FCM TEST REPORT

Applicant	Hangzhou Yihan Network Technology Co., Ltd.
Address	Unit 19A07, 18th Floor, T2 Office Tower Runao Business Centre Xiaoshan District, Hangzhou
Manufacture	Ningbo Poogoo Electrical Appliance Co., Ltd.
Address	Puyan Village Ditang Street Yuyao Zhejiang China
Sample Name	Water Kettle
Model	PK-3018
Serial Model	/
Trademark	/
Date of Receipt	Dec. 05, 2025
Date of Test	Dec. 06, 2025 to Dec. 12, 2025
Date of Report	Dec. 12, 2025
Test laboratory	Guangdong KAIXU Testing Technology Co., Ltd.
Test location	Room 215, Building 2, No. 123, Dongcheng Section, Guanlong Road, Dongcheng Street, Dongguan City, Guangdong Province, China

Test Conclusion:

Test Requested	Conclusion
As specified by client with German Food, Articles of Daily Use and Feed Code of September 1, 2005(LFGB), Section 30&31. European Commission Directive 1935/2004/EC, Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190 on plastic materials and articles intended to come into contact with food Council of Europe committee of ministers (partial agreement in the social and public health field) Resolution AP(89)1 on the use of colourants in plastic materials coming into contact with food Resolution Res AP (2004)5 on silicones used for food contact applications.	**PASS**

****** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) ******

Signed for and on behalf of KAIXU Test International

GUANGDONG KAIXU TESTING TECHNOLOGY CO., LTD KTi APPROVAL

Tested by: Cathy Approved by: Martin

Summary of Test Results:

Test Requested		Conclusion
As specified by client with German Food, Articles of Daily Use and Feed Code of September 1, 2005(LFGB), Section 30&31. European Commission Directive 1935/2004/EC, Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190 on plastic materials and articles intended to come into contact with food Council of Europe committee of ministers (partial agreement in the social and public health field) Resolution AP(89)1 on the use of colourants in plastic materials coming into contact with food Resolution Res AP (2004)5 on silicones used for food contact applications.		
1. For Material: Silicone		
1.1	Overall Migration Test	**PASS**
1.2	Peroxide value Test	**PASS**
1.3	Sensorial Examination Odour And Taste Test	**PASS**
1.4	PAH content Test	**PASS**
1.5	Migration of PAH	**PASS**
1.6	Organotin content Test (Monobutyltin, Dibutyltin, Tributyltin, Tetrabutyltin, Triphenyltin, Mono-octyltin, Di-octyltin)	**PASS**
1.7	Total Migration Test	**PASS**
1.8	Visible Color Migration Test	**PASS**
1.9	Volatile organic matter (VOM) Test	**PASS**
1.10	Heavy metal Test	**PASS**
2. For Material: Nylon		
2.1	Overall Migration Test	**PASS**
2.2	Migration of Primary Aromatic Amines	**PASS**
2.3.1	Migration of Heavy Metals	**PASS**
2.3.2	Soluble 19 Heavy metal (Ba, Co, Cu, Fe, Li, Mn, Zn, Al, Ni, Sb, As, Cd, Cr, Hg, Pb, Eu, Gd, La, Tb)	**PASS**
2.4	Specific migration of 1,3-butadiene	**PASS**
2.5	1,3-butadiene content	**PASS**
2.6	Specific migration of Acrylonitrile	**PASS**
2.7	Phthalate Test	**PASS**
2.8	Migration of PAH	**PASS**
2.9	PAH content	**PASS**
2.10	BPA Test	**PASS**
2.11	Sensory test-taste and odour to the integrate product	**PASS**
2.12	Visible Color Migration Test	**PASS**

3. For Material: Stainless Steel		
3.1	Sensorial examination odour and taste test	**PASS**
3.2	Migration of Heavy Metals	**PASS**
3.3	Overall migration	**PASS**
4. For Materials: PP		
4.1	Overall Migration	**PASS**
4.2	Sensorial Examination Odour and Taste	**PASS**
4.3	Visible Color Migration	**PASS**
4.4	Overall Migration	**PASS**
4.5	Migration of PAH	**PASS**
4.6	Specific Migration of 19 Heavy metals in 3% acetic acid	**PASS**
4.7	BPA	**PASS**
4.8	Specific Migration of Octene in olive oil	**PASS**
4.9	Specific Migration of Hexene in olive oil	**PASS**

Test Material Area and Simulant Liquid Volume

Material No.	Material Area	Simulant Volume
1	1dm^2	150ml
2	1dm^2	150ml
3	1dm^2	150ml
4	1dm^2	150ml
5	1dm^2	150ml

Test Result:

1. For Material: Silicone

1.1 Overall Migration Test

Test Method: Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190.With reference to EN 13130-1:2004, EN 1186-1:2002, EN 1186-2:2022, EN 1186-3:2022

Stimulant used	Test condition	Test Result (mg/dm^2)			MDL (mg/dm^2)	Limit (mg/dm^2)
		No.1				
		1st	2nd	3rd		
3 % acetic acid	0.5 hour at 100℃	N.D.	N.D.	N.D.	2.0	10
10 % ethanol	0.5 hour at 100℃	N.D.	N.D.	N.D.	2.0	10
50 % ethanol	0.5 hour at 100℃	N.D.	N.D.	N.D.	2.0	10

Note：

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

1.2 Peroxide value Test

Test Method: With reference to European pharmacopoeia, 2005 Appendix X F. Peroxide Value method A.

Test Item(s)	Limit	Result
		No.1
Peroxide Value	Absent	Absent

1.3 Sensorial examination odour and taste Test

Test Method: Sensorial examination odour and taste test with reference to DIN 10955-2023-02;
Test condition: Odour test: 23℃, 24 hours;
Taste test: sunflower oil, 100℃, 1 hour.

