



Test Report No. 64.165.24.00713.01B
Rev. 01
Dated 2025-01-23

Applicant: Foshan Coede Home Appliance & Technology Co.,Ltd

Address: 8th floor, No.3 Building, Technology8 Road Xingtan Town, Shunde District, Foshan City, Guangdong Province, China

Sample Description: Parts of Electric Smokeless Grill

Model No.: KD801, KD801-A, KD802, KD802-A

Sample Received Date: 2024-01-08, 2025-01-15

Test Period: From 2024-01-08 to 2024-01-23, 2025-01-15 to 2025-01-23

Purpose of examination: As specified by client, to test as regulated by the German Food & Feed Acts LFGB (§ 30 & 31) and Regulation (EC) No.1935/2004.

Test Result: Refer to following page(s)

Remark: 1. The result relates only to the items tested.
2. The testing approach, the testing methods, and the reported results in this report demonstrate compliance or non-compliance to the client's requirements which were mutually agreed at the contract review and stipulated in the quotation. The testing approach, the testing methods, and the reported results may not or only partially fulfil the associated requirements of the applicable regulations.

TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
TÜV SÜD Group

Prepared by:

Autumn Lin

Autumn Lin
Project Handler



Reviewed by:

Kevin Zhang

Kevin Zhang
Designated Reviewer

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details, please see testing and certification regulation, chapter A-3.4.

Disclaimer Measurement Uncertainty: Unless otherwise agreed upon, pass or fail verdicts are given based on the measured values without consideration of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as pass or fail.



TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
TÜV SÜD Group
5F, Communication Building, 163 Pingyun Rd, Huangpu West Ave.
Guangzhou 510656, P.R. China

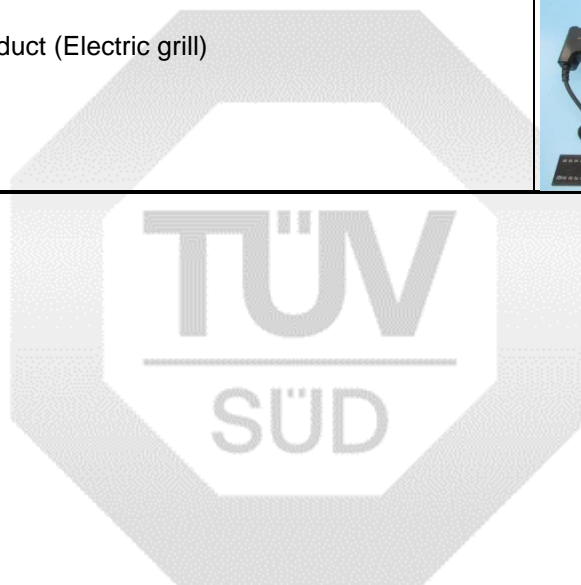
Tel.: (86) 20 38320668
Fax: (86) 20 38320478

SUMMARY OF TEST RESULTS

Test Requested	Conclusion	Remarks
<p>For material: Non-stick coating on metal substrate Test for compliance with Resolution AP (2004)1, (EU) No. 2018/213, BfR "Kunststoffe im Lebensmittelverkehr" Part Li "Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils", EDQM Technical guide for METALS AND ALLOYS used in food contact materials and articles (2nd Edition 2024), DIN 51032:2017, 84/500/EEC and 2005/31/EC.</p> <ol style="list-style-type: none"> 1. Overall migration 2. Specific Migration of Primary Aromatic Amine 3. Specific Migration of Formaldehyde 4. Specific Migration of Bisphenol A 5. Specific Migration of Phenolic substances 6. Specific Migration of PFOA and PFOS 7. Specific Migration of Chromium III and Chromium VI 8. Specific Migration of Lithium 9. Specific Migration of 22 Heavy Metals 10. Specific Migration of Tetrafluoroethylene 	PASS	/
<p>Sensory test</p> <ol style="list-style-type: none"> 11. Sensory test with reference to DIN 10955: 2024 	PASS	/

1. TESTED SUBJECT DESCRIPTION

Sample Number	Tested Material Description	Photo
001	Black non-sticking coating	
002	End Product (Electric grill)	



2. TEST RESULT
2.1. OVERALL MIGRATION TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Resolution AP (2004)1; with reference to EN 1186-1: 2002, EN 1186-2: 2022, EN 1186-3: 2022, EN 1186-13: 2002.

