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Applicant:	Mid Ocean Brands B.V.		

Address: 7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.

 The following sample(s) information and test item(s) were submitted and identified by/on behalf of the applicant

 Sample Name:
 MO6971

 Vendor code:
 117444

Sample Receiving Date:Apr. 19, 2023Testing Period:Apr. 20, 2023 to Jun. 08, 2023

Signed for and on behalf of LST

Rory / Technical Manager



Zhejiang Lisen Testing Technology Co.,

Address:5 Floor,Building 13,Yiwu Science&Technology Park, No.968 Xuefeng West Road,Yiwu,Zhejiang,China

Tel: 86-579-85573858 E-mail: zj@lisenlab.com URL: http://www.lisenlab.com



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Summary of Test Result(s):

No.	Test Sample	Test Requested	Result(s)
1	Tested materials of submitted samples	Annex XVII items 63 of the REACH Regulation (EC) No 1907/2006 & amended (EU) No 836/2012 & (EU) No 2015/628 - Lead content	PASS
2	Tested materials of submitted samples	Annex XVII items 23 of the REACH Regulation (EC) No 1907/2006 & commission regulation(EU) No.494/2011 & amended (EU) No. 835/2012 & (EU) No 217/2016 - Cadmium content ⁿ	PASS
3	Tested materials of submitted samples	Annex XVII items 51&52 of the REACH Regulation (EC) No 1907/2006 & amended (EC) No. 552/2009&(EU) 2018/2005 - Phthalates	PASS
4	Tested materials of submitted samples	Annex XVII items 50 of the REACH Regulation (EC) No 1907/2006 Class II - Polycyclic Aromatic Hydrocarbons (PAHs)	PASS
5	Tested materials of submitted samples	Annex XVII items 43 of the REACH Regulation (EC) No 1907/2006 & amended (EC) No. 552/2009 - Azo colorants and Azo dyes	PASS
6	Tested materials of submitted samples	Client's requirements on colorfastness to rubbing ⁿ	PASS
7	Tested materials of submitted samples	Commission Regulation (EU) No 10/2011 and its subsequent amendment Regulation EU No.1282/2011, 1183/2012, 202/2014 and Regulation (EU) 2016/1416, (EU) 2017/752, (EU) 2018/213, (EU) 2020/1245 on plastic materials and articles intended to come into contact with foodstuffs, General Requirement(Article 3) in EU Regulation No. 1935/2004 - Overall migration ⁿ - Specific Migration of Heavy Metal ^s - Specific Migration of Bisphenol A ^s - Specific migration test of Primary Aromatic Amine for plastic ^s	PASS
8	Tested materials of submitted samples	Framework Resolution ResAP(2004) 5 on silicones used for food contact applications. - Overall migration ⁿ	PASS
9	Tested materials of submitted samples	French Arrêté du 25 Novembre 1992 and French Décret 2007-766 with amendments - Volatile organic matter - Peroxide residues ^s - Specific migration of Organotin ^s	PASS

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10	Tested materials of submitted samples	CM/Res(2013)9 on metals and alloys used in food contact materials and articles. - Specific release of metals ^s	PASS
11	Tested materials of submitted samples	Migration of Bisphenol A ^{s n}	PASS
12	Tested materials of submitted samples	Client's requirement on Bisphenol A (BPA) ^{sn} content	PASS

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Sample Description

Component Description	Location					
Silvery metal	Inside of cup					
Black plastic	Lid					
Gray plastic	Waterproof plug					
White silicone	Seal ring					
White plastic	Sucker					
Black leatherette	Cup sleeve					
Black paint	Coating of cup					
Silvery plating metal	Connect buckle					
Silvery plating metal	Buckle cap					
Silvery plating metal	Base of buckle					
Black fiber	Bottom of cup cover					
	Component Description Silvery metal Black plastic Gray plastic White silicone White plastic Black leatherette Black paint Silvery plating metal Silvery plating metal Silvery plating metal					

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Photo of sample



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Test Result(s):

Annex XVII items 63 of the REACH - Lead content

Method:

Metal - With reference to CPSC-CH-E1001-08.3,

Nonmetal - With reference to CPSC-CH-E1002-08.3,

Surface coating - With reference to CPSC-CH-E1003-09.1,

analyzed by Atomic Absorption Spectroscopy (AAS).

Material No.	Limit (mg/kg)	Result (mg/kg)	Conclusion
01	500	10	PASS
(02+05) 🔺	500	N.D.	PASS
(03+04) 🔺	500	N.D.	PASS
06	500	N.D.	PASS
07	500	N.D.	PASS
(08+09+10) 🔺	500	13	PASS

Note: 1. mg/kg = milligram per kilogram (ppm).