Test Item(s)	Result	Maximum Permissilbe Limit
	No.1	
Sensorial examination odor (Point scale)	0	2.5
Sensorial examination taste (Point scale)	0	2.5

Note:
Odour/Taste Grade
0= No perceptible difference
1= Just perceivable difference (still difficult to define)
2= Slight difference
3= Marked difference
4= Strong difference
5. This part of the test is holistic test

1.4 PAHS Test

Test Result:

Compound	CAS No.	Unit	Test Method/ Test Equipment	MDL	Result
					No.1
(1) Naphthalene (NAP)	91-20-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(2) Phenanthrene (PHE)	85-01-8	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(3) Anthracene (ANT)	120-12-7	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(4) Fluoranthene (FLT)	206-44-0	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(5) Pyrene (PYE)	129-00-0	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(6)Benzo[a]anthracene (BaA)	56-55-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(7)Chrysene (CHR)	218-01-9	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(8)Benzo[b]fluoranthene (BbF)	205-99-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(9)Benzo[k]fluoranthene (BkF)	207-08-9	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(10).Benzo[a]pyrene (BaP)	50-32-8	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(11)Indeno[1,2,3-cd]pyrene (IPY)	193-39-5	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(12)Dibenzo[a,h]anthracene (DBA)	53-70-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(13)Benzo[g,hi]perylene (BPE)	191-24-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(14)Benzo[j]fluoranthene	205-82-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(15) Benzo[e]pyrene	192-97-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
Sum of PAHs	--	mg/kg	--	--	N.D.

Note：

1. mg/kg= ppm
2. N.D.=Not Detected (<MDL)
3. MDL =Method Detection Limit

AfPS GS 2019:01: Restraining maximum values for products

Unit: mg/kg

Parameter	Category 1	Category 2		Category 3	
	Materials intended to be placed into the mouth, or Materials in toys or articles for children up to 3 years of age with intended long-term skin contact (more than 30 s)	Materials that do not fall into Category 1 with intended or foreseeable long-term skin contact (more than 30 s) or repeated short-term skin contact		Materials that do neither fall into Category 1 nor 2 with intended or foreseeable short-term skin contact (up to 30 s)	
	--	Use by children	Other Products	Use by children	Other Products
Benzo[a]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[e]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[a]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[b]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[j]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[k]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo[a,h]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[g,hi]perylene	<0.2	<0.2	<0.5	<0.5	<1
Indeno[1,2,3-cd]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Phenanthrene, Pyrene, Anthracene, Fluoranthene	<1 Sum	<5 Sum	<10 Sum	<20 Sum	<50 Sum
Naphthalene	<1	<2		<10	
Sum of all 15 PAH	<1	<5	<10	<20	<50

1.5 Migration of PAH Test

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

Test Condition: 3% Acetic acid: 100℃, 1 h

Test Item(s)	Unit	Test result			MDL	Limit
		No.1				
		1st	2nd	3rd		
(1) Naphthalene (NAP)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(2) Phenanthrene (PHE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(3) Anthracene (ANT)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(4) Fluoranthene (FLT)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(5) Pyrene (PYE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(6)Benzo[a]anthracene (BaA)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(7)Chrysene (CHR)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(8)Benzo[b]fluoranthene (BbF)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(9)Benzo[k]fluoranthene (BkF)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(10).Benzo[a]pyrene (BaP)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(11)Indeno[1,2,3-cd]pyrene (IPY)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(12)Dibenzo[a,h]anthracene (DBA)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(13)Benzo[g,hi]perylene (BPE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(14)Benzo[j]fluoranthene	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(15) Benzo[e]pyrene	mg/kg	N.D.	N.D.	N.D.	0.01	0.01

Note:

1. mg/kg= ppm
2. N.D.=Not Detected (<MDL)
3. MDL =Method Detection Limit

1.6 Organotin content Test (Monobutyltin, Dibutyltin, Tributyltin, Tetrabutyltin, Triphenyltin, Mono-octyltin, Di-octyltin)

Test Method: Solvent extraction followed by analysis using GC-MS.

Test Item(s)	Limit	Unit	MDL	Result
				No.1
Monobutyl tin (MBT)	Absent	mg/kg	0.02	N.D.
Dibutyl tin (DBT)	Absent	mg/kg	0.02	N.D.
Tributyl tin (TBT)	Absent	mg/kg	0.02	N.D.
Monooctyl tin (MOT)	Absent	mg/kg	0.02	N.D.
Tetrabutyl tin (TTBT)	Absent	mg/kg	0.02	N.D.
Dioctyl tin (DOT)	Absent	mg/kg	0.02	N.D.
Triphenyl tin (TPT)	Absent	mg/kg	0.02	N.D.

Note：

mg/kg= ppm=0.0001%

N.D.=Not Detected(<MDL)

MDL = Method Detection Limit

1.7 Total Migration Test

Resolution Res AP (2004)5 on silicones used for food contact applications

Test Method: With reference to EN 13130-1:2004, Regulation (EU) 2024/3190, EN 1186-1:2002, EN 1186-2:2022, EN 1186-3:2022

Test Result: (No.1)

Stimulant used	Test condition	Test Result (mg/dm²)			Maximum permissible Limit (mg/dm²)
		1st	2nd	3rd	
3 % acetic acid	2 hours at 100℃	<2.0	<2.0	<2.0	10
10 % ethanol	2 hours at 100℃	<2.0	<2.0	<2.0	10

1.8 Visible Color Migration Test

Test Method: With reference to DM 21-03-1973.

Test Result: (No.1)

Simulant used	Test condition	optical transmission limit (%)	Test result (%)
Deionized water	2 hours at 70℃	95	98
Acetic acid 3 % (w/v)	2 hours at 70℃	95	97

1.9 Volatile organic matter (VOM) Test

Test Method: With reference to 60. Mitteilung ber dieUntersuchung von Kunststoffen, Bundesgesundheitsbl 45 (2002) 462 and LFGB § 64 BVL B 80.30.1(EG)

Test Result: (No.1)

Test Item(s)	Limit	Unit	MDL	Result
Volatile organic matter (VOM)	0.5	% (w/w)	0.1	0.1

Notes: %(w/w) =percentage of weight by weight

1.10 Heavy metal Test

Test Method: samples are chemically digested using acids in order to get a clear solution and performed by ICP.