Surface area to Volume ratio: 10dm² : 1000ml

Simulant Used	Test Condition	Result [mg/dm ²]	Requirement [mg/dm ²]
		Sample 001 (3 rd migration)	
3% Acetic Acid	100 °C for 4 hours	< 3.0	≤ 10
10% Ethanol	100 °C for 4 hours	< 3.0	≤ 10
95% Ethanol	60 °C for 6 hours	< 3.0	≤ 10
Isooctane	60 °C for 4 hours	< 3.0	≤ 10

Note:

- “mg/dm²” denotes milligram per square decimeter.
- The specification was quoted from Resolution AP (2004)1.

2.2. SPECIFIC MIGRATION OF PRIMARY AROMATIC AMINE TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”; the sample(s) were migrated with food stimulant, followed by Ultraviolet–visible Specphotometer (UV-Vis) analysis.

Testing condition and simulant: 3% acetic acid at 100 °C for 4 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

Test Item	Result [mg/kg]	Requirement [mg/kg]
	Sample 001 (1 st migration)	
Migration of Primary Aromatic Amine	< 0.01	Not Detected (< 0.01)

Test method: As specified in Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”; the sample(s) were migrated with food stimulant, followed by Liquid Chromatography with Tandem Mass Spectrometry Detection (LC-MS/MS) analysis.

Testing condition and simulant: 3% acetic acid at 100 °C for 4 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

No.	Test Item	CAS No.	Result [mg/kg]	Requirement [mg/kg]
			Sample 001 (1 st migration)	
1	biphenyl-4-ylamine 4-aminobiphenyl xenylamine	92-67-1	<0.002	< 0.002
2	Benzidine	92-87-5	<0.002	< 0.002
3	4-chloro-o-toluidine	95-69-2	<0.002	< 0.002

No.	Test Item	CAS No.	Result [mg/kg]	Requirement [mg/kg]
			Sample 001 (1 st migration)	
4	2-naphthylamine	91-59-8	<0.002	< 0.002
5	o-aminoazotoluene 4-amino-2',3-dimethylazobenzene 4-o-tolylazo-o-toluidine	97-56-3	<0.002	< 0.002
6	5-nitro-o-toluidine	99-55-8	<0.002	< 0.002
7	4-chloroaniline	106-47-8	<0.002	< 0.002
8	4-methoxy-m-phenylenediamine	615-05-4	<0.002	< 0.002
9	4,4'-methylenedianiline 4,4'-diaminodiphenylmethane	101-77-9	<0.002	< 0.002
10	3,3'-dichlorobenzidine 3,3'-dichlorobiphenyl-4,4'-ylenediamine	91-94-1	<0.002	< 0.002
11	3,3'-dimethoxybenzidine o-dianisidine	119-90-4	<0.002	< 0.002
12	3,3'-dimethylbenzidine 4,4'-bi-o-toluidine	119-93-7	<0.002	< 0.002
13	4,4'-methylenedi-o-toluidine	838-88-0	<0.002	< 0.002
14	6-methoxy-m-toluidine p-cresidine	120-71-8	<0.002	< 0.002
15	4,4'-methylene-bis-(2-chloro-aniline) 2,2'-dichloro-4,4'-methylene-dianiline	101-14-4	<0.002	< 0.002
16	4,4'-oxydianiline	101-80-4	<0.002	< 0.002
17	4,4'-thiodianiline	139-65-1	<0.002	< 0.002
18	o-toluidine 2-aminotoluene	95-53-4	<0.002	< 0.002
19	4-methyl-m-phenylenediamine	95-80-7	<0.002	< 0.002
20	2,4,5-trimethylaniline	137-17-7	<0.002	< 0.002
21	o-anisidine 2-methoxyaniline	90-04-0	<0.002	< 0.002
22	4-amino azobenzene	60-09-3	<0.002	< 0.002
23	1,5- Diaminenaphthalene	2243-62-1	<0.002	< 0.002
24	Aniline (ANL)	62-53-3	<0.002	< 0.002
25	2,4-Dimethylaniline (2,4-DMA)	95-68-1	<0.002	< 0.002
26	2,6-Dimethylaniline (2,6-DMA)	87-62-7	<0.002	< 0.002
27	m-Phenylenediamine (m-PDA)	108-45-2	<0.002	< 0.002
28	p-Phenylenediamine (p-PDA)	106-50-3	<0.002	< 0.002
29	2,6-Toluenediamine (2,6-TDA)	823-40-5	<0.002	< 0.002

Note:

- “mg/kg” denotes milligram per kilogram foodstuff.
- The specification was quoted from Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”.