- 2. N.D. = Not Detected (< RL).
- 3. RL (Reporting Limit) = 10 mg/kg.
- 4. "▲"this data for several samples of mixed test results, the actual data of one or several samples in mixed samples are likely more than the results, please be careful to use this data.

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Annex XVII items 23 of the REACH - Cadmium contentⁿ

<u>Method:</u>

Metal - With reference to CPSC-CH-E1001-08.3,

Nonmetal - With reference to CPSC-CH-E1002-08.3,

Surface coating - With reference to CPSC-CH-E1003-09.1,

analyzed by Atomic Absorption Spectroscopy (AAS).

Material No.	Limit (mg/kg)	Result (mg/kg)	Conclusion
01	100	N.D.	PASS
(02+05) 🔺	100	N.D.	PASS
(03+04) 🔺	100	N.D.	PASS
06	100	N.D.	PASS
07	1000	N.D.	PASS
(08+09+10) 🔺	100	N.D.	PASS

Note: 1. mg/kg = milligram per kilogram (ppm).

- 2. N.D. = Not Detected (< RL).
- 3. RL (Reporting Limit) = 5 mg/kg.
- 4. "▲"this data for several samples of mixed test results, the actual data of one or several samples in mixed samples are likely more than the results, please be careful to use this data.
- 5. Items marked with "n" means they are not accredited by CNAS.



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Annex XVII items 51&52 of the REACH - Phthalates

<u>Method:</u>With reference to ISO 8124-6:2018(E) Method C,Internal standard(IS) calibration,was analyzed by Gas Chromatograph-Mass Spectrometer (GC-MS).

Substances	DBP	BBP	DEHP	DIBP	SUM	DNOP	DIDP	DINP	SUM	
CAS No.	01 71 2	95 69 7	117-81-7	94 60 F		117-84-0	26761-40-0	28553-12-0		
CAS NO.	04-74-2	00-00-7	11/-01-/	04-09-5		117-04-0	/68515-49-1	/68515-48-0		0
Limit (%)					0.1				0.1	Conclusion
RL(%)	0.005	0.005	0.005	0.005		0.005	0.01	0.01		
Material No.					Resu	lt (%)				
(02+05) 🔺	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	PASS
(03+04) 🔺	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	PASS
06	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	PASS
07	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	PASS

Note: 1. mg/kg = milligram per kilogram (ppm).

- 2. 1%= 10000mg/kg
- 3. N.D. = Not Detected (< RL).
- 4. RL= Reporting Limit.
- 5. The DBP,BBP,DEHP and DIBP shall not be used as substances or in mixtures, in concentrations greater than 0.1% by weight of the plasticised material, in toys and childcare articles.
- 6. The DNOP,DIDP and DINP shall not be used as substances or in mixtures, in concentrations greater than 0.1% by weight of the plasticised material, in toys and childcare articles which can be placed in the mouth by children.
- 7. "▲"this data for several samples of mixed test results, the actual data of one or several samples in mixed samples are likely more than the results, please be careful to use this data.



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Annex XVII items 50 of the REACH - Polycyclic Aromatic Hydrocarbons (PAHs)

<u>Method</u>: With reference to AfPS GS 2019:01 PAK, analyzed by Gas Chromatograph-Mass Spectrometry (GC-MS).

		Limit (mg/kg)			Result (mg/kg)			
Test Substance	CAS No.	Ι	Π	III	(02+05) ▲	(03+04) ▲	06	07
Benzo[a]anthracene(BaA)	56-55-3		1	0.5	N.D.	N.D.	N.D.	N.D.
Chrysene (CHR)	218-01-9		1	0.5	N.D.	N.D.	N.D.	N.D.
Benzo[b]fluoranthene(BbFA)	205-99-2		1	0.5	N.D.	N.D.	N.D.	N.D.
Benzo[k]fluoranthene(BkFA)	207-08-9		1	0.5	N.D.	N.D.	N.D.	N.D.
Benzo[a]pyrene(BaP)	50-32-8	1	1	0.5	N.D.	N.D.	N.D.	N.D.
Dibenzo[a,h]anthracene(DBAhA)	53-70-3		1	0.5	N.D.	N.D.	N.D.	N.D.
Benzo[e]pyrene(BeP)	192-97-2		1	0.5	N.D.	N.D.	N.D.	N.D.
Benzo[j]fluoranthene(BjFA)	205-82-3		1	0.5	N.D.	N.D.	N.D.	N.D.
SUM	SUM 10					N.D.	N.D.	N.D.
Conclus	PASS	PASS	PASS	PASS				

Note: 1. mg/kg = milligram per kilogram (ppm).

