TEST REPORT

Applicant	:	Chengdu Ziliihood Cultural Creativity Co.,Ltd
Address	:	No.10,Floor 9 ,Building 8,No.88,ShengbangStreet,High Tech Zone,Chengdu,Sichuan,China

Report on the submitted sample said to be

Sample name	:	Stainless steel water bottle
Model	:	Narrow mouth water bottle, Cup, Mug, Drinkware
Trade	:	N/A
Batch No	:	N/A
Manufacture	:	Chengdu Ziliihood Cultural Creativity Co.,Ltd
Address	:	No.10,Floor 9 ,Building 8,No.88,ShengbangStreet,High Tech Zone,Chengdu,Sichuan,China
Buyer	:	N/A
received date	:	Feb. 17, 2025
Testing period	:	Feb. 17, 2025- Feb. 21, 2025

Test Sample	Testing Requested:	Results
Stainless steel water bottle	- Sensorial examination odour and taste test	PASS
	- Colour Release	
	- Extractable components	
	- Lead and Cadmium .	
	- Volatile organic matter(VOM)	
	- Polynuclear Aromatic Hydrocarbons (PAHs) .	
	- Extactable heavy metals	

Signed for and on behalf of

Lab Manager : **Amy Ji**

Feb. 21, 2025

Date of issue

Test Result:

Sample Description

No	Sample	Description
001	Stainless steel water bottle	304 Stainless steel
002	Stainless steel water bottle	Silica gel
002	Stainless steel water bottle	PP

1. Sensory requirements - German food, Articles of Daily Use and Feed Code (LFGB), section 30&31 and BFR Recommendations

Method: DIN 10955:2004

Test Item(s)	Limit	Result			Conclusion
		001	002	003	
Sensorial examination odour	3	1	1.1	1.2	PASS
Sensorial examination taste	3	1	1.1	1.3	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

2. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments–Colour Release

Test Requested:	As specified by client, to determine Colour Release from the submitted sample used in contact with food for compliance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments.
Test Method:	With reference to Kunststoffe im Lebensmittelverkehr, Part B II IX.

Test Item(s)		Limit	002	003
Visible Color Migration in Distilled water as aqueous foodstuff Comment		Absent	PASS	PASS

Note:

Permissible Limit is according to BfR Recommendation IX.

3. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments and BfR recommendation –Extractable components

Test Requested : As specified by client, to determine Extractable components from Silicone rubber used in contact with food for compliance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments and BfR recommendation.

Test Method : 61st Communication on testing of plastics in Bundesgesundheitsblatt 46 (2003) 362]

Simulant Used.	Time.	Temperature.	Max. Permissible Limit	Result Overall Migration	
				002	003
10% Ethanol	5 hours	5℃	0.5% (w/w)	<0.1% (w/w)	<0.1% (w/w)
3% acetic acid	5 hours	5℃	0.5% (w/w)	<0.1% (w/w)	<0.1% (w/w)

Note:

1. %w/w = percentage of weight by weight
2. ℃=Degree Celsius

4. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments, European Commission Regulation (EU) No 10/2011, 1935/2004/EC with amendments and BfR recommendation–Lead and Cadmium

Test Requested : As specified by client, to determine Lead and Cadmium from the submitted sample used in contact with food for compliance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments, European Commission Regulation (EU) No 10/2011, 1935/2004/EC with amendments and BfR recommendation.

Test Method :. With reference to US EPA Method 3052:1996(GZTC CHEM-TOP-004-01), analysis was performed by ICP-OES..

Test Item(s).	Limit.	Unit.	MDL	002	003
Cadmium (Cd).	Absent	mg/kg.	-2	ND	ND
Lead (Pb).	Absent	mg/kg.	2	ND	ND

Note:

1. mg/kg = milligram per kilogram of sample
2. MDL=Method Detection Limit
3. ND= Not Detected(less than MDL)

4. Permissible Limit is according to Commission Regulation (EU) No 10/2011,1935/2004/EC of 14 January 2011 with amendments and German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31. Lead, Cadmium and their compounds are not listed for the production of plastic materials in contact with food.

5. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments and BfR recommendation–Volatile organic matter (VOM).

Test Requested : As specified by client, to determine Volatile organic matter (VOM) content from Silicone rubber used in contact with food for compliance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments and BfR recommendation..