Test Item(s)	Limit (mg/kg)	Result (mg/kg)	MDL (mg/kg)
		No.1	
Lead (Pb)	--	N.D.	0.01
Cadmium(Cd)	--	N.D.	0.01

Note：

mg/kg= ppm=0.0001%

N.D.=Not Detected(<MDL)

MDL = Method Detection Limit

2. For Material: Nylone

2.1 Overall Migration Test

Test Method: With reference to EN 13130-1:2004, Regulation (EU) 2024/3190, EN 1186-1:2002, EN 1186-3:2002, EN1186-14:2002

Stimulant used	Test condition	Test Result (mg/dm^2)			Maximum permissible Limit (mg/dm^2)
		No.2			
		1st	2nd	3rd	
Deionized Water	1 hour at 70℃	<2.0	<2.0	<2.0	10
3 % Acetic Acid	1 hour at 100℃	<2.0	<2.0	<2.0	10
10 % Ethanol	1 hour at 100℃	<2.0	<2.0	<2.0	10
95 % Ethanol	1 hour at 100℃	<2.0	<2.0	<2.0	10
20 % Ethanol	1 hour at 100℃	<2.0	<2.0	<2.0	10
50 % Ethanol	1 hour at 100℃	<2.0	<2.0	<2.0	10
Iso-octane	1 hour at 100℃	<2.0	<2.0	<2.0	10

Note：

Analytical tolerance of aqueous simulants is 1 mg/dm^2

2.1 Migration of Primary Aromatic Amines test

Test Method: Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190, With reference to EN 13130-1:2004, analysis was performed by LC-MS

Test Condition: 0.5 hour at 100℃in 3% Acetic acid

No.	Name	CAS No.	Result(mg/kg)			MDL (mg/kg)	Limit (mg/kg)
			No.2				
			1st	2nd	3rd		
1	4-Aninobiphenyl	92-67-1	N.D.	N.D.	N.D.	0.002	0.002
2	4-Chloro-o-toluidine	95-69-2	N.D.	N.D.	N.D.	0.002	0.002
3	2-Naphthylamine	91-59-8	N.D.	N.D.	N.D.	0.002	0.002
4	o-Aminoazotoluene	97-56-3	N.D.	N.D.	N.D.	0.002	0.002
5	2-Amino-4-nitrotoluene	99-55-8	N.D.	N.D.	N.D.	0.002	0.002
6	p-Chloroaniline	106-47-8	N.D.	N.D.	N.D.	0.002	0.002
7	2,4-Diaminoanisole	615-05-4	N.D.	N.D.	N.D.	0.002	0.002
8	4,4’-Diaminobiphenylmethane	101-77-9	N.D.	N.D.	N.D.	0.002	0.002
9	3,3’-Dichlorobenzidine	91-94-1	N.D.	N.D.	N.D.	0.002	0.002
10	3,3’-Dmethoxybenzidine	119-90-4	N.D.	N.D.	N.D.	0.002	0.002
11	3,3’-Dimethylbenzidine	119-93-7	N.D.	N.D.	N.D.	0.002	0.002
12	3,3’-Dimethyl-4,4-diaminobiphenylmethane	838-88-0	N.D.	N.D.	N.D.	0.002	0.002
13	p-Cresidine	120-71-8	N.D.	N.D.	N.D.	0.002	0.002
14	4,4’-Methylene-bis-（2-chloroaniline）	101-214-4	N.D.	N.D.	N.D.	0.002	0.002
15	4,4’-Oxydianiline	101-80-4	N.D.	N.D.	N.D.	0.002	0.002
16	4,4’-Thiodianiline	139-65-1	N.D.	N.D.	N.D.	0.002	0.002
17	o-Toluidine	95-53-4	N.D.	N.D.	N.D.	0.002	0.002
18	2,4-Toluylendiamine	95-80-7	N.D.	N.D.	N.D.	0.002	0.002
19	2,4,5-Trimethylaniline	137-17-7	N.D.	N.D.	N.D.	0.002	0.002
20	o-Anisidine	90-04-0	N.D.	N.D.	N.D.	0.002	0.002
21	2,4-Xylidine	95-68-1	N.D.	N.D.	N.D.	0.002	0.002
22	2,6-Xylidine	87-62-7	N.D.	N.D.	N.D.	0.002	0.002
23	SUM	--	N.D.	N.D.	N.D.	--	0.01

Note：

1. mg/kg=ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

4. Primary aromatic amines (“PAAs”) listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council (*) and for which no migration limit is specified in Table 1 of Annex I shall not migrate or shall not otherwise be released from plastic materials and articles into food or food simulant. They shall not be detectable using analytical equipment with a limit of detection of 0.002 mg/kg food or food simulant applied to each individual primary aromatic amine (“PAA”), in accordance with Article 11(4). For PAAs not listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006, but for which no specific migration limit is specified in Annex I, compliance with Article 3 of Regulation (EC) No 1935/2004 shall be verified in accordance with Article 19. The sum of those PAAs shall however not exceed 0.01 mg/kg in food or food simulant.

2.3.1 Migration of Heavy Metals

Test Method: Regulation (EU) 2024/3190, With reference to EN 13130-1:2004, analysis was performed by ICP-MS
Test Condition: 40℃ for 2 hours in 3% Acetic acid

Test Item(s)	Unit	Result			MDL	Limit
		No.2				
		1st	2nd	3rd		
Soluble Aluminium (Al)	mg/kg	N.D.	N.D.	N.D.	0.01	1
Soluble Ammonium	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Antimony(Sb)	mg/kg	N.D.	N.D.	N.D.	0.01	0.04
Soluble Arsenic(As)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Barium(Ba)	mg/kg	N.D.	N.D.	N.D.	0.01	1
Soluble Cadmium(Cd)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Calcium(Ca)	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Chromium(Cr)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Cobalt(Co)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Copper(Cu)	mg/kg	N.D.	N.D.	N.D.	0.01	5
Soluble Europium(Eu)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Gadolinium(Gd)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Iron(Fe)	mg/kg	N.D.	N.D.	N.D.	0.01	48
Soluble Lanthanum(La)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Lead(Pb)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Lithium(Li)	mg/kg	N.D.	N.D.	N.D.	0.01	0.6
Soluble Magnesium(Mg)	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Manganese(Mn)	mg/kg	N.D.	N.D.	N.D.	0.01	0.6
Soluble Mercury(Hg)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Nickel(Ni)	mg/kg	N.D.	N.D.	N.D.	0.01	0.02
Soluble Potassium(K)	mg/kg	N.D.	N.D.	N.D.	0.01	--

