

Test Report No.: 180289121a 001

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Client: Norbert Woll GmbH
Contact Information: Heinrich-Barth-Str.7-11 66115 Saarbrucken Germany
Buyer's name: n.a.
Manufacturer's name: n.a.
Identification/ Cutting board
Model No(s): CB4925-1, CB4925, CB3525, CB3022, CB2519 and CB2715
Sample Receiving date: 2024-03-20, 2024-03-25
Testing Period: 2024-03-21 to 2024-04-03
Delivery condition: *Apparent good, Samples tested as received*

Test specification:

As specified by client, to perform testing on below test parameters as regulated by the German §31 LFGB (Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch)

— Sensorial examination	PASS
— Global Migration	PASS
— Global Migration from Silicone	PASS
— Pesticides	PASS
— Specific Migration of Formaldehyde	PASS
— Specific Migration of Primary Aromatic Amines	PASS
— Specific Migration of Metals	PASS
— Specific Migration of Phenol	PASS
— Colourfastness	PASS
— Residual Catalyst	PASS
— Volatile Organic Substances (Silicone)	PASS
— Remaining Peroxides (Silicone)	PASS
— Polycyclic aromatic hydrocarbons (PAHs) according to GS Specification - AfPS GS 2019:01 PAK	PASS
— Total Lead and total Cadmium Content	PASS

Test conclusion:

Other Information:

Not available

For detailed sample picture please
refer to last page

For and on behalf of TÜV Rheinland / CCIC (Ningbo)Co., Ltd.



2024-04-09

Chris W. W. Wang / Assistant Manager

Date

Name / Position

Sample information is provided by customer. Test result is drawn according to the kind and extent of tests performed.

This test report relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.

'Decision Rule' document announced in our website (<https://www.tuv.com/landingpage/en/qm-gcn/>) describes the statement of conformity and its rule of enforcement for test results are applicable throughout this test report.

Indication: Food contact

Product: Commodity, contact with foodstuff

§ 2 (6) No. 1, German Food, Commodities and Animal Feed Code of Law (LFGB)

Description of test specimen

Item

1 Cutting board

1. Material List:

Sample No.	Material	Color	Location
A001	Whole product	Black	Refer to photo
1	Silicone	Black	Refer to photo
2	Plastic + cellulose	Black	Refer to photo

2. Overall Results:

Test No.	Tested Item	Conclusion
1	Sensorial examination	PASS
2	Global Migration	PASS
3	Global Migration from Silicone	PASS
4	Pesticides	PASS
5	Specific Migration of Formaldehyde	PASS
6	Specific Migration of Primary Aromatic Amines	PASS
7	Specific Migration of Metals	PASS
8	Specific Migration of Phenol	PASS
9	Colourfastness	PASS
10	Residual Catalyst	PASS
11	Volatile Organic Substances (Silicone)	PASS
12	Remaining Peroxides (Silicone)	PASS
13	Polycyclic aromatic hydrocarbons (PAHs) according to GS Specification - AfPS GS 2019:01 PAK	PASS
14	Total Lead and total Cadmium Content	PASS

3. Results

3.1 Sensorial examination

Test method: It is examined to the extent of food simulant being used, which comes into contact with the product, undergoes detectable changes in taste and smell.

For this purpose, the food simulant was stored in the product under the below mentioned time and temperature. Afterwards, the food simulant was examined by an appropriate number of tasters with regard to any divergence in smell and taste. Another test sample, which was used as a reference, was treated by the same way except that it had no contact with the product to be tested.

Before testing, the product had been cleaned according to the product's instruction manual or in the absence of such manual, by normal household cleaning.

The test is carried out on the basis of DIN 10955:2024 by paired comparison test:

Evaluation scheme:	0 = No perceptible difference
	1 = Just perceptible difference (still difficult to define)
	2 = Slight difference (possible to define)
	3 = Marked difference
	4 = Strong difference
Limit:	3 (failed)

The following food simulants and conditions were applied:

Food simulant	Test duration / Temperature
Water	2 hour(s) / 70 °C

Test No.:	1
Material No.:	A001
Parameter:	Result
Transfer of Smell:	1
Transfer of Taste:	1

3.2 Global Migration

Test method: The migratory behaviour is examined with reference to Commission Regulation (EU) No 10/2011 and its amendments.