Test Method :. With reference to 60. Mitteilung über die Untersuchung von Kunststoffen, Bundesgesundheitsbl 45
(2002) 462 and LFGB § 64 BVL B 80.30.1(EG).
Test condition: 40℃, 240 hr(s) .

Test Item(s).	Limit.	Unit.	MDL	002	003
Volatile organic matter (VOM)	0.5	% (w/w).	0.1	ND	ND

Note:

1. %w/w = percentage of weight by weight
2. MDL=Method Detection Limit
3. ND= Not Detected(less than MDL) .

6. German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments and BfR recommendation–Polynuclear Aromatic Hydrocarbons (PAHs).

Test Requested : As specified by client, to determine Polynuclear Aromatic Hydrocarbons (PAHs) from Silicone rubber used in contact with food for compliance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 & 31 with amendments and BfR recommendation.

Test Method :. With reference to ZEK 01.4-08 of German ZLS and its amendments, analysis was performed by GC-MS..

Test Item(s).	Unit.	MDL	001
Naphthalene(NAP) .	mg/kg.	0.2	ND
Acenaphthylene(ANY) .	mg/kg.	0.2	ND
Acenaphthene(ANA) .	mg/kg.	0.2	ND
Fluorene(FLU).	mg/kg.	0.2	ND
Phenanthrene(PHE) .	mg/kg.	0.2	ND
Anthracene(ANT) .	mg/kg.	0.2	ND
Fluoranthene(FLT)	mg/kg.	0.2	ND
Pyrene(PYR)	mg/kg.	0.2	ND
Benzo(a)anthracene(BaA) .	mg/kg.	0.2	ND
Chrysene(CHR).	mg/kg.	0.2	ND
Benzo(b)fluoranthene(BbF)	mg/kg.	0.2	ND
Benzo(j)fluoranthene(BjF) .	mg/kg.	0.2	ND
Benzo(k)fluoranthene(BkF) .	mg/kg.	0.2	ND
Benzo(e)pyrene(BeP) .	mg/kg.	0.2	ND
Benzo(a)pyrene(BaP) .	mg/kg.	0.2	ND
Indeno(1,2,3-c,d)pyrene(IPY) .	mg/kg.	0.2	ND
Dibenzo(a,h)anthracene(DBA)	mg/kg.	0.2	ND
Benzo(g,h,i)perylene(BPE) .	mg/kg.	0.2	ND
Sum of 18 PAHs .	mg/kg.	0.2	ND

Note:

1.Test condition & simulant were specified by client.

7. Extactable heavy metals

Test Requested : In accordance with German Food, Articles of Daily Use and Feed Code of September 1, 2005 (LFGB), Section 30 and 31 with amendments, Council of Europe Resolution CM/Res(2013)9 and BfR recommendation, to determine extractable heavy metals.

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

Simulant Used : Artificial tap water.

Test Condition : 100.℃ 0.5.hr(s).

Specimen No.	Result(mg/kg)		Unit	RL (mg/kg)	Migratable Limit (mg/kg)
	001				
Migration	1st	2nd			
Aluminum (Al)	ND	ND	mg/kg	0.2	1
Antimony (Sb)	ND	ND	mg/kg	0.02	0.04
Arsenic (As)	ND	ND	mg/kg	0.01	ND
Barium (Ba)	ND	ND	mg/kg	0.2	1
Cadmium (Cd)	ND	ND	mg/kg	0.002	ND
Chromium (Cr)	ND	ND	mg/kg	0.01	ND
Cobalt (Co)	ND	ND	mg/kg	0.02	0.05
Copper (Cu)	ND	ND	mg/kg	0.2	5
Europium (Eu)	ND	ND	mg/kg	0.02	0.05
Gadolinium (Gd)	ND	ND	mg/kg	0.02	0.05
Iron (Fe)	ND	ND	mg/kg	0.2	48
Lanthanum (La)	ND	ND	mg/kg	0.02	0.05
Lead (Pb)	ND	ND	mg/kg	0.01	ND
Lithium (Li)	ND	ND	mg/kg	0.2	0.6
Manganese (Mn)	ND	ND	mg/kg	0.2	0.6
Mercury (Hg)	ND	ND	mg/kg	0.01	ND
Nickel (Ni)	ND	ND	mg/kg	0.02	0.02
Terbium (Tb)	ND	ND	mg/kg	0.02	0.05
Zinc (Zn)	ND	ND	mg/kg	0.2	5
Comment	**PASS**				