- 2. N.D. = Not Detected (<RL).
- 3. RL (Reporting Limit) = 0.2 mg/kg.
- 4. "--" = Not Regulated.
- 5. Product Class:
 - I = Extender oils.

II = Rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use.

III = Toys, including activity toys, and childcare articles, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use.

6. "▲"this data for several samples of mixed test results, the actual data of one or several samples in mixed samples are likely more than the results, please be careful to use this data.



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Annex XVII items 43 of the REACH - Azo colourants and Azo dyes

<u>Method:</u> With reference to BS EN ISO 14362-1:2017, calibration using internal standard, Analyzed by Gas Chromatograph-Mass Spectrometry (GC-MS).

No.	Substances Name	CAS No.	Limit	Result (mg/kg)
NO.		CAS NO.	(mg/kg)	11*
1	biphenyl-4-ylamine/ 4-aminodiphenyl/ xenylamine	92-67-1	30	N.D.
2	benzidine	92-87-5	30	N.D.
3	4-chloro-o-toluidine	95-69-2	30	N.D.
4	2-naphthylamine	91-59-8	30	N.D.
5∆	o-aminoazotoluene/ 4-o-tolylazo-o-toluidine/ 4-amino-2', 3-dimethylazobenzene	97-56-3	30	N.D.
6△	2-amino-4-nitrotoluene/ 5-nitro-o-toluidine	99-55-8	30	N.D.
7	4-chloroaniline	106-47-8	30	N.D.
8	4-methoxy-m-phenylenediamine	615-05-4	30	N.D.
9	4,4'-methylenedianiline/ ,4'-diaminodiphenylmethane	101-77-9	30	N.D.
10	3,3'-dichlorobenzidine/ 3,3'-dichlorobiphenyl-4,4'-ylenediamine	91-94-1	30	N.D.
11	3,3'-dimethoxybenzidine/ o-dianisidine	119-90-4	30	N.D.
12	3,3'-dimethylbenzidine/ 4,4'-bi-o-toluidine	119-93-7	30	N.D.
13	4,4'-methylenedi-o-toluidine	838-88-0	30	N.D.
14	6-methoxy-m-toluidine/ p-cresidine	120-71-8	30	N.D.
15	4,4'-methylene-bis-(2-chloroaniline)/ 2,2'-dichloro-4,4'-methylene-dianiline	101-14-4	30	N.D.
16	4,4'-oxydianiline	101-80-4	30	N.D.
17	4,4'-thiodianiline	139-65-1	30	N.D.
18	o-toluidine/ 2-aminotoluene	95-53-4	30	N.D.
19	4-methyl-m-phenylenediamine/ 2,4-toluylendiamine	95-80-7	30	N.D.
20	2,4,5-trimethylaniline	137-17-7	30	N.D.
21	o-anisidine / 2-methoxyaniline	90-04-0	30	N.D.
22◇	4-aminoazobenzene	60-09-3	30	N.D.
	Conclusion		PASS	

Note: 1. mg/kg = milligram per kilogram (ppm).

- 2. N.D. = Not Detected (< RL).
- 3. RL (Reporting Limit) = 5 mg/kg.

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- 4. "△" = The CAS No. 97-56-3 (No.5) and 99-55-8 (No.6) are further reduced to CAS No.95-53-4 (No.18) and 95-80-7(No.19).
- "◊" = Azo colorants that are able to form 4-aminoazobenzene(No.22), generate under the condition of this method aniline and 1, 4-phenylenediamine, therefore, the method of BS EN ISO 14362-3:2017 was employed to verify the 4-aminoazobenzene.
- 6. The colorant was extracted from the sample by xylene.
- 7. "*"= Sample receiving date is May. 16, 2023.

Colorfastness to rubbing ⁿ

Method: With reference to ISO 105-X12:2016

Material No.	Test Item	Client's Limit (Grade)	Results (Grade)	Conclusion
4.4.*	Dry(Color Staining)	≥2-3	4-5	PASS
11*	Wet(Color Staining)	≥2-3	3	PASS

Note: 1. The friction head used in this test is a cylinder with a diameter of (16 ± 0.1) mm;

2. The humidity conditioning time of the sample and the friction cloth is 6 hours;

3. The moisture content of wet rubbing cloth is 100%.

- 4. "*"= Sample receiving date is May. 16, 2023.
- 5. Items marked with "n" means they are not accredited by CNAS.