Test Item(s)	Unit	Result			MDL	Limit
		No.2				
		1st	2nd	3rd		
Soluble Sodium(Na)	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Terbium(Tb)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Zinc(Zn)	mg/kg	N.D.	N.D.	N.D.	0.01	5

Note：

1. mg/kg = ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

2.3.2 Soluble 19 Heavy metal

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

Test Condition: 40℃ for 2 hours in 3% Acetic acid

Test Item(s)	Unit	Result			MDL	Limit
		No.2				
		1st	2nd	3rd		
Soluble Barium(Ba)	mg/kg	N.D.	N.D.	N.D.	0.01	1
Soluble Cobalt(Co)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Copper(Cu)	mg/kg	N.D.	N.D.	N.D.	0.01	5
Soluble Iron(Fe)	mg/kg	N.D.	N.D.	N.D.	0.01	48
Soluble Lithium(Li)	mg/kg	N.D.	N.D.	N.D.	0.01	0.6
Soluble Manganese(Mn)	mg/kg	N.D.	N.D.	N.D.	0.01	0.6
Soluble Zinc(Zn)	mg/kg	N.D.	N.D.	N.D.	0.01	5
Soluble Aluminium (Al)	mg/kg	N.D.	N.D.	N.D.	0.01	1
Soluble Nickel(Ni)	mg/kg	N.D.	N.D.	N.D.	0.01	0.02
Soluble Antimony(Sb)	mg/kg	N.D.	N.D.	N.D.	0.01	0.04
Soluble Arsenic(As)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Cadmium(Cd)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Chromium(Cr)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Mercury(Hg)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Lead(Pb)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Europium(Eu)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Gadolinium(Gd)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Lanthanum(La)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05

Test Item(s)	Unit	Result			MDL	Limit
		No.2				
		1st	2nd	3rd		
Soluble Terbium(Tb)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05

Note：

1. mg/kg = ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

2.4 Specific migration of 1,3-butadiene

Simulant Used	Time	Temperature	Limit	Result		
				No.2		
				1st	2nd	3rd
Distilled Water	0.5 h	40 ℃	Prohibition	<0.02 mg/kg	<0.02 mg/kg	<0.02 mg/kg
3% Acetic Acid	0.5 h	40 ℃	Prohibition	<0.02 mg/kg	<0.02 mg/kg	<0.02 mg/kg
10% Ethanol	0.5 h	40 ℃	Prohibition	<0.02 mg/kg	<0.02 mg/kg	<0.02 mg/kg

2.5 Total 1,3-butadiene

Total Butadiene for Plastic Materials in Contact with Foodstuffs – Commission Regulation (EU) No. 10/2011 and Its Amendments Regulation (EU) 2020/1245

Test Method: Solvent extraction followed by analysis using GC-MS.

Test Item(s)	Unit	MDL	Limit	Result
				No.2
Total 1,3-butadiene	mg/kg	0.01	1	N.D.

2.6 Specific migration of Arcylonitrile

Simulant Used	Time	Temperature	Limit(mg/kg)	Result		
				No.2		
				1st	2nd	3rd
Distilled Water	0.5 h	40 ℃	0.01	<0.01	<0.01	<0.01
3% Acetic Acid	0.5 h	40 ℃	0.01	<0.01	<0.01	<0.01
10% Ethanol	0.5 h	40 ℃	0.01	<0.01	<0.01	<0.01
20% Ethanol	0.5 h	40 ℃	0.01	<0.01	<0.01	<0.01
50% Ethanol	0.5 h	40 ℃	0.01	<0.01	<0.01	<0.01

2.7 Phthalate test

Test Method: Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190, With reference to EN 13130-1:2004, EN 1186-1:2002, EN 1186-2:2022, EN1186-3:2022. analysis was performed by GC-MS

Total Phthalate

Test Item(s)	Unit	Result	MDL	Limit
		No.2		
Dibutyl Phthalate(DBP)	mg/kg	N.D.	30	500
Benzylbutyl Phthalate (BBP)	mg/kg	N.D.	30	1000
Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	N.D.	30	1000
Diisononyl Phthalate(DINP)	mg/kg	N.D.	100	1000
Di-n-octyl Phthalate(DNOP)	mg/kg	N.D.	30	1000
Diisodecyl Phthalate (DIDP)	mg/kg	N.D.	100	1000

Phthalate Migration

Test Condition: 3% Acetic acid: 100℃, 0.5 hour

Test Item(s)	Unit	Result			MDL	Limit
		No.2				
		1st	2nd	3rd		
Dibutyl Phthalate(DBP)	mg/kg	N.D.	N.D.	N.D.	0.05	0.12
Benzylbutyl Phthalate (BBP)	mg/kg	N.D.	N.D.	N.D.	0.2	6
Di-(2-ethylhexyl) Phthalate(DEHP)	mg/kg	N.D.	N.D.	N.D.	0.2	0.6
Diisononyl Phthalate(DINP)	mg/kg	N.D.	N.D.	N.D.	0.2	1.8
Di-n-octyl Phthalate(DNOP)	mg/kg	N.D.	N.D.	N.D.	0.2	5
Diisodecyl Phthalate (DIDP)	mg/kg	N.D.	N.D.	N.D.	0.2	9