Specimen No.	Result(mg/kg)		Unit	RL (mg/kg)	Migratable Limit (mg/kg)
	002				
Migration	1st	2nd			
Aluminum (Al)	ND	ND	mg/kg	0.2	1
Antimony (Sb)	ND	ND	mg/kg	0.02	0.04
Arsenic (As)	ND	ND	mg/kg	0.01	ND
Barium (Ba)	ND	ND	mg/kg	0.2	1
Cadmium (Cd)	ND	ND	mg/kg	0.002	ND
Chromium (Cr)	ND	ND	mg/kg	0.01	ND
Cobalt (Co)	ND	ND	mg/kg	0.02	0.05
Copper (Cu)	ND	ND	mg/kg	0.2	5
Europium (Eu)	ND	ND	mg/kg	0.02	0.05
Gadolinium (Gd)	ND	ND	mg/kg	0.02	0.05
Iron (Fe)	ND	ND	mg/kg	0.2	48
Lanthanum (La)	ND	ND	mg/kg	0.02	0.05
Lead (Pb)	ND	ND	mg/kg	0.01	ND
Lithium (Li)	ND	ND	mg/kg	0.2	0.6
Manganese (Mn)	ND	ND	mg/kg	0.2	0.6
Mercury (Hg)	ND	ND	mg/kg	0.01	ND
Nickel (Ni)	ND	ND	mg/kg	0.02	0.02
Terbium (Tb)	ND	ND	mg/kg	0.02	0.05
Zinc (Zn)	ND	ND	mg/kg	0.2	5
Comment	**PASS**				

Specimen No.	Result(mg/kg)		Unit	RL (mg/kg)	Migratable Limit (mg/kg)
	003				
Migration	1st	2nd			
Aluminum (Al)	ND	ND	mg/kg	0.2	1
Antimony (Sb)	ND	ND	mg/kg	0.02	0.04
Arsenic (As)	ND	ND	mg/kg	0.01	ND
Barium (Ba)	ND	ND	mg/kg	0.2	1
Cadmium (Cd)	ND	ND	mg/kg	0.002	ND
Chromium (Cr)	ND	ND	mg/kg	0.01	ND
Cobalt (Co)	ND	ND	mg/kg	0.02	0.05
Copper (Cu)	ND	ND	mg/kg	0.2	5
Europium (Eu)	ND	ND	mg/kg	0.02	0.05
Gadolinium (Gd)	ND	ND	mg/kg	0.02	0.05
Iron (Fe)	ND	ND	mg/kg	0.2	48
Lanthanum (La)	ND	ND	mg/kg	0.02	0.05
Lead (Pb)	ND	ND	mg/kg	0.01	ND
Lithium (Li)	ND	ND	mg/kg	0.2	0.6
Manganese (Mn)	ND	ND	mg/kg	0.2	0.6
Mercury (Hg)	ND	ND	mg/kg	0.01	ND
Nickel (Ni)	ND	ND	mg/kg	0.02	0.02
Terbium (Tb)	ND	ND	mg/kg	0.02	0.05
Zinc (Zn)	ND	ND	mg/kg	0.2	5
Comment	**PASS**				

Notes :

1. mg/kg = milligram per kilogram of foodstuff in contact with
2. ND = Not detected. Result value is less than reporting limit (RL).