Limit: With reference to Commission Regulation (EU) No 10/2011 and its amendments

The following food simulants and conditions were applied:

Food simulant	Test duration / Temperature
Acetic acid 3 %	2 hour(s) / 70 °C
Ethanol 95 %	2 hour(s) / 60 °C
Isooctane	0.5 hour(s) / 40 °C

Test No.:	1					
Sample No.:	2					
Migration ratio:	167 ml / 1.0 dm ²					
Parameter	Unit	RL	1 st Migration Result	2 nd Migration Result	3 rd Migration Result	Limit
Acetic acid 3 %	mg/dm ²	2	5	2	<RL	10
Ethanol 95 %	mg/dm ²	2	3	<RL	<RL	10
Isooctane	mg/dm ²	2	<RL	<RL	<RL	10

Abbreviations:

RL = Reporting Limit

mg/dm² = Milligram per square decimetre

ml/dm² = Millilitre per square decimetre

< = Less than

Remark:

*1 Acc. to DIN EN 1186-1 the following analytical tolerances have been observed:

- 3 mg/dm² in migration tests using rectified olive oil or substitutes,
- 1 mg/dm² in migration tests using aqueous simulants

A material or article that exceeds the overall migration limit by an amount not greater than the analytical tolerance mentioned above should therefore be deemed to be in compliance with the overall migration limit.

*2 Stability test is included in this test parameter.

*3 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.

3.3 Global Migration from Silicone

Test method: The migratory behaviour is examined with reference to Chapter V, Article 18 of Commission regulation 10/2011 and its amendments. Deviating to the regulations the following tests were performed as orientating single tests.

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

The following food simulants and conditions were applied:

Food simulant	Test duration / Temperature
Acetic acid 3 %	2 hour(s) / 70 °C
Ethanol 50 %	2 hour(s) / 70 °C
MPPO	2 hour(s) / 100 °C

Test No.:	1					
Sample No.:	1					
Migration ratio:	167 ml / 1.0 dm ²					
Parameter	Unit	RL	1 st Migration Result	2 nd Migration Result	3 rd Migration Result	Limit
Acetic acid 3 %	mg/dm ²	2	<RL	<RL	<RL	10
Ethanol 50 %	mg/dm ²	2	<RL	<RL	<RL	10
MPPO	mg/dm ²	2	2	<RL	<RL	10

Abbreviations:

mg/dm² = Milligram per square decimetre

< = Less than

Remark:

*1 Acc. to DIN EN 1186-1 the following analytical tolerances have been observed:

- 3 mg/dm² in migration tests using rectified olive oil or substitutes,
- 1 mg/dm² in migration tests using aqueous simulants

A material or article that exceeds the overall migration limit by an amount not greater than the analytical tolerance mentioned above should therefore be deemed to be in compliance with the overall migration limit.

*2 Stability test is included in this test parameter.

*3 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.

3.4 Pesticides

Test method: Organic solvent extraction, GC-ECD, GC-MS

Table 1: Selected Pesticides being tested

Test No.:	1				
Sample No.:	2				
Selected Pesticides	Cas no.	Unit	RL	Result	Limit ⁽¹⁾
Allethrin	584-79-2	mg/kg	0.15	n.d.	n.d.
1-chloronaphthalene	90-13-1	mg/kg	0.15	n.d.	n.d.
2-chloronaphthalene	91-58-7	mg/kg	0.15	n.d.	n.d.
Chloropyrifos	2921-88-2	mg/kg	0.15	n.d.	n.d.
Chlorothalnil	1897-45-6	mg/kg	0.15	n.d.	n.d.
Cyfluthrin	68359-37-5	mg/kg	0.15	n.d.	n.d.
Cypermethrin	52315-07-8	mg/kg	0.15	n.d.	n.d.
DDE	3424-82-6, 72-55-9	mg/kg	0.15	n.d.	n.d.
DDT	50-29-3, 789-02-6	mg/kg	0.15	n.d.	n.d.
Diazinon	333-41-5	mg/kg	0.15	n.d.	n.d.
Dichlofuanid	1085-98-9	mg/kg	0.15	n.d.	n.d.
Dieldrin	60-57-1	mg/kg	0.15	n.d.	n.d.
α-Endosulfan	959-98-8	mg/kg	0.15	n.d.	n.d.
β-Endosulfan	33213-65-9	mg/kg	0.15	n.d.	n.d.
Fenitrothion	122-14-5	mg/kg	0.15	n.d.	n.d.
Fenthion	55-38-9	mg/kg	0.15	n.d.	n.d.
Fenvalerate	51630-58-1	mg/kg	0.15	n.d.	n.d.
Furmecyclo	60568-05-0	mg/kg	0.15	n.d.	n.d.
Hexachlorobenzene	118-74-1	mg/kg	0.15	n.d.	n.d.
Lindane(g-HCH)	58-89-9	mg/kg	0.15	n.d.	n.d.
Malathion	121-75-5	mg/kg	0.15	n.d.	n.d.
Methoxychlor	72-43-5	mg/kg	0.15	n.d.	n.d.
Parathion-ethyl	56-38-2	mg/kg	0.15	n.d.	n.d.
Parathion-methyl	298-00-0	mg/kg	0.15	n.d.	n.d.
Pentachloroanisole	1825-21-4	mg/kg	0.15	n.d.	n.d.
Permethrin	52645-53-1	mg/kg	0.15	n.d.	n.d.
Piperonyl butoxide	51-03-06	mg/kg	0.15	n.d.	n.d.