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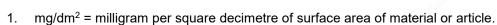
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Overall migration ⁿ

Method: With reference to EN 1186-1:2002 & EN 1186-3:2002 method 1a

Material No.	Test Condition		Limit (mg/dm ²)	Result (mg/dm²)	Conclusion
	1 st test	3% Acetic acid(w/v), 70 $^\circ\!{\rm C}$, 2 hours	10	<3	PASS
	2 nd test	3% Acetic acid(w/v), 70 $^\circ\!\!{\rm C}$, 2 hours	10	<3	PASS
0.2	3 rd test	3% Acetic acid(w/v), 70 $^\circ\!{\rm C}$, 2 hours	10	<3	PASS
02	1 st test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	2 nd test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	3 rd test	50% Ethanol(v/v), 70 $^\circ\!\!\mathbb{C}$, 2 hours	10	<3	PASS
	1 st test	3% Acetic acid(w/v), 70 $^\circ\!\mathrm{C}$, 2 hours	10	<3	PASS
	2 nd test	3% Acetic acid(w/v), 70 $^\circ\!\mathrm{C}$, 2 hours	10	<3	PASS
004	3 rd test	3% Acetic acid(w/v), 70 $^\circ\!\mathrm{C}$, 2 hours	10	<3	PASS
03Δ	1 st test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	2 nd test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	3 rd test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	1 st test	3% Acetic acid(w/v), 70℃, 2 hours	10	<3	PASS
	2 nd test	3% Acetic acid(w/v), 70℃, 2 hours	10	<3	PASS
	3 rd test	3% Acetic acid(w/v), 70℃, 2 hours	10	<3	PASS
04	1 st test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	2 nd test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	3 rd test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	1 st test	3% Acetic acid(w/v), 70℃, 2 hours	10	<3	PASS
	2 nd test	3% Acetic acid(w/v), 70 $^\circ \!\! \mathbb{C}$, 2 hours	10	<3	PASS
05	3 rd test	3% Acetic acid(w/v), 70℃, 2 hours	10	<3	PASS
05	1 st test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	2 nd test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS
	3 rd test	50% Ethanol(v/v), 70℃, 2 hours	10	<3	PASS



- 2. Items marked with "n" means they are not accredited by CNAS.
- 3. " Δ "= Sample receiving date is May. 20, 2023.

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Specific Migration of Heavy Metal ^s

Test Method : With reference to EN 13130-1:2004, analysis was performed by ICP-OES and ICP-MS Simulant used : 3% Acetic acid

Test condition: 70℃ for 2 hours

Teet Kern			Result (mg/kg)			
Test Item	RL(mg/kg)	Limit (mg/kg)	02			
(Unit :mg/kg)			1 st test	2 nd test	3 rd test	
1. Barium(Ba)	0.1	1	N.D.	N.D.	N.D.	
2. Cobalt(Co)	0.05	0.05	N.D.	N.D.	N.D.	
3. Copper(Cu)	1	5	N.D.	N.D.	N.D.	
4. Iron(Fe)	1	48	N.D.	N.D.	N.D.	
5. Lithium(Li)	0.1	0.6	N.D.	N.D.	N.D.	
6. Manganese(Mn)	0.1	0.6	N.D.	N.D.	N.D.	
7. Zinc(Zn)	1	5	N.D.	N.D.	N.D.	
8. Aluminum(Al)	0.1	1	N.D.	N.D.	N.D.	
9. Nickel(Ni)	0.01	0.02	N.D.	N.D.	N.D.	
10. Antimony (Sb)	0.002	0.04	N.D.	N.D.	N.D.	
11. Arsenic(As)	0.01	0.01	N.D.	N.D.	N.D.	
12. Cadmium(Cd)	0.002	0.002	N.D.	N.D.	N.D.	
13. Chromium(Cr)	0.01	0.01	N.D.	N.D.	N.D.	
14. Lead(Pb)	0.01	0.01	N.D.	N.D.	N.D.	
15. Mercury(Hg)	0.01	0.01	N.D.	N.D.	N.D.	
16. Europium(Eu)	0.002		N.D.	N.D.	N.D.	
17. Gadolinium(Gd)	0.002		N.D.	N.D.	N.D.	
18. Lanthanum(La)	0.002	SUM: 0.05	N.D.	N.D.	N.D.	
19. Terbium(Tb)	0.002		N.D.	N.D.	N.D.	
	Conclusion		PASS			



