclusion	
	002	115 tes in 115 test in 115 test in 115	Les TUR LIZ LESTI	
Bacillus subtilis ATCC No. 6633.	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).

75 108 15 75 108 16 10 10 10 10 10 10 10 10 10 10 10 10 10	Test result.	" 12 Lezring 12 Lezring 12 Lezr	Canalysian	
	002	Limit	Conclusion	
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 100 125 155 100 115 155 100 115 155 100 1	Unit	Test result.	MDL	Limit	Conclusion
1 Liz Lez (148 / Liz		002			
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
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.

	Unit	Test result.	MDL	Limit	Conclusion
Extractable formaldehyde	mg/dm ² .	N.D.	0.1	12 162 118 12	Pass

Picture of sample





Photo 1



Photo 2

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