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Propiconazole	60207-90-1	mg/kg	0.15	n.d.	n.d.
Propoxur	114-26-1	mg/kg	0.15	n.d.	n.d.
Tebuconazole	107534-96-3	mg/kg	0.15	n.d.	n.d.
Tetrachlorvinylphos	22248-79-9	mg/kg	0.15	n.d.	n.d.
Tetramethrin	7696-12-0	mg/kg	0.15	n.d.	n.d.
Tolyfluanid	731-27-1	mg/kg	0.15	n.d.	n.d.

Abbreviations:

n.d. = Not detected (<Reporting Limit)

RL = Reporting Limit

mg/kg = Milligram per kilogram

Remark:

*1 Technically preventable limit

3.5 Specific Migration of Formaldehyde

Test method: The migratory behavior was examined with reference to Commission Regulation (EU) No. 10/2011 and its amendments. Determination with ref. to CEN/TS 13130-23:2005.

Limit: Commission Regulation (EU) No 10/2011 and its amendments

The following food simulant and condition were applied:

Food simulant	Test duration / Temperature
Acetic acid 3 %	2 hour(s) / 70 °C

Test No.:	1						
Sample No.:	2						
Migration ratio	167 ml / 1.0 dm ²						
Parameter	CAS No.	Unit	RL	1 st Migration Result	2 nd Migration Result	3 rd Migration Result	Limit
Formaldehyde	50-00-0	mg/kg	2	< RL	< RL	< RL	15

Abbreviations:

RL = Reporting Limit

mg/kg = Milligram per kilogram

ml/dm² = Millilitre per square decimetre

< = Less than

Remark:

*1 Stability test is included in this test parameter.

*2 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.

3.6 Specific Migration of Primary Aromatic Amines

Test method: The migratory behaviour was examined with reference to Commission Regulation (EU) No 10/2011 and its amendments. Determination by LC-MS/MS.

Limit: With reference to Commission Regulation (EU) No 10/2011 and its amendments

The following food simulant and condition were applied:

Food simulant	Test duration / Temperature
Acetic acid 3 %	2 hour(s) / 70 °C

Parameter	CAS no.	Unit	RL	1 st	2 nd	3 rd	Limit
				Migration Result	Migration Result	Migration Result	
2,4-Diaminoanisole	615-05-4	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
2,4-toluenediamine	95-80-7	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4,4'-oxydianiline	101-80-4	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
Benzidine	92-87-5	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4,4'-methylenedianiline	101-77-9	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
o-anisidine	90-04-0	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
o-Toluidine	95-53-4	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4,4'-bi-o-toluidine	119-93-7	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
3,3'-Dimethoxybenzidine	119-90-4	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4-chloroaniline	106-47-8	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
p-cresidine	120-71-8	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4-chloro-o-toluidine	95-69-2	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4-aminobiphenyl	92-67-1	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4,4'-Methylene-di-o-toluidine	838-88-0	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4,4'-thiodianiline	139-65-1	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
2-Naphthylamine	91-59-8	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
3,3'-Dichlorobenzidine	91-94-1	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4,4'-methylene-bis-(2-chloro-aniline)	101-14-4	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
4-aminoazobenzene	60-09-3	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
o-aminoazotoluene	97-56-3	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
2,4,5-Trimethylaniline	137-17-7	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
2-Methyl-5-nitroaniline	99-55-8	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.