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				Result (mg/kg)	
Test Item	RL(mg/kg)	Limit (mg/kg)		03Δ	
(Unit :mg/kg)	S		1 st test	2 nd test	3 rd test
20. Barium(Ba)	0.1	1	N.D.	N.D.	N.D.
21. Cobalt(Co)	0.05	0.05	N.D.	N.D.	N.D.
22. Copper(Cu)	1	5	N.D.	N.D.	N.D.
23. Iron(Fe)	1	48	N.D.	N.D.	N.D.
24. Lithium(Li)	0.1	0.6	N.D.	N.D.	N.D.
25. Manganese(Mn)	0.1	0.6	N.D.	N.D.	N.D.
26. Zinc(Zn)	1	5	N.D.	N.D.	N.D.
27. Aluminum(Al)	0.1	1	N.D.	N.D.	N.D.
28. Nickel(Ni)	0.01	0.02	N.D.	N.D.	N.D.
29. Antimony (Sb)	0.002	0.04	N.D.	N.D.	N.D.
30. Arsenic(As)	0.01	0.01	N.D.	N.D.	N.D.
31. Cadmium(Cd)	0.002	0.002	N.D.	N.D.	N.D.
32. Chromium(Cr)	0.01	0.01	N.D.	N.D.	N.D.
33. Lead(Pb)	0.01	0.01	N.D.	N.D.	N.D.
34. Mercury(Hg)	0.01	0.01	N.D.	N.D.	N.D.
35. Europium(Eu)	0.002		N.D.	N.D.	N.D.
36. Gadolinium(Gd)	0.002		N.D.	N.D.	N.D.
37. Lanthanum(La)	0.002	SUM: 0.05	N.D.	N.D.	N.D.
38. Terbium(Tb)	0.002		N.D.	N.D.	N.D.
	Conclusion	12		PASS	

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Test Item				Result (mg/kg)	
	RL(mg/kg)	Limit (mg/kg)			
(Unit :mg/kg)	0		1 st test	2 nd test	3 rd test
. Barium(Ba)	0.1	1	N.D.	N.D.	N.D.
2. Cobalt(Co)	0.05	0.05	N.D.	N.D.	N.D.
3. Copper(Cu)	1	5	N.D.	N.D.	N.D.
4. Iron(Fe)	1	48	N.D.	N.D.	N.D.
5. Lithium(Li)	0.1	0.6	N.D.	N.D.	N.D.
6. Manganese(Mn)	0.1	0.6	N.D.	N.D.	N.D.
7. Zinc(Zn)	1	5	N.D.	N.D.	N.D.
8. Aluminum(Al)	0.1	1	N.D.	N.D.	N.D.
9. Nickel(Ni)	0.01	0.02	N.D.	N.D.	N.D.
10. Antimony (Sb)	0.002	0.04	N.D.	N.D.	N.D.
11. Arsenic(As)	0.01	0.01	N.D.	N.D.	N.D.
12. Cadmium(Cd)	0.002	0.002	N.D.	N.D.	N.D.
13. Chromium(Cr)	0.01	0.01	N.D.	N.D.	N.D.
14. Lead(Pb)	0.01	0.01	N.D.	N.D.	N.D.
15. Mercury(Hg)	0.01	0.01	N.D.	N.D.	N.D.
16. Europium(Eu)	0.002		N.D.	N.D.	N.D.
17. Gadolinium(Gd)	0.002		N.D.	N.D.	N.D.
18. Lanthanum(La)	0.002	SUM: 0.05	N.D.	N.D.	N.D.
19. Terbium(Tb)	0.002		N.D.	N.D.	N.D.
	Conclusion			PASS	

Note: 1. mg/Kg = ppm=parts per million

- 2. N.D. = Not Detected (< RL).
- 3. RL= Reporting Limit.
- 4. Items marked "s" means the item of subcontractor. The subcontractor is Guangdong Safety Testing Co., Ltd. (CNAS No.L7462, subcontractor report No. SFT23042244048E(R1))
- 5. " Δ "= Sample receiving date is May. 20, 2023.



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Volatile organic matter (VOM)ⁿ

Method: With reference to FrenchArrêté du 25 November 1992, ANNEX III

Material No.	Limit(%)	Result(%)	Conclusion
04	0.5	0.22	PASS

Note: 1. % = Percentage by weight.

2. Items marked with "n" means they are not accredited by CNAS.

Peroxide value ^s

Method: With reference to European Pharmacopoeia (2005).

Material No.	Limit(mg/kg)	Result(mg/kg)	Conclusion
04	Absent	Absent	PASS

Note: 1. Items marked with "n" means they are not accredited by CNAS.