Note：

1. mg/kg=ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

2.8 Migration of PAH

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

Test Condition: 3% Acetic acid: 100℃, 1 h

Test Item(s)	Unit	Result			MDL	Limit
		No.2				
		1st	2nd	3rd		
(1) Naphthalene (NAP)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(2) Phenanthrene (PHE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(3) Anthracene (ANT)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(4) Fluoranthene (FLT)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(5) Pyrene (PYE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(6)Benzo[a]anthracene (BaA)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(7)Chrysene (CHR)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(8)Benzo[b]fluoranthene (BbF)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(9)Benzo[k]fluoranthene (BkF)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(10).Benzo[a]pyrene (BaP)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(11)Indeno[1,2,3-cd]pyrene (IPY)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(12)Dibenzo[a,h]anthracene (DBA)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(13)Benzo[g,hi]perylene (BPE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(14)Benzo[j]fluoranthene	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(15) Benzo[e]pyrene	mg/kg	N.D.	N.D.	N.D.	0.01	0.01

Note:

1. mg/kg= ppm
2. N.D.=Not Detected (<MDL)
3. MDL =Method Detection Limit

2.9 PAHS test

Test Result (No.2):

Compound	CAS No.	Unit	Test Method/ Test Equipment	MDL	Result
(1) Naphthalene (NAP)	91-20-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(2) Phenanthrene (PHE)	85-01-8	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(3) Anthracene (ANT)	120-12-7	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(4) Fluoranthene (FLT)	206-44-0	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(5) Pyrene (PYE)	129-00-0	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(6)Benzo[a]anthracene (BaA)	56-55-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(7)Chrysene (CHR)	218-01-9	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(8)Benzo[b]fluoranthene (BbF)	205-99-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(9)Benzo[k]fluoranthene (BkF)	207-08-9	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(10).Benzo[a]pyrene (BaP)	50-32-8	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(11)Indeno[1,2,3-cd]pyrene (IPY)	193-39-5	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(12)Dibenzo[a,h]anthracene (DBA)	53-70-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(13)Benzo[g,hi]perylene (BPE)	191-24-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(14)Benzo[j]fluoranthene	205-82-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(15) Benzo[e]pyrene	192-97-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
Sum of PAHs	--	mg/kg	--	--	N.D.

Note:

1. mg/kg= ppm
2. N.D.=Not Detected (<MDL)
3. MDL =Method Detection Limit

AfPS GS 2019:01: Restraining maximum values for products

Unit: mg/kg

Parameter	Category 1	Category 2		Category 3	
	Materials intended to be placed into the mouth, or Materials in toys or articles for children up to 3 years of age with intended long-term skin contact (more than 30 s)	Materials that do not fall into Category 1 with intended or foreseeable long-term skin contact (more than 30 s) or repeated short-term skin contact		Materials that do neither fall into Category 1 nor 2 with intended or foreseeable short-term skin contact (up to 30 s)	
	--	Use by children	Other Products	Use by children	Other Products
Benzo[a]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[e]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[a]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[b]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[j]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[k]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo[a,h]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[g,hi]perylene	<0.2	<0.2	<0.5	<0.5	<1
Indeno[1,2,3-cd]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Phenanthrene, Pyrene, Anthracene, Fluoranthene	<1 Sum	<5 Sum	<10 Sum	<20 Sum	<50 Sum
Naphthalene	<1	<2		<10	
Sum of all 15 PAH	<1	<5	<10	<20	<50

Note:

1. mg/kg = ppm
2. MDL = Method Detection Limit
3. N.D.= Not Detected(<MDL)

2.10 Bisphenol A Test

Total Bisphenol A Test

Test Method and Test Equipment:

Test Item	Test Method	Test Equipment
Bisphenol A	EN 14372:2004	HPLC

Test Result:

No.	Test Item	Unit	MDL	Test Result
2	Bisphenol A	mg/kg	0.1	N.D.

Note:

1. mg/kg = ppm
2. MDL = Method Detection Limit
3. N.D.= Not Detected(<MDL)

Migration of Bisphenol A

Test Method: Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190, With reference to EN 13130-1:2004, EN 1186-1:2002, EN 1186-3:2022, EN1186-14:2002. analysis was performed by LC-MS

Simulant used	Test condition	Result(mg/kg)			MDL (mg/kg)	Limit (mg/kg)
		No.2				
		1st	2nd	3rd		
50 % ethanol	0.5 hour at 100℃	N.D.	N.D.	N.D.	0.001	0.001
3 % acetic acid	0.5 hour at 100℃	N.D.	N.D.	N.D.	0.001	0.001
10 % ethanol	0.5 hour at 100℃	N.D.	N.D.	N.D.	0.001	0.001
Vegetable oil	0.5 hour at 100℃	N.D.	N.D.	N.D.	0.001	0.001

Note：

1. mg/kg=ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

2.11 Sensorial examination odour and taste test

Test Method: Sensorial examination odour and taste test with reference to DIN 10955-2023-02;
Test condition: Odour test: 23℃, 24 hours;
Taste test: sunflower oil, 100℃, 1 hour.

Test Item(s)	Result	Maximum Permissilbe Limit
	No.2	
Sensorial examination odor (Point scale)	0	2.5
Sensorial examination taste (Point scale)	0	2.5

Note:
Odour/Taste Grade
0= No perceptible difference
1= Just perceivable difference(still difficult to define)
2= Slight difference
3= Marked difference
4= Strong difference
5. This part of the test is holistic test

2.12 Visible Color Migration Test

Test Method: With reference to AP 89 (1)

Simulant used	Test condition	Assessment of visible migration limit	Test result
			No.2
Deionized water	5 hours at 50℃	no difference	no difference
Acetic acid 3 % (w/v)	5 hours at 50℃	no difference	no difference
15% ethanol (v/v)	5 hours at 50℃	no difference	no difference
decolourised edible oil	5 hours at 50℃	no difference	no difference

Remark:
Compare the strips that have been in contact with the sample with the blank strips; these should have remained colourless. The visual comparison of strips is undertaken in daylight. The plastic materials or articles meet the requirements if comparison of test strips and blank strips reveals no difference

3. For·Material: Stainless Steele

3.1 Sensorial examination odour and taste test

Test Method: Sensorial examination odour and taste test with reference to DIN10955:2024-01;

Test condition: Odour test: 40℃, 2 hours;

Taste test: sunflower oil, 40℃, 2 hours.

