



■ 식품 · 의약품분야 시험 · 검사 등에 관한 법률 시행규칙[별지 제 10 호서식]

시험 · 검사성적서(국외시험 · 검사기관용)
Certificate of Laboratory Testing

발행번호 Issue No.		721669876		접수일자 Date of receipt		06-Jan-2022~13-May-2022	
국외시험 · 검사기관 소재국 Country of laboratory		China		시험 · 검사일자 Date of testing		06-Jan-2022~23-May-2022	
의뢰자/수출자 Client/Exporter	성명 Name	SANMEI YANG		회사명 Company name	HUNAN ZHONGGU SCIENCE AND TECHNOLOGY CO.,LTD		
	주소(또는 소재지) Address (Location)	No.058, Yinzhou North Road, Industrial Concentration Zone, Jinzhou New District, Ningxiang County, Hunan Province, China					
	전화번호/팩스번호/전자우편 Tel. No./FAX No./E-mail	86-715-832-9888 guangshen@vip.163.com					
수입자 Importer	성명 Name	Song Kyoung Taek		회사명 Company name	NEXTCUBECOMPANY CO.,LTD.		
	주소(또는 소재지) Address (Location)	32-8, Muran 2-gil, Soheul-eup, Pocheon-si, Gyeonggi-do, Republic of Korea (Zip code: 11184)					
	전화번호/팩스번호/전자우편 Tel. No./FAX No./E-mail	(T) 82+031-544-3999 / (F) 82+031-543-8896 richard@nextcc.co.kr					
	제품명 Product name	Vending Machine		수입량(총중량) Import quantity (Total weight)	5,345 Kg	포장단위 Packing unit	20 EA
선적항 공항 Port/Airport of loading		Incheon Port		운송방법 Transportation method		BY Sea	
제조번호 Manufacturer serial number		/		제조연월일 Date of manufacture		2022.01.03	
시료명(제품명) Sample name(Product name)		Vending Machine		유통기한 Expiration date		-	
시료채취지역 Place of sampling		No.058, Yinzhou North Road, Industrial Concentration Zone, Jinzhou New District, Ningxiang County, Hunan Province, China		시료채취일 Date of sampling		2022.01.05	



시험 · 검사항목 Test items	시험 · 검사방법 Test methods	시험기준 · 규격 Test standards	시험 · 검사 결과값 Test results	비 고 Remarks
Refer to next page	Refer to next page	Refer to next page	Refer to next page	검출한계(LOD) Refer to next page 정량한계(LOQ) Refer to next page
<p>년 year 2022 월 month May 일 day 23</p> <p>국외시험 · 검사기관 소재지 Address of laboratory</p> <p>B-3/4, No.1999 Du Hui Road, Minhang District Shanghai 201108, P.R. China</p> <p>국외시험 · 검사기관 명칭 Name of laboratory TÜV SÜD Products Testing (Shanghai) Co., Ltd.</p> <p>국외시험 · 검사기관 서명권자 Authorized signatory of laboratory (서명 signature) <i>Zhang Chuang</i></p>				

* Any contradictions between different versions of translations shall be referred to the English version.



SUBJECT Chemical Test

TEST LOCATION TÜV SÜD China

TÜV SÜD Products Testing (Shanghai) Co., Ltd.
B-3/4, No.1999 Du Hui Road, Minhang District
Shanghai 201108, P.R. China

CLIENT NAME NEXTCUBECOMPANY CO.,LTD.

CLIENT ADDRESS 32-8, Muran 2-gil, Soheul-eup, Pocheon-si, Gyeonggi-do, Republic of Korea

TEST PERIOD 06-Jan-2022~23-May-2022

RESULT SUMMARY

The tested items **complied with** Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages.

- Extractable Heavy metal test (Cd, Pb, Ni, CrVI, As) 001~002 PASS
- Overall migration test 003~011 PASS
- Specific migration of Lead 003~011 PASS
- Consumption of Potassium Permanganate 003~006, 010~011 PASS
- Lead content 007~009 PASS
- Cadmium content 007~009 PASS
- Specific migration of Phenol 007~009 PASS
- Specific migration of Formaldehyde 004, 007~009 PASS
- Specific migration of Zinc 007~009 PASS

Prepared By

Nance Gao

(Nance Gao)
Report Drafter

Authorized By

Zhang Chuang

(Zhang Chuang)
Authorized Signatory

Note: (1) General Terms & Conditions as mentioned overleaf. (2) The results relate only to the items tested.(3) The test report shall not be reproduced except in full without the written approval of the laboratory.(4) Without the agreement of the laboratory, the client is not authorized to use the test results for unapproved propaganda.


RECEIPT DATE/ TEST DATE

06-Jan-2022~13-May-2022 / 06-Jan-2022~23-May-2022

THE FOLLOWING SAMPLE(S) WAS/WERE SUBMITTED

BY/ ON BEHALF OF THE CLIENTS AS

Sample Name: Vending Machine
Sample Specification: /
Batch No./Date: /
Manufacturer: /

SAMPLE NO.	TEST PART	DESCRIPTION	PHOTOGRAPH
721669876-1	001	Silvery metal	
721669876-2	002	Silvery metal	
721669876-3	003	White plastic	
721669876-4	004	White plastic	
721669876-5-3	005	Black plastic	

721669876-6	006	Red plastic	
721669876-7	007	White silicone rubber	
721669876-8	008	Ivory silicone rubber	
721669876-9	009	Black silicone rubber	
721669876-10	010	Ivory plastic	
721669876-11	011	Black plastic	

TEST RESULT(S)

- Extractable Heavy metal test (Cd, Pb, Ni, CrVI, As)
 - Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2.2-1, 2.2-2, 2.2-54, 2.2-4, 2.2-9
 - Sample 001~002 migration ratio (S/V): 5dm²/L