m-phenylenediamine	108-45-2	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
Benzoguanamine	91-76-9	mg/kg	0.01	n.d.	n.d.	n.d.	5
4,4'-Methylenebis-(3-chloro-2,6-diethylaniline)	106246-33-7	mg/kg	0.01	n.d.	n.d.	n.d.	0.05
PAAs not listed in entry 43 to Appendix 8 of Annex XVII to Regulation (EC) No 1907/2006 and its amendments							
p-toluidine	106-49-0	mg/kg	0.01	n.d.	n.d.	n.d.	-
p-phenylenediamine	106-50-3	mg/kg	0.01	n.d.	n.d.	n.d.	-
2-Methyl-4-nitroaniline	99-52-5	mg/kg	0.01	n.d.	n.d.	n.d.	-
o-phenylenediamine	95-54-5	mg/kg	0.01	n.d.	n.d.	n.d.	-
1,5-naphthylenediamine	2243-62-1	mg/kg	0.01	n.d.	n.d.	n.d.	-
Aniline	62-53-3	mg/kg	0.01	n.d.	n.d.	n.d.	-
2,4-Dimethylaniline	95-68-1	mg/kg	0.01	n.d.	n.d.	n.d.	-
2,6-Dimethylaniline	87-62-7	mg/kg	0.01	n.d.	n.d.	n.d.	-
5-Chloro-2-methylaniline	95-79-4	mg/kg	0.01	n.d.	n.d.	n.d.	-
2,6-toluenediamine	823-40-5	mg/kg	0.01	n.d.	n.d.	n.d.	-
5-Amino-6-methyl-1,3-dihydro-2H-benzimidazol-2-one	67014-36-2	mg/kg	0.01	n.d.	n.d.	n.d.	-
4-aminobenzamide	2835-68-9	mg/kg	0.01	n.d.	n.d.	n.d.	-
3-Amino-4-methylbenzamide	19406-86-1	mg/kg	0.01	n.d.	n.d.	n.d.	-
m-Anisidine	536-90-3	mg/kg	0.01	n.d.	n.d.	n.d.	-
m-toluidine	108-44-1	mg/kg	0.01	n.d.	n.d.	n.d.	-
4-Ethoxyaniline	156-43-4	mg/kg	0.01	n.d.	n.d.	n.d.	-
2-ethoxyaniline	94-70-2	mg/kg	0.01	n.d.	n.d.	n.d.	-
4-Chloro-3-methoxyaniline	13726-14-2	mg/kg	0.01	n.d.	n.d.	n.d.	-
1,3-Diiminoisoindoline	3468-11-9	mg/kg	0.01	n.d.	n.d.	n.d.	-
3-Amino-4-methoxybenzalide	120-35-4	mg/kg	0.01	n.d.	n.d.	n.d.	-
2,4,5-Trichloroaniline	636-30-6	mg/kg	0.01	n.d.	n.d.	n.d.	-
4-chloro-2,5-dimethoxyaniline	6358-64-1	mg/kg	0.01	n.d.	n.d.	n.d.	-
2-Methoxy-4-nitroaniline	97-52-9	mg/kg	0.01	n.d.	n.d.	n.d.	-
5-Chloro-2-methoxyaniline	95-03-4	mg/kg	0.01	n.d.	n.d.	n.d.	-
3-Chloroaniline	108-42-9	mg/kg	0.01	n.d.	n.d.	n.d.	-
2-Chloroaniline	95-51-2	mg/kg	0.01	n.d.	n.d.	n.d.	-
Dimethyl-2-aminoterephthalate	5372-81-6	mg/kg	0.01	n.d.	n.d.	n.d.	-
Biphenyl-2-ylamine	90-41-5	mg/kg	0.01	n.d.	n.d.	n.d.	-
2,5-Dichloroaniline	95-82-9	mg/kg	0.01	n.d.	n.d.	n.d.	-
2-Nitroaniline	88-74-4	mg/kg	0.01	n.d.	n.d.	n.d.	-
4-Aminotoluene-3-sulfonic acid	88-44-8	mg/kg	0.01	n.d.	n.d.	n.d.	-

2-Aminonaphthalene-1-sulfonic acid	81-16-3	mg/kg	0.01	n.d.	n.d.	n.d.	-
2,4-Dinitroaniline	97-02-9	mg/kg	0.01	n.d.	n.d.	n.d.	-
2-Chloro-4-nitroaniline	121-87-9	mg/kg	0.01	n.d.	n.d.	n.d.	-
Sum of Primary Aromatic Amines ^{*1}	-	mg/kg	0.01	n.d.	n.d.	n.d.	n.d.