2. Items marked "s" means the item of subcontractor. The subcontractor is Guangdong Safety Testing Co., Ltd. (CNAS No.L7462, subcontractor report No. SFT23042244048E(R1))

Specific Migration of Organotin (as Tin) $^{\rm s}$

<u>Method:</u>With reference to Commission Regulation (EU) No 10/2011 of 14 January 2011 Annex III and Annex V for selection of condition and EN13130-1:2004 for selection of test methods; analysis was performed by ICP-OES.

Material No.		Test Condition	Limit (mg/kg)	Result (mg/kg)	Conclusion
	1 st test	70 $^\circ\!\!\!\mathrm{C}$ for 2 hours in 3%Acetic acid (w/V)	0.1	<0.01	PASS
04	2 nd test	70 $^\circ\!\!\!\mathrm{C}$ for 2 hours in 3%Acetic acid (w/V)	0.1	<0.01	PASS
	3 rd test	70°C for 2 hours in 3%Acetic acid (w/V)	0.1	<0.01	PASS

Note: 1. mg/kg = milligrams per kilogram.

- 2. The result express as Tin.
- 3. Items marked "s" means the item of subcontractor. The subcontractor is Guangdong Safety Testing Co., Ltd. (CNAS No.L7462, subcontractor report No. SFT23042244048E(R1))



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Specific Release of 23 Metals migration^s

Test Method : With reference to Council of Europe Resolution CM/Res (2013)9 on metals and alloys used in food contact materials and articles, analysis was performed by ICP-OES and ICP-MS

Test Item	MDL		Sum (1 st + 2	Sum (1 st + 2 nd migration)		3 rd migration	
(Unit :mg/kg)	1 st + 2 nd	3 rd	01#	SRL	01#	SRL	
1)Aluminum(Al)	2	1	N.D.	35	N.D.	5	
2)Antimony (Sb)	0.02	0.01	N.D.	0.28	N.D.	0.04	
3)Chromium(Cr)	0.002	0.001	N.D.	1.75	N.D.	0.25	
4)Cobalt(Co)	0.002	0.001	N.D.	0.14	N.D.	0.02	
5)Copper(Cu)	2	1	N.D.	28	N.D.	4	
6)Iron(Fe)	2	1	N.D.	280	N.D.	40	
7) Magnesium(Mg)	2	1	N.D.		N.D.		
8)Manganese(Mn)	0.2	0.1	N.D.	12.6	N.D.	1.8	
9)Molybdenum(Mo)	0.02	0.01	N.D.	0.84	N.D.	0.12	
10)Nickel(Ni)	0.1	0.05	N.D.	0.98	N.D.	0.14	
11) Silver(Ag)	0.02	0.01	N.D.	0.56	N.D.	0.08	
12) Tin(Sn)	2	1	N.D.	700	N.D.	100	
13) Titanium(Ti)	2	1	N.D.		N.D.		
14) Vanadium(V)	0.002	0.001	N.D.	0.07	N.D.	0.01	
15) Zinc(Zn)	2	1	N.D.	35	N.D.	5	
16) Arsenic(As)	0.0002	0.0001	N.D.	0.014	N.D.	0.002	
17) Barium(Ba)	0.2	0.1	N.D.	8.4	N.D.	1.2	
18) Beryllium(Be)	0.002	0.001	N.D.	0.07	N.D.	0.01	
19) Cadmium(Cd)	0.002	0.001	N.D.	0.035	N.D.	0.005	
20) Lead(Pb)	0.002	0.001	N.D.	0.07	N.D.	0.01	
21) Lithium(Li)	0.02	0.01	N.D.	0.336	N.D.	0.048	
22) Mercury(Hg)	0.0002	0.0001	N.D.	0.021	N.D.	0.003	
23) Thallium(TI)	0.0002	0.0001	N.D.	0.0007	N.D.	0.0001	
Co	nclusion			PAS	S		

Test condition: 70°C, 2 hr(s), 0.5% Citric acid

Note: 1. mg/Kg = ppm=parts per million

- 2. MDL = Method detection limit
- 3. SRL = Specific release limit

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- 4. Items marked "s" means the item of subcontractor. The subcontractor is Guangdong Safety Testing Co., Ltd. (CNAS No.L7462, subcontractor report No. SFT23042244048E(R1))
- 5. "#"= Sample receiving date is May. 15, 2023.

Specific Migration of Bisphenol A^s <u>Method:</u>With reference to BS EN 13130-1:2004.