2.3. SPECIFIC MIGRATION OF FORMALDEHYDE TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”; the sample(s) were migrated with food stimulant, followed by Ultraviolet-visible Spectrophotometer (UV-Vis) analysis.

Testing condition and simulant: 3% acetic acid at 100 °C for 4 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

Test Item	CAS No.	Result [mg/kg]			Requirement [mg/kg]
		Sample 001 (3 rd migration)			
Migration of Formaldehyde	50-00-0	< 3			≤ 15

Note:

- “mg/kg” denotes milligram per kilogram foodstuff.
- The specification was quoted from Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”.

2.4. SPECIFIC MIGRATION OF BISPHENOL A TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Regulation (EU) No. 10/2011 and it's amendment; the sample(s) were migrated with food simulant, followed by Liquid Chromatography with Tandem Mass Spectrometry Detection (LC-MS/MS) analysis.

Testing condition and simulant: Olive oil at 225 °C for 1 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

Test Item	CAS No.	Result [mg/kg]			Requirement [mg/kg]
		Sample 001			
		1 st migration	2 nd migration	3 rd migration	3 rd < 2 nd < 1 st & 3 rd migration limit
Migration of Bisphenol A	80-05-7	< 0.01	< 0.01	< 0.01	≤ 0.05

Note:

- “mg/kg” denotes milligram per kilogram foodstuff.
- The specification was quoted from regulation (EU) 10/2011 and it's amendment (EU) No. 2018/213 and (EU) No. 2020/1245.

2.5. SPECIFIC MIGRATION OF PHENOLIC SUBSTANCES TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”; With reference to DIN 53704:1988, the sample(s) were migrated with food stimulant, followed by Ultraviolet-visible Spectrophotometer (UV-Vis) analysis.

Testing condition and simulant: 3% acetic acid at 95 °C for 1.5 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

Test Item	Result [mg/dm ²]	Requirement [mg/dm ²]
	Sample 001 (3 rd migration)	
Migration of Phenolic Substances	< 0.05	≤ 0.05

Note:

- “mg/dm²” denotes milligram per square decimeter.
- The specification was quoted from the Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”.

2.6. SPECIFIC MIGRATION OF PFOS AND PFOA TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”; the samples were tested migrated with food simulant, followed by Liquid Chromatography with Tandem Mass Spectrometry Detection (LC-MS/MS) analysis.

Testing condition and simulant: 95% ethanol at 60 °C for 6 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

Test Item	Result [mg/dm ²]	Requirement [mg/dm ²]
	Sample 001 (3 rd migration)	
Migration of PFOS	< 0.002	≤ 0.005

Test Item	Result [mg/dm ²]	Requirement [mg/dm ²]
	Sample 001 (3 rd migration)	
Migration of PFOA	< 0.002 (Not Detected)	/

Note:

- “mg/dm²” denotes milligram per square decimeter.
- The specification was quoted from Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”.

2.7. SPECIFIC MIGRATION OF CHROMIUM III AND CHROMIUM VI TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”; the samples were tested migrated with food simulant, followed by Inductively Coupled Plasma Mass Spectrometry(ICP-MS) and Ion Chromatograph (IC) analysis.

Testing condition and simulant: 3% acetic acid at 95 °C for 1.5 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

Test Item	Result [mg/dm ²]	Requirement [mg/dm ²]
	Sample 001 (3 rd migration)	
Migration of Chromium III	< 0.01	≤ 0.02
Migration of Chromium VI	< 0.01	Not Detected (< 0.01)

Note:

- “mg/dm²” denotes milligram per square decimeter.
- The specification was quoted from the Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”.

2.8. SPECIFIC MIGRATION OF LITHIUM TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”; the samples were tested migrated with food simulant, followed by Inductively Coupled Plasma Mass Spectrometry(ICP-MS) analysis.

Testing condition and simulant: 3% acetic acid at 95 °C for 1.5 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

Test Item	Result [mg/kg]	Requirement [mg/kg]
	Sample 001 (3 rd migration)	
Migration of Lithium	< 0.10	≤ 0.6

Note:

- “mg/kg” denotes milligram per kilogram foodstuff.
- The specification was quoted from the Recommendation of the BfR “Kunststoffe im Lebensmittelverkehr” Part LI “Temperature Resistant Polymer Coating Systems for Frying, Cooking and Baking Utensils”.

2.9. SPECIFIC MIGRATION OF 22 HEAVY METALS CONTENT TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: The sample(s) were extracted with food simulant, followed by Inductively Coupled Plasma Mass Spectrometry(ICP-MS) analysis.