Abbreviations:

RL = Reporting Limit

n.d. = Not detected

mg/kg = Milligram per kilogramm

ml/dm² = Mililitre per square decimetre

< = Less than

Remark:

- *1 Sum of Primary Aromatic Amines does not include the value of Benzoguanamine and 4,4'-Methylenebis-(3-cholor-2,6-diethylaniline) as the SML of both substances should refer to EU 10/2011 Union list.
Single components with an amount of less than reporting limit were not considered by the calculation of the sum. In the case of all of Primary Aromatic Amines were not detected, the result is stated n.d.
- *2 Stability test is included in this test parameter.
- *3 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.

3.7 Specific Migration of Metals

Test method: The migratory behaviour was examined with reference to Commission Regulation (EU) No. 10/2011 and its amendments. Determination by ICP-MS.

Limit: With reference to Commission Regulation (EU) No 10/2011 and its amendments

The following food simulant and condition were applied:

Food simulant	Test duration / Temperature
Acetic acid 3 %	2 hour(s) / 70 °C

Test No.:	1					
Material No.:	2					
Migration ratio:	167 ml / 1.0 dm ²					
Parameter	Unit	RL	1 st Migration Result	2 nd Migration Result	3 rd Migration Result	Limit
Aluminium	mg/kg	0.1	n.d.	n.d.	n.d.	1
Antimony	mg/kg	0.01	n.d.	n.d.	n.d.	0.04
Arsenic	mg/kg	0.01	n.d.	n.d.	n.d.	n.d.
Barium	mg/kg	0.1	n.d.	n.d.	n.d.	1
Cadmium	mg/kg	0.002	n.d.	n.d.	n.d.	n.d.
Total Chromium	mg/kg	0.01	n.d.	n.d.	n.d.	n.d.
Cobalt	mg/kg	0.01	n.d.	n.d.	n.d.	0.05
Copper	mg/kg	0.5	n.d.	n.d.	n.d.	5
Iron	mg/kg	5	n.d.	n.d.	n.d.	48
Lead	mg/kg	0.01	n.d.	n.d.	n.d.	n.d.
Lithium	mg/kg	0.1	n.d.	n.d.	n.d.	0.6
Manganese	mg/kg	0.1	n.d.	n.d.	n.d.	0.6
Mercury	mg/kg	0.01	n.d.	n.d.	n.d.	n.d.
Nickel	mg/kg	0.01	n.d.	n.d.	n.d.	0.02
Zinc	mg/kg	1	n.d.	n.d.	n.d.	5
Europium	mg/kg	0.01	n.d.	n.d.	n.d.	--
Gadolinium	mg/kg	0.01	n.d.	n.d.	n.d.	--
Lanthanum	mg/kg	0.01	n.d.	n.d.	n.d.	--
Terbium	mg/kg	0.01	n.d.	n.d.	n.d.	--
Sum of Lanthanide substances	mg/kg	0.01	n.d.	n.d.	n.d.	0.05

Abbreviations:

RL = Reporting limit
n.d. = Not detected
mg/kg = Milligram per kilogram
ml/dm² = Millilitre per square decimetre
< = Less than

Remark:

- *1 Single component with an amount below reporting limit was not considered by the calculation of the sum. In the case of all lanthanide substances europium, gadolinium, lanthanum and terbium were not detected, the result is stated n.d.
- *2 Stability test is included in this test parameter.
- *3 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.

3.8 Specific Migration of Phenol

Test method: The migratory behavior was examined with reference to Commission Regulation (EU) No. 10/2011 and its amendments. Determination by LC-DAD.