Test Item(s)	Test Condition	Result(s) [mg/L]	Maximum	Comment
--------------	----------------	------------------	---------	---------



		001	Permissible Limit [mg/L]	
Cd	Water, 70°C for 30 min	<0.01	0.1	PASS
Pb		<0.1	0.4	PASS
Ni		<0.01	0.1	PASS
CrVI		<0.01	0.1	PASS
As (as As ₂ O ₃)		<0.01	0.2	PASS

Test Item(s)	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		002		
Cd	Water, 70°C for 30 min	<0.01	0.1	PASS
Pb		<0.1	0.4	PASS
Ni		<0.01	0.1	PASS
CrVI		<0.01	0.1	PASS
As (as As ₂ O ₃)		<0.01	0.2	PASS

2. Overall migration test

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-8 Overall migration Test Method
- Sample 003~011 migration ratio (S/V): 5 dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		003		
20% Ethanol	70°C for 30 min	<5.00	30	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		004		
20% Ethanol	70°C for 30 min	<5.00	30	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		005 *		
20% Ethanol	70°C for 30 min	<10	30	PASS

Note: 1. * denotes this test was carried out by external laboratory assessed as competent



Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		006		
20% Ethanol	70°C for 30 min	<5.00	30	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		007		
Water	70°C for 30 min	<5.00	60	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		008		
Water	70°C for 30 min	10.8	60	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		009		
Water	70°C for 30 min	<5.00	60	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		010		
20% Ethanol	70°C for 30 min	<5.00	30	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		011		
20% Ethanol	70°C for 30 min	<5.00	30	PASS

3. Specific migration of Lead

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-1 Lead Test Method b. Migrant Test
- Sample 003~011 migration ratio (S/V): 5 dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		003		



4% Acetic acid	70°C for 30 min	<0.01	1.0	PASS
----------------	-----------------	-------	-----	------

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		004		
4% Acetic acid	70°C for 30 min	<0.01	1.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		005 *		
4% Acetic acid	70°C for 30 min	<0.1	1.0	PASS

Note: 1. * denotes this test was carried out by external laboratory assessed as competent

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		006		
4% Acetic acid	70°C for 30 min	<0.01	1.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		007		
4% Acetic acid	70°C for 30 min	<0.01	1.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		008		
4% Acetic acid	70°C for 30 min	<0.01	1.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		009		
4% Acetic acid	70°C for 30 min	<0.01	1.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum	Comment
------------------	----------------	------------------	---------	---------



		010	Permissible Limit [mg/L]	
4% Acetic acid	70°C for 30 min	<0.01	1.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		011		
4% Acetic acid	70°C for 30 min	<0.01	1.0	PASS

4. Consumption of Potassium Permanganate

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-7 Consumption of potassium permanganate Test Method
- Sample 003~006, 010~011 migration ratio (S/V): 5 dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		003		
Water	70°C for 30 min	0.666	10	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		004		
Water	70°C for 30 min	1.47	10	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		005 *		
Water	70°C for 30 min	1	10	PASS

Note: 1. * denotes this test was carried out by external laboratory assessed as competent

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		006		
Water	70°C for 30 min	0.634	10	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum	Comment
------------------	----------------	------------------	---------	---------



		010	Permissible Limit [mg/L]	
Water	70°C for 30 min	0.669	10	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		011		
Water	70°C for 30 min	1.27	10	PASS

5. Lead Content

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-1 Lead Test Method a. Residue Test

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Comment
	007		
Lead Content	<2	100	PASS

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Comment
	008		
Lead Content	<2	100	PASS

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Comment
	009		
Lead Content	<2	100	PASS

6. Cadmium Content

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-2 Cadmium Test Method a. Residue Test

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Comment
	007		
Cadmium Content	<2	100	PASS

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Comment
	008		
Cadmium Content	<2	100	PASS

Test Item(s)	Result(s) [mg/kg]	Maximum Permissible Limit [mg/kg]	Comment
	009		
Cadmium Content	<2	100	PASS

7. Specific migration of Phenol

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-26 Phenol Test Method
- Sample 007~009 migration ratio (S/V): 5 dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		007		
4% Acetic acid	70°C for 30 min	<5.0	5.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		008		
4% Acetic acid	70°C for 30 min	<5.0	5.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		009		
4% Acetic acid	70°C for 30 min	<5.0	5.0	PASS

8. Specific migration of Formaldehyde

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-26 Formaldehyde Test Method and IV. 2. 2-27 Formaldehyde Test Method
- Sample 004, 007~009 migration ratio (S/V): 5 dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		004		



4% Acetic acid	70°C for 30 min	<4.0	4.0	PASS
----------------	-----------------	------	-----	------

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		007		
4% Acetic acid	70°C for 30 min	<4.0	4.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		008		
4% Acetic acid	70°C for 30 min	<4.0	4.0	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		009		
4% Acetic acid	70°C for 30 min	<4.0	4.0	PASS

9. Specific migration of Zinc

- Test method: In accordance with Korean Ministry of Food and Drug Safety Standards and Specifications for Utensils, Containers and Packages IV. 2. 2-50 Zinc Test Method
- Sample 007~009 migration ratio (S/V): 5 dm²/L

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		007		
4% Acetic acid	70°C for 30 min	<0.01	15	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		008		
4% Acetic acid	70°C for 30 min	0.03	15	PASS

Simulant(s) Used	Test Condition	Result(s) [mg/L]	Maximum Permissible Limit [mg/L]	Comment
		009		
4% Acetic acid	70°C for 30 min	<0.01	15	PASS

Whole product:



Note: 1. This report is for internal use only such as internal scientific research, education, quality control, product R&D.

-END OF THE TEST REPORT-