Material No.	Test Condition		Limit (mg/kg)	Result (mg/kg)	Conclusion
	1 st test	70 $^\circ\!\!{\rm C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS
02	2 nd test	70 $^\circ\!\!\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS
	3 rd test	70 $^\circ\!\!\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS
2	1 st test	70 $^\circ\!\!\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS
03Δ	2 nd test	70 $^\circ\!\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS
	3 rd test	70 $^\circ \!\!\! \mathbb{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS
	1 st test	70 $^\circ\!\!\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS
05	2 nd test	70 $^\circ\!\!\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS
	3 rd test	70 $^\circ\!\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.01	PASS

Note: 1. mg/kg = milligrams per kilogram.

- 2. The result express as Tin.
- 3. Items marked "s" means the item of subcontractor. The subcontractor is Guangdong Safety Testing Co., Ltd. (CNAS No.L7462, subcontractor report No. SFT23042244048E(R1))
- 4. "Δ"= Sample receiving date is May. 20, 2023.

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Specific Migration of Bisphenol A^{s n} Method:With reference to BS EN 13130-1:2004.

Material No.		Test Condition	Client's Limit (mg/kg)	Result (mg/kg)	Conclusion
	1 st test	70 $^\circ\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.05	PASS
04	2 nd test	70 $^\circ\!\!\mathrm{C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.05	PASS
	3 rd test	70 $^\circ\!\!{\rm C}$ for 2 hrs in 3%Acetic acid (w/V)	0.05	<0.05	PASS

Note: 1. mg/kg = milligrams per kilogram.

- 2. The result express as Tin.
- 3. Items marked "s" means the item of subcontractor. The subcontractor is Guangdong Safety Testing Co., Ltd. (CNAS No.L7462, subcontractor report No. SFT23042244048E(R1))
- 4. Items marked with "n" means they are not accredited by CNAS.

Specific Migration of Primary Aromatic Amine ^s

Test Method: To refer to EN 13130-1:2004, the analysis was performed by GC-MS.

Test Condition: Sample preparation in 3% acetic acid at 70°C, 2h (three times).

Test Item	Limit (mg/kg)	MDL (mg/kg)	Result (mg/kg) 02			
(Unit :mg/kg)			1 st test	2 nd test	3 rd test	
4-Aminobiphenyl	Non-detectable	0.002	N.D.	N.D.	N.D.	
Benzidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
4-Chloro-o-toluidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
2-Naphthylamine	Non-detectable	0.002	N.D.	N.D.	N.D.	
O-Aminoazotoluene	Non-detectable	0.002	N.D.	N.D.	N.D.	
2-amino-4-nitrotoluene	Non-detectable	0.002	N.D.	N.D.	N.D.	
p-chloroaniline	Non-detectable	0.002	N.D.	N.D.	N.D.	
2,4-diaminoanisole	Non-detectable	0.002	N.D.	N.D.	N.D.	
4,4'-diaminodiphenylmethane	Non-detectable	0.002	N.D.	N.D.	N.D.	
3,3'-dichlorobenzidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
3,3'-dimethoxybenzidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
3,3'-dimethylbenzidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
3,3'-dimethyl-4,4'-	Non-detectable	0.002	N.D.	N.D.	N.D.	

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				tank and the second	
diaminodiphenylmethane					
p-cresidine	Non-detectable	0.002	N.D.	N.D.	N.D.
4,4' -methylene-bis-(2- chloroaniline)	Non-detectable	0.002	N.D.	N.D.	N.D.
4,4' -oxydianiline	Non-detectable	0.002	N.D.	N.D.	N.D.
4,4' -thiodianiline	Non-detectable	0.002	N.D.	N.D.	N.D.
o-toluidine	Non-detectable	0.002	N.D.	N.D.	N.D.
2,4-diaminotoluene	Non-detectable	0.002	N.D.	N.D.	N.D.
2,4,5-trimethylaniline	Non-detectable	0.002	N.D.	N.D.	N.D.
2-methoxyaniline	Non-detectable	0.002	N.D.	N.D.	N.D.
4-aminoazobenzene	Non-detectable	0.002	N.D.	N.D.	N.D.
1,3-phenylenediamine	Non-detectable	0.002	N.D.	N.D.	N.D.
2,4-xylidine		0.002	N.D.	N.D.	N.D.
2,6-xylidine		0.002	N.D.	N.D.	N.D.
p-Phenylenediamine	SUM: <0.01	0.002	N.D.	N.D.	N.D.
Aniline		0.002	N.D.	N.D.	N.D.
Conclu	ision			PASS	•