Limit: With reference to Commission Regulation (EU) No 10/2011 and its amendments

The following food simulant and condition were applied:

Food simulant	Test duration / Temperature
Oil	2 hour(s) / 70 °C

Test No.:	1						
Sample No.:	2						
Migration ratio	167 ml / 1.0 dm ²						
Parameter	CAS No.	Unit	RL	1 st Migration Result	2 nd Migration Result	3 rd Migration Result	Limit
Phenol	108-95-2	mg/kg	0.5	< RL	<RL	<RL	3

Abbreviations:

RL = Reporting Limit

mg/kg = Milligram per kilogram

ml/dm² = Millilitre per square decimetre

< = Less than

Remark:

*1 Stability test is included in this test parameter.

*2 The migration results do not show increase between subsequent tests and therefore it meets the stability requirement.

3.9 Colourfastness

Test method: 24th Communication on the testing of plastics in Bundesgesundheitsbl. 15 (1972) 285

Requirement: BfR Recommendations on Food Contact Materials (formerly "Plastics Recommendations") Part IX "Colorants for Plastics and other Polymers used in Commodities" - *No transfer of colorants to foodstuffs is permitted*

Test No.:	1	2
Sample No.:	1	2
Parameter – Colourfastness to	Difference between blank and filter paper contacted with sample	Difference between blank and filter paper contacted with sample
Water	No	No
Acetic acid 3 %	No	No
Ethanol 50 %	No	No
Oil	No	No

3.10 Residual Catalyst

Test method: The synthetic material is dissolved by acid digestion. The concentration of platinum was determined by means of ICP-OES.

Limit: BfR Recommendations on Food Contact Materials (formerly "Plastics Recommendations") Part XV, "Silicones"

Test No.:	1			
Sample No.:	1			
Parameter	Unit	RL	Result	Limit
Platinum	mg/kg	10	n.d.	50

Abbreviations:

n.d. = Not detected (<Reporting Limit)

RL = Reporting Limit

mg/kg = Milligram per kilogram

3.11 Volatile Organic Substances (Silicone)

Test method: The test was performed according to the Bestimmung von flüchtigen Verbindungen in Bedarfsgegenständen aus Silikon.

Limit: BfR Recommendations on Food Contact Materials (formerly "Plastics Recommendations") Part XV, Silicones

The following conditions were applied:

Test duration / Temperature
4 hour(s) / 200 °C

Test No.:	1			
Material No.:	1			
Parameter	Unit	RL	Result	Limit
Volatile organic substances (VOC)	%	0.1	0.18	0.5

Abbreviations:

% = Percentage

< = Less than

RL = Reporting Limit

3.12 Remaining Peroxides (Silicone)

Test method: The test was performed with reference to the 58th Communication on testing of plastics, Bundesgesundheitsbl. 40 (1997) 412

Limit: BfR Recommendations on Food Contact Materials (formerly "Plastics Recommendations") Part XV "Silicone"

Test No.:	1			
Sample No.:	1			
Parameter	Unit	RL	Result	Limit
Peroxides	%	0.01	n.d.	n.d.

Abbreviations:

% = Percentage

RL = Reporting Limit

n.d. = Not detected (<Reporting Limit)

< = Less than

3.13 Polycyclic aromatic hydrocarbons (PAHs)

Test Method: AfPS GS 2019:01 PAK

Test Result:

		Test No.	1	
		Material No.	2	
Test Parameter	CAS NO	Unit	RL	Result
Anthracene	120-12-7	mg/kg	0.2	< RL
Benzo[a]anthracene	56-55-3	mg/kg	0.2	< RL
Benzo[a]pyrene(BaP)	50-32-8	mg/kg	0.2	< RL
Benzo[b]fluoranthene	205-99-2	mg/kg	0.2	< RL
Benzo[k]fluoranthene	207-08-9	mg/kg	0.2	< RL
Benzo[jj]fluoranthene	205-82-3	mg/kg	0.2	< RL
Benzo[g,h,i]perylene	191-24-2	mg/kg	0.2	< RL
Benzo[e]pyrene	192-97-2	mg/kg	0.2	< RL
Chrysene	218-01-9	mg/kg	0.2	< RL
Dibenzo[a,h]anthracene	53-70-3	mg/kg	0.2	< RL
Fluoranthene	206-44-0	mg/kg	0.2	< RL
Indeno[1,2,3-cd]pyrene	193-39-5	mg/kg	0.2	< RL
Naphthalene	91-20-3	mg/kg	0.2	< RL
Phenanthrene	85-01-8	mg/kg	0.2	< RL
Pyrene	129-00-0	mg/kg	0.2	< RL
Sum of, Anthracene, Fluoranthene, Phenanthrene, Pyrene	-	mg/kg	0.2	< RL
Sum of 15 PAHs	-	mg/kg	0.2	< RL
Category*	-	--	-	1
Conclusion				PASS