Test Item(s)	Test Result(s)		Limit
	No.3	No.4	
Sensorial examination odour (Point scale)	0	0	2.5
Sensorial examination taste (Point scale)	0	0	2.5

Note：

Odour/Taste Grade

0= No perceptible difference

1= Just perceivable difference (still difficult to define)

2= Slight difference

3= Marked difference

4= Strong difference

5. This part of the test is holistic test

3.2 Migration of Heavy Metals

Test Method: with reference to CM/Res (2020)9

Test Condition: 2 hours at 70℃ in 5 g/L Citric acid

Test Item(s)	Unit	MDL	Test Result(s)		Requirement(s)	
			No.3			
			1st+2nd	3rd	7*RSL	RSL
Aluminium (Al)	mg/kg	0.1	N.D.	N.D.	35	5
Antimony (Sb)	mg/kg	0.001	N.D.	N.D.	0.28	0.04
Chromium (Cr)	mg/kg	0.1	N.D.	N.D.	7	1
Cobalt (Co)	mg/kg	0.001	N.D.	N.D.	0.14	0.02
Copper (Cu)	mg/kg	0.1	N.D.	N.D.	28	4
Iron (Fe)	mg/kg	1	N.D.	N.D.	280	40
Manganese (Mn)	mg/kg	0.1	N.D.	N.D.	3.85	0.55
Molybdenum (Mo)	mg/kg	0.01	N.D.	N.D.	0.84	0.12
Nickel (Ni)	mg/kg	0.01	N.D.	N.D.	0.98	0.14
Silver (Ag)	mg/kg	0.001	N.D.	N.D.	0.56	0.08
Tin (Sn)	mg/kg	1	N.D.	N.D.	700	100
Vanadium (V)	mg/kg	0.001	N.D.	N.D.	0.07	0.01
Zinc (Zn)	mg/kg	0.1	N.D.	N.D.	35	5
Arsenic (As)	mg/kg	0.001	N.D.	N.D.	0.014	0.002
Barium (Ba)	mg/kg	0.1	N.D.	N.D.	8.4	1.2
Beryllium (Be)	mg/kg	0.001	N.D.	N.D.	0.07	0.01
Cadmium (Cd)	mg/kg	0.001	N.D.	N.D.	0.035	0.005
Lead (Pb)	mg/kg	0.001	N.D.	N.D.	0.07	0.01
Lithium (Li)	mg/kg	0.001	N.D.	N.D.	0.336	0.048
Mercury (Hg)	mg/kg	0.001	N.D.	N.D.	0.021	0.003
Thallium (Tl)	mg/kg	0.0001	N.D.	N.D.	0.007	0.001
Zirconium(Zr)	mg/kg	0.1	N.D.	N.D.	14	2
Magnesium (Mg)	mg/kg	0.001	N.D.	N.D.	–	–
Titanium (Ti)	mg/kg	0.001	N.D.	N.D.	–	–

Test Item(s)	Unit	MDL	Test Result(s)		Requirement(s)	
			No.4			
			1st+2nd	3rd	7*RSL	RSL
Aluminium (Al)	mg/kg	0.1	N.D.	N.D.	35	5
Antimony (Sb)	mg/kg	0.001	N.D.	N.D.	0.28	0.04
Chromium (Cr)	mg/kg	0.1	N.D.	N.D.	7	1
Cobalt (Co)	mg/kg	0.001	N.D.	N.D.	0.14	0.02
Copper (Cu)	mg/kg	0.1	N.D.	N.D.	28	4
Iron (Fe)	mg/kg	1	N.D.	N.D.	280	40
Manganese (Mn)	mg/kg	0.1	N.D.	N.D.	3.85	0.55
Molybdenum (Mo)	mg/kg	0.01	N.D.	N.D.	0.84	0.12
Nickel (Ni)	mg/kg	0.01	N.D.	N.D.	0.98	0.14
Silver (Ag)	mg/kg	0.001	N.D.	N.D.	0.56	0.08
Tin (Sn)	mg/kg	1	N.D.	N.D.	700	100
Vanadium (V)	mg/kg	0.001	N.D.	N.D.	0.07	0.01
Zinc (Zn)	mg/kg	0.1	N.D.	N.D.	35	5
Arsenic (As)	mg/kg	0.001	N.D.	N.D.	0.014	0.002
Barium (Ba)	mg/kg	0.1	N.D.	N.D.	8.4	1.2
Beryllium (Be)	mg/kg	0.001	N.D.	N.D.	0.07	0.01
Cadmium (Cd)	mg/kg	0.001	N.D.	N.D.	0.035	0.005
Lead (Pb)	mg/kg	0.001	N.D.	N.D.	0.07	0.01
Lithium (Li)	mg/kg	0.001	N.D.	N.D.	0.336	0.048
Mercury (Hg)	mg/kg	0.001	N.D.	N.D.	0.021	0.003
Thallium (Tl)	mg/kg	0.0001	N.D.	N.D.	0.007	0.001
Zirconium(Zr)	mg/kg	0.1	N.D.	N.D.	14	2
Magnesium (Mg)	mg/kg	0.001	N.D.	N.D.	–	–
Titanium (Ti)	mg/kg	0.001	N.D.	N.D.	–	–

Note：

1. mg/kg = ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

3.3 Overall migration

Test Method: With reference to Italian Ministerial Decree n°34 21.3.1973 ANNEX, n°220 dated 26 April 1993，n°338 dated 22 July 1998 and n°269 dated 12 December 1988.