Test Item			Result (mg/kg)			
	Limit (mg/kg)	RL (mg/kg)	03			
(Unit :mg/kg)			1 st test	2 nd test	3 rd test	
4-Aminobiphenyl	Non-detectable	0.002	N.D.	N.D.	N.D.	
Benzidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
4-Chloro-o-toluidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
2-Naphthylamine	Non-detectable	0.002	N.D.	N.D.	N.D.	
O-Aminoazotoluene	Non-detectable	0.002	N.D.	N.D.	N.D.	
2-amino-4-nitrotoluene	Non-detectable	0.002	N.D.	N.D.	N.D.	
p-chloroaniline	Non-detectable	0.002	N.D.	N.D.	N.D.	
2,4-diaminoanisole	Non-detectable	0.002	N.D.	N.D.	N.D.	
4,4'-diaminodiphenylmethane	Non-detectable	0.002	N.D.	N.D.	N.D.	
3,3'-dichlorobenzidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
3,3'-dimethoxybenzidine	Non-detectable	0.002	N.D.	N.D.	N.D.	
3,3'-dimethylbenzidine	Non-detectable	0.002	N.D.	N.D.	N.D.	

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N.D. N.D. N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D. N.D.	N.D. N.D. N.D. N.D.
N.D. N.D. N.D.	N.D. N.D.	N.D. N.D.
N.D. N.D.	N.D.	N.D.
N.D.		
	N.D.	
N.D.		N.D.
	N.D.	N.D.
N.D.	N.D.	N.D.
	PASS	
-	N.D.	N.D. N.D. N.D. N.D. N.D. N.D. N.D. N.D.

Test Item (Unit :mg/kg)	Limit (mg/kg)	RL (mg/kg)	Result (mg/kg)		
			05		
			1 st test	2 nd test	3 rd test
4-Aminobiphenyl	Non-detectable	0.002	N.D.	N.D.	N.D.
Benzidine	Non-detectable	0.002	N.D.	N.D.	N.D.
4-Chloro-o-toluidine	Non-detectable	0.002	N.D.	N.D.	N.D.
2-Naphthylamine	Non-detectable	0.002	N.D.	N.D.	N.D.
O-Aminoazotoluene	Non-detectable	0.002	N.D.	N.D.	N.D.
2-amino-4-nitrotoluene	Non-detectable	0.002	N.D.	N.D.	N.D.
p-chloroaniline	Non-detectable	0.002	N.D.	N.D.	N.D.
2,4-diaminoanisole Non-detectable		0.002	N.D.	N.D.	N.D.
4,4'-diaminodiphenylmethane	Non-detectable	0.002	N.D.	N.D.	N.D.
3,3'-dichlorobenzidine Non-detectable		0.002	N.D.	N.D.	N.D.
3,3'-dimethoxybenzidine Non-detectable		0.002	N.D.	N.D.	N.D.
3,3'-dimethylbenzidine	Non-detectable	0.002	N.D.	N.D.	N.D.

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Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
Non-detectable	0.002	N.D.	N.D.	N.D.		
	0.002	N.D.	N.D.	N.D.		
	0.002	N.D.	N.D.	N.D.		
SUM: <0.01	0.002	N.D.	N.D.	N.D.		
	0.002	N.D.	N.D.	N.D.		
Conclusion				PASS		
	Non-detectable Non-detectable Non-detectable Non-detectable Non-detectable Non-detectable Non-detectable Non-detectable Non-detectable SUM: <0.01	Non-detectable 0.002 Non-detectable 0.002	Non-detectable 0.002 N.D. SUM: <0.01	Non-detectable 0.002 N.D. N.D. SUM: <0.01		

- **Note:** 1. mg/Kg = ppm=parts per million
 - 2. N.D. = Not Detected (< RL(Reporting Limit)).
 - Items marked "s" means the item of subcontractor. The subcontractor is EMTEK(DONGGUAN) Co., Ltd. (CNAS No.L7462, subcontractor report No. EDG2305220229C00101R & EDG2305150004C00101R.



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Bisphenol A (BPA)^{s n}

Method: In house method.

Material No.	Client's Limit (mg/kg)	Result (mg/kg)	Conclusion
02	N.D.	N.D.	PASS
03	N.D.	N.D.	PASS
04	N.D.	N.D.	PASS
05	N.D.	N.D.	PASS

Note: 1. mg/kg = milligram per kilogram (ppm).

- 2. N.D. = Not Detected (< RL).
- 3. RL(Reporting Limit) =0.1mg/kg.
- 4. Items marked "s" means the item of subcontractor. The subcontractor is Guangdong Safety Testing Co., Ltd. (subcontractor report No. SFT23060545515E)
- 5. Items marked with "n" means they are not accredited by CNAS.

Remark:

This report is a revised document for Report No. LST23040051ENS1. Report No. LST23040051ENS1 is replaced and invalidated automatically from the approval date of this report.

End of Report

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