Picture of sample

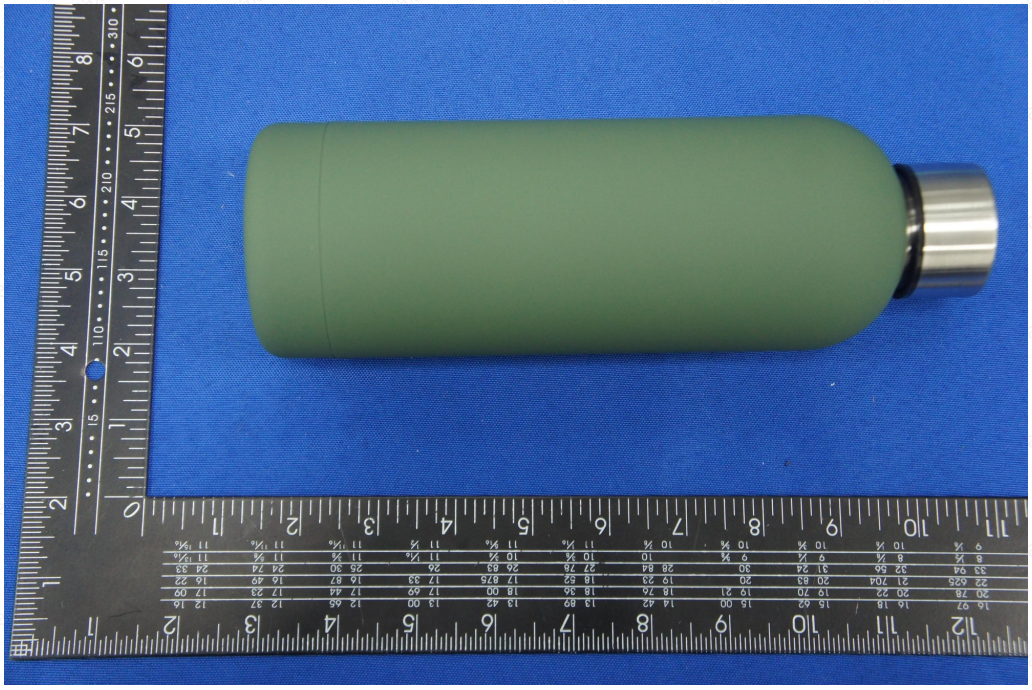
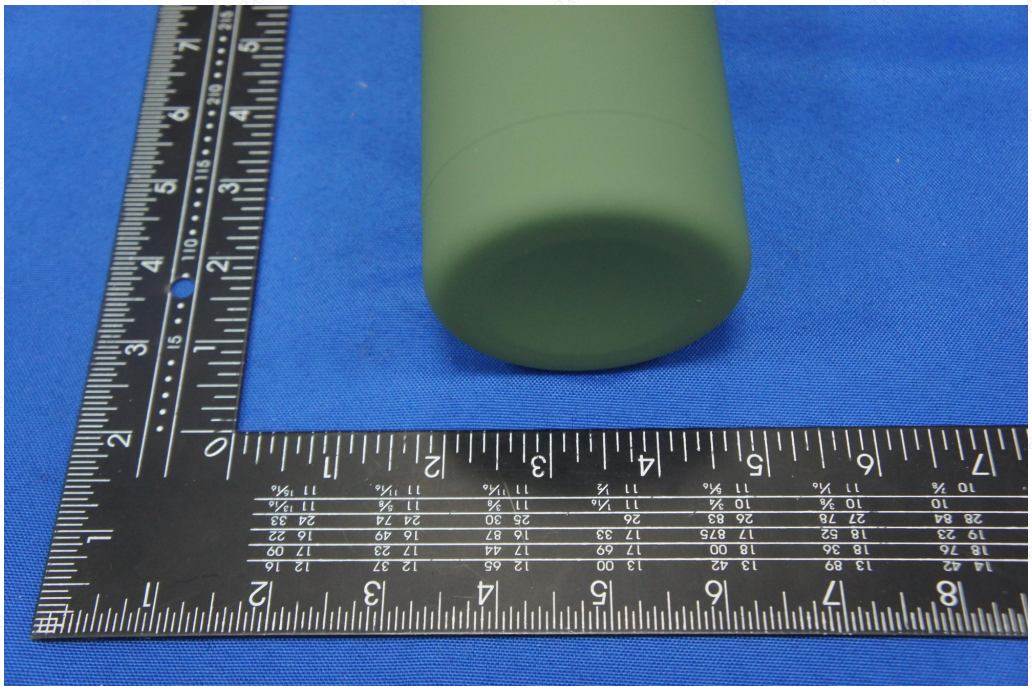