Simulant used	Test condition	Overall Migration (mg/dm^2)			Maximum permissible Limit (mg/dm^2)
		No.3			
		1st	2nd	3rd	
3 % acetic acid	30 minutes at 100℃	<2	<2	<2	8

Simulant used	Test condition	Overall Migration (mg/dm^2)			Maximum permissible Limit (mg/dm^2)
		No.4			
		1st	2nd	3rd	
3 % acetic acid	30 minutes at 100℃	<2	<2	<2	8

Note：

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

4.For Materials: PP

Test Result:

4.1 Overall Migration

Test Method: With reference to BS EN 13130-1:2004, EN 1186-1:2002, EN 1186-2:2022, EN1186-3:2022

Stimulant used	Test condition	Test Result (mg/dm^2)			Maximum permissible Limit (mg/dm^2)
		No.5			
		1st	2nd	3rd	
Deionized Water	0.5 hour at 70℃	<2.0	<2.0	<2.0	10
3 % acetic acid	0.5 hour at 100℃	<2.0	<2.0	<2.0	10
10 % ethanol	0.5 hour at 100℃	<2.0	<2.0	<2.0	10

4.2 Sensorial examination odour and taste

Test Method: Sensorial examination odour and taste test with reference to DIN 10955-2024-01;

Test condition: Odour test: 23℃, 24 hours;

Taste test: sunflower oil, 100℃, 1 hour.

Test Item(s)	Test Result	Maximum Permissilbe Limit
	No.5	
Sensorial examination odor (Point scale)	0	2.5
Sensorial examination taste (Point scale)	0	2.5

Note:

Odour/Taste Grade

0= No perceptible difference

1= Just perceivable difference (still difficult to define)

2= Slight difference

3= Marked difference

4= Strong difference

5. This part of the test is holistic test

4.3 Visible Color Migration Test

Test Method: With reference to AP 89 (1)

Simulant used	Test condition	Assessment of visible migration limit	Test Result
			No.5
Deionized water	5 hours at 50℃	no difference	no difference
Acetic acid 3 % (w/v)	5 hours at 50℃	no difference	no difference
15% ethanol (v/v)	5 hours at 50℃	no difference	no difference
decolourised edible oil	5 hours at 50℃	no difference	no difference

Remark:

Compare the strips that have been in contact with the sample with the blank strips; these should have remained colourless. The visual comparison of strips is undertaken in daylight. The plastic materials or articles meet the requirements if comparison of test strips and blank strips reveals no difference

4.4 Total PAHS Test

Test Result (No.5):

Compound	CAS No.	Unit	Test Method/ Test Equipment	MDL	Result
(1) Naphthalene (NAP)	91-20-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(2) Phenanthrene (PHE)	85-01-8	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(3) Anthracene (ANT)	120-12-7	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(4) Fluoranthene (FLT)	206-44-0	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(5) Pyrene (PYE)	129-00-0	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(6)Benzo[a]anthracene (BaA)	56-55-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(7)Chrysene (CHR)	218-01-9	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(8)Benzo[b]fluoranthene (BbF)	205-99-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(9)Benzo[k]fluoranthene (BkF)	207-08-9	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(10).Benzo[a]pyrene (BaP)	50-32-8	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(11)Indeno[1,2,3-cd]pyrene (IPY)	193-39-5	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(12)Dibenzo[a,h]anthracene (DBA)	53-70-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(13)Benzo[g,hi]perylene (BPE)	191-24-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(14)Benzo[j]fluoranthene	205-82-3	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
(15) Benzo[e]pyrene	192-97-2	mg/kg	AFPS GS 2019:01, GC-MS	0.2	N.D.
Sum of PAHs	--	mg/kg	--	--	N.D.

Note：

1. mg/kg= ppm
2. N.D.=Not Detected (<MDL)
3. MDL =Method Detection Limit

AfPS GS 2019:01: Restraining maximum values for products

Unit: mg/kg

Parameter	Category 1	Category 2		Category 3	
	Materials intended to be placed into the mouth, or Materials in toys or articles for children up to 3 years of age with intended long-term skin contact (more than 30 s)	Materials that do not fall into Category 1 with intended or foreseeable long-term skin contact (more than 30 s) or repeated short-term skin contact		Materials that do neither fall into Category 1 nor 2 with intended or foreseeable short-term skin contact (up to 30 s)	
	--	Use by children	Other Products	Use by children	Other Products
Benzo[a]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[e]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[a]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[b]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[j]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[k]fluoranthene	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo[a,h]anthracene	<0.2	<0.2	<0.5	<0.5	<1
Benzo[g,hi]perylene	<0.2	<0.2	<0.5	<0.5	<1
Indeno[1,2,3-cd]pyrene	<0.2	<0.2	<0.5	<0.5	<1
Phenanthrene, Pyrene, Anthracene, Fluoranthene	<1 Sum	<5 Sum	<10 Sum	<20 Sum	<50 Sum
Naphthalene	<1	<2		<10	
Sum of all 15 PAH	<1	<5	<10	<20	<50

4.5 Migration of PAH Test

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

Test Condition: 3% Acetic acid: 100℃, 1 h

Test Item(s)	Unit	Test result			MDL	Limit
		No.5				
		1st	2nd	3rd		
(1) Naphthalene (NAP)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(2) Phenanthrene (PHE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(3) Anthracene (ANT)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(4) Fluoranthene (FLT)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(5) Pyrene (PYE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(6)Benzo[a]anthracene (BaA)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(7)Chrysene (CHR)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(8)Benzo[b]fluoranthene (BbF)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(9)Benzo[k]fluoranthene (BkF)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(10).Benzo[a]pyrene (BaP)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(11)Indeno[1,2,3-cd]pyrene (IPY)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(12)Dibenzo[a,h]anthracene (DBA)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(13)Benzo[g,hi]perylene (BPE)	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(14)Benzo[j]fluoranthene	mg/kg	N.D.	N.D.	N.D.	0.01	0.01
(15) Benzo[e]pyrene	mg/kg	N.D.	N.D.	N.D.	0.01	0.01

Note:

1. mg/kg= ppm
2. N.D.=Not Detected (<MDL)
3. MDL =Method Detection Limit

4.6 Specific Migration of 19 Heavy metals in 3% acetic acid

Test Method: Regulation (EU) 2024/3190, With reference to EN 13130-1:2004, analysis was performed by ICP-MS