Abbreviation: < = less than

RL = Reporting Limit

NA = Not Applicable

mg/kg = milligram per kilogram

Remark:

- * PAH maximum permissible limits requirement from the GS-Mark Approval published by the German Federal Institute for Occupational Safety and Health (BAuA)

Parameter	Unit	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	Cat. 2a Use by children	Cat. 2b Other consumer products	Cat. 3a Use by children
Benzo[a]pyrene(BaP)	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[e]pyrene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[a]anthracene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[b]fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[j]fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[k]fluoranthene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Chrysene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Dibenzo[a,h]anthracene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Benzo[g,h,i]perylene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Indeno[1,2,3-cd]pyrene	mg/kg	<0.2	<0.2	<0.5	<0.5	<1
Naphthalene	mg/kg	<1	<2	<2	<10	<10
Sum of Anthracene Fluoranthene Phenanthrene Pyrene	mg/kg	<1	<5	<10	<20	<50
Sum of 15 PAHs	mg/kg	<1	<5	<10	<20	<50

Limit: Specific evaluation required according to type of foreseeable use.

The definition of "child" means persons before the age of 14 years. "Use by children" includes both active and passive direct contact by children.

- ** Single components with an amount of <0.2 mg/kg were not considered by the calculation of the sum. In the case of all 15 PAHs were not detected, the result is stated <RL

3.14 Total Lead and total Cadmium Content

Test method: Lead: CPSC-CH-E1001-08.3, CPSC-CH-E1002-08.3 and CPSC-CH-E1003-09.1
(Microwave method)
Cadmium: EN 1122:2001 (method B)

Test No.:	1			
Sample No.:	1			
Parameter	Unit	RL	Result	Customer's Requirement
Lead	mg/kg	10	< RL	100
Cadmium	mg/kg	10	< RL	100

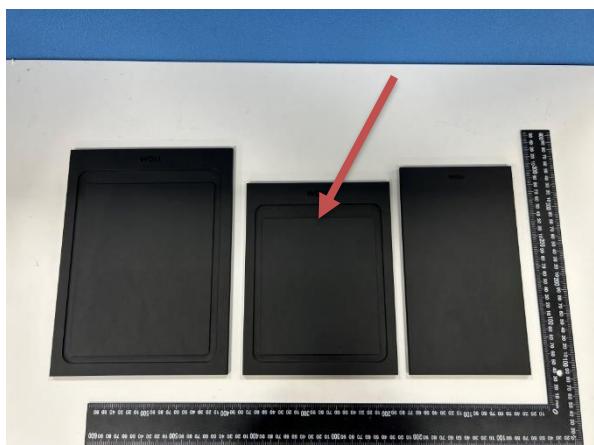
Test No.:	2			
Sample No.:	2			
Parameter	Unit	RL	Result	Customer's Requirement
Lead	mg/kg	10	< RL	100
Cadmium	mg/kg	10	< RL	100

Abbreviation: < = less than
RL = Reporting Limit
mg/kg = milligram per kilogram

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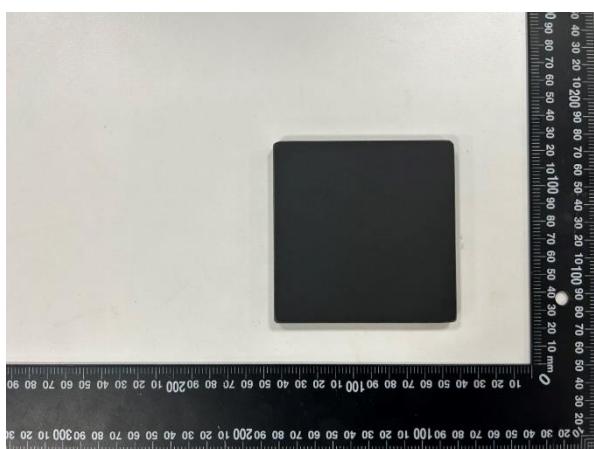
4. Sample picture(s):



Sample A001



Sample 1



Sample 2



- END -