Photo 1



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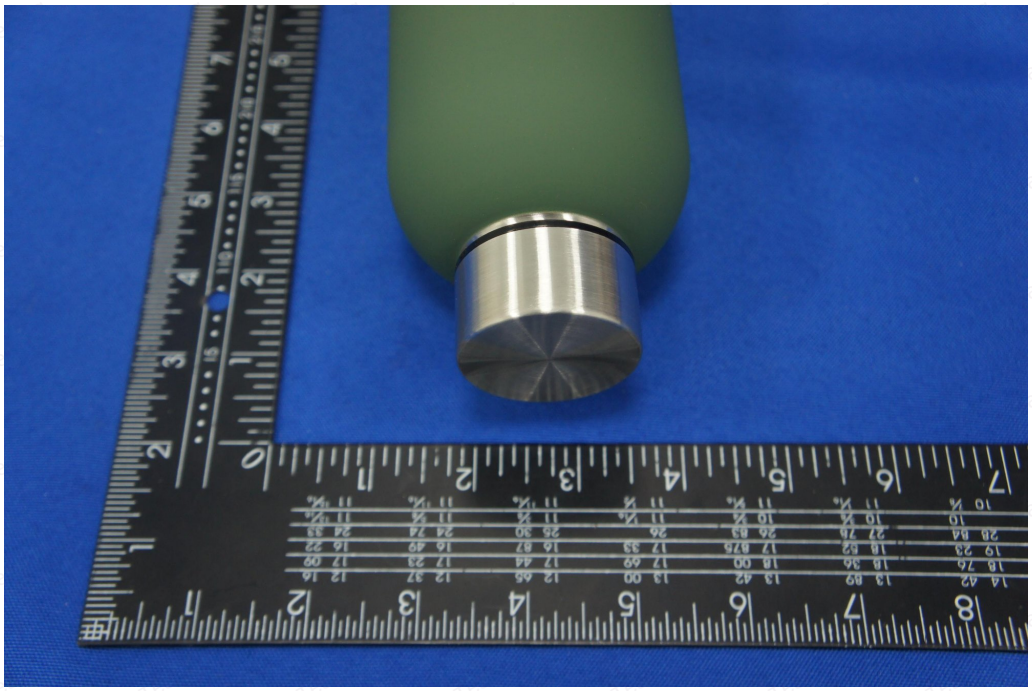

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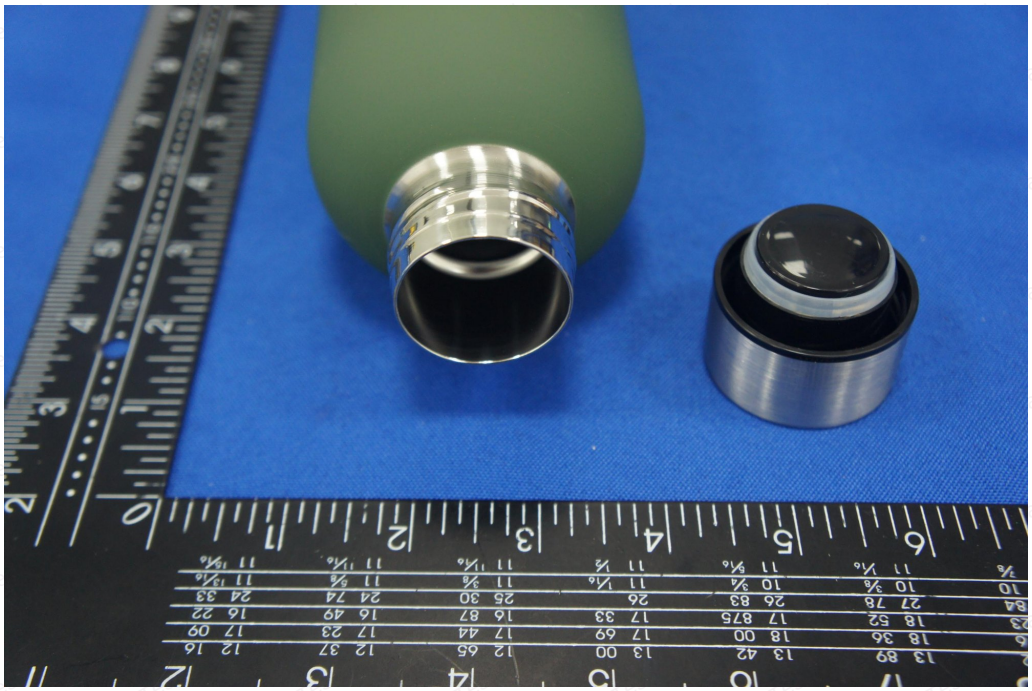

Photo 4

Photo 5

Photo 6

Photo 7

Photo 8

Photo 9

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