Test Condition: 40℃ for 2 hours in 3% Acetic acid

Test Item(s)	Unit	Test result			MDL	Limit
		No.5				
		1st	2nd	3rd		
Soluble Aluminium (Al)	mg/kg	N.D.	N.D.	N.D.	0.01	1
Soluble Ammonium	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Antimony(Sb)	mg/kg	N.D.	N.D.	N.D.	0.01	0.04
Soluble Arsenic(As)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Barium(Ba)	mg/kg	N.D.	N.D.	N.D.	0.01	1
Soluble Cadmium(Cd)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Calcium(Ca)	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Chromium(Cr)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Cobalt(Co)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Copper(Cu)	mg/kg	N.D.	N.D.	N.D.	0.01	5
Soluble Europium(Eu)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Gadolinium(Gd)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Iron(Fe)	mg/kg	N.D.	N.D.	N.D.	0.01	48
Soluble Lanthanum(La)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Lead(Pb)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Lithium(Li)	mg/kg	N.D.	N.D.	N.D.	0.01	0.6
Soluble Magnesium(Mg)	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Manganese(Mn)	mg/kg	N.D.	N.D.	N.D.	0.01	0.6
Soluble Mercury(Hg)	mg/kg	N.D.	N.D.	N.D.	0.002	0.002
Soluble Nickel(Ni)	mg/kg	N.D.	N.D.	N.D.	0.01	0.02
Soluble Potassium(K)	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Sodium(Na)	mg/kg	N.D.	N.D.	N.D.	0.01	--
Soluble Terbium(Tb)	mg/kg	N.D.	N.D.	N.D.	0.01	0.05
Soluble Zinc(Zn)	mg/kg	N.D.	N.D.	N.D.	0.01	5

Note：

1. mg/kg = ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

4.7 Bisphenol A

Total Bisphenol A Test

Test Method and Test Equipment:

Test Item	Test Method	Test Equipment
Bisphenol A	EN 14372:2004	HPLC

Test Result:

No.	Test Item	Unit	MDL	Test Result
5	Bisphenol A	mg/kg	0.1	N.D.

Note:

1. mg/kg = ppm
2. MDL = Method Detection Limit
3. N.D.= Not Detected(<MDL)

Migration of Bisphenol A

Test Method: Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190, With reference to EN 13130-1:2004, EN 1186-1:2002, EN 1186-3:2022, EN1186-14:2002. analysis was performed by LC-MS

Simulant used	Test condition	Test Result (mg/kg)			MDL (mg/kg)	Limit (mg/kg)
		No.5				
		1st	2nd	3rd		
50 % ethanol	0.5 hour at 100℃	N.D.	N.D.	N.D.	0.001	0.001
3 % acetic acid	0.5 hour at 100℃	N.D.	N.D.	N.D.	0.001	0.001
10 % ethanol	0.5 hour at 100℃	N.D.	N.D.	N.D.	0.001	0.001
Vegetable oil	0.5 hour at 100℃	N.D.	N.D.	N.D.	0.001	0.001

Note：

1. mg/kg=ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

4.8 Specific Migration of Octene in olive oil

Test Method: Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190.With reference to EN 13130-1:2004, EN 1186-1:2002, EN 1186-2:2022, EN 1186-3:2022

Stimulant used	Test condition	Test Result (mg/dm²)			MDL (mg/kg)	Limit (mg/kg)
		No.5				
		1st	2nd	3rd		
Olive oil	0.5 hour at 100℃	N.D.	N.D.	N.D.	2.0	15

Note：

1. mg/kg=ppm
2. N.D. = Not Detected (<MDL)
3. MDL = Method Detection Limit

4.9 Specific Migration of Hexene in olive oil

Test Method: Regulation (EU)10/2011 and its amendments Regulation (EU) 2024/3190.With reference to EN 13130-1:2004, EN 1186-1:2002, EN 1186-2:2022, EN 1186-3:2022

Stimulant used	Test condition	Test Result (mg/dm²)			MDL (mg/kg)	Limit (mg/kg)
		No.5				
		1st	2nd	3rd		
Olive oil	0.5 hour at 100℃	N.D.	N.D.	N.D.	2.0	3

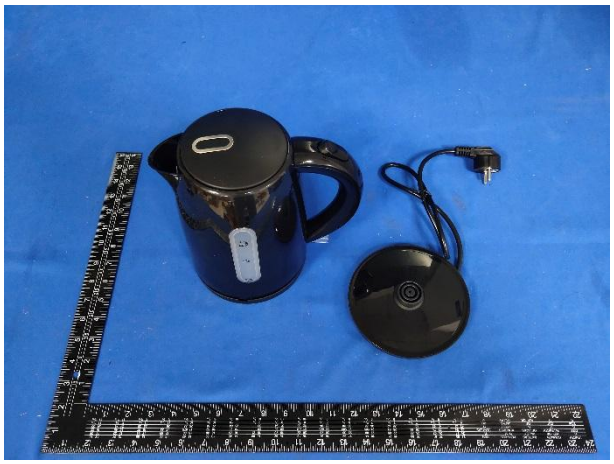
Note：

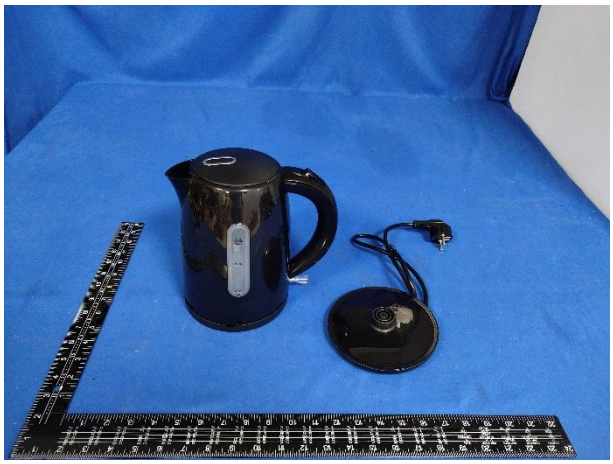
1. mg/dm²=milligram per square decimeter
2. N.D.= Not Detected(<MDL)
3. MDL = Method Detection Limit

Sample Description:

Material No.	Description	Material
1	Leak-proof sealing strip	Silicone
2	Filter screen	Nylon
3	Silver stainless steel body	Stainless steel
4	Silver stainless steel base	Stainless steel
5	The main body of the plastic outer pot	PP

Tested sample photos





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