Testing condition and simulant: 0.5% citric acid at 100 °C for 2 hour(s).

Surface area to Volume ratio: 0.41 dm² : 68 ml

No.	Test Item		Result [mg/kg]		Requirement [mg/kg]	
			Sample 001		1 st +2 nd migration	3 rd migration
			1 st +2 nd migration	3 rd migration		
1.	Barium	(Ba)	<0.2	<0.1	≤ 8.4	≤ 1.2
2.	Copper	(Cu)	<0.2	<0.1	≤ 28	≤ 4
3.	Iron	(Fe)	<0.2	<0.1	≤ 280	≤ 40
4.	Tin	(Sn)	<1.0	<0.5	≤ 700	≤ 100
5.	Chromium	(Cr)	<0.1	<0.05	≤ 7	≤ 1
6.	Manganese	(Mn)	<0.2	<0.1	≤ 3.85	≤ 0.55
7.	Zinc	(Zn)	<0.2	<0.1	≤ 35	≤ 5
8.	Aluminum	(Al)	0.8	0.4	≤ 35	≤ 5
9.	Lithium	(Li)	<0.01	<0.005	≤ 0.336	≤ 0.048
10.	Beryllium	(Be)	<0.004	<0.002	≤ 0.07	≤ 0.01
11.	Vanadium	(V)	<0.004	<0.002	≤ 0.07	≤ 0.01
12.	Nickel	(Ni)	<0.1	<0.05	≤ 0.98	≤ 0.14
13.	Cobalt	(Co)	<0.004	<0.002	≤ 0.14	≤ 0.02
14.	Arsenic	(As)	<0.0008	<0.0004	≤ 0.014	≤ 0.002
15.	Molybdenum	(Mo)	<0.004	<0.002	≤ 0.84	≤ 0.12
16.	Silver	(Ag)	<0.004	<0.002	≤ 0.56	≤ 0.08
17.	Cadmium	(Cd)	<0.0008	<0.0004	≤ 0.035	≤ 0.005
18.	Antimony	(Sb)	<0.01	<0.005	≤ 0.28	≤ 0.04
19.	Mercury	(Hg)	<0.001	<0.0005	≤ 0.021	≤ 0.003
20.	Thallium	(Tl)	<0.0002	<0.0001	≤ 0.007	≤ 0.001
21.	Lead	(Pb)	<0.02	<0.01	≤ 0.07	≤ 0.010
22.	Zirconium	(Zr)	<0.1	<0.05	≤ 14	≤ 2

Note:

- “mg/kg” denotes milligram per kilogram foodstuff.
- The specification was quoted from EDQM Technical guide for METALS AND ALLOYS used in food contact materials and articles (2nd Edition 2024).

2.10. SPECIFIC MIGRATION OF TETRAFLUOROETHYLENE TEST FOR NON-STICK COATING ON METAL SUBSTRATE

Test method: As specified in Resolution AP (2004)1; the sample(s) were migrated with food simulant, followed by Gas Chromatography and Mass Spectrometry (GC-MS) analysis.

Testing condition and simulant: 3% acetic acid at 100 °C for 4 hour(s).

Surface area to Volume ratio: 6dm² : 1000ml

Test Item	CAS No.	Result [mg/kg]	Requirement [mg/kg]
		Sample 001 (3 rd migration)	
Migration of Tetrafluoroethylene	116-14-3	< 0.05	≤ 0.05

Note:

- “mg/kg” denotes milligram per kilogram foodstuff.
- The specification was quoted from Resolution AP (2004)1.

2.11. SENSORY TEST

Test method: With reference to DIN 10955: 2024. The submitted sample was treated with food stimulant. After this treatment, examined by panels with regard to any divergence in smell and taste.

Testing condition and simulant: Distilled water at 100 °C for 2 hour(s)

No. of Judges: 6 panel

Test Item	Grading Result	Recommended Level
	Sample 002	
Transfer of Smell	1	< 3
Transfer of Taste	1	< 3

Note:

- Explanation for grading are listed as below:
 Grading 0: No perceptible taste/smell deviation
 Grading 1: Just perceptible taste/smell deviation
 Grading 2: Weak taste/smell deviation
 Grading 3: Clear taste/smell deviation
 Grading 4: Strong taste/smell deviation

3. REMARK

The chemical testing was performed in TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Chemical lab and the test results were reviewed at TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch.

APPENDIX:

Photos of submitted products



-----End of Report-----

