Dated: 2022-01-06



Applicant : The Dream Farm Pty Ltd

9 Amy Street, Albion QLD Australia

Attention : Ms. Dani Toeke

Sample Description : Chopula + Mini Chopula

Product Type/ End use : Spatula

Style No. / Name / Design No. : DFCUXXXX

Supplier : The Dream Farm Pty Ltd

Manufacturer : Millennium Metal & Plastics / Hui Zi Yi Run Metal

Country of Origin : China

Test Sample Receipt Date, Location : 2021-12-17, Shenzhen

Test Period, Location : From 2021-12-20 to 2022-01-06, Shenzhen

Test Result(s) : Refer to Section 3

Dated: 2022-01-06



Purpose Of Examination / Conclusion:

Test Requested:	As specified by client, to test per the selected requirement(s) for the tested
	item(s) as stated in the German Food & Feed Acts LFGB (§ 30 & 31) and
	Regulation (EC) No.1935/2004

No.	Test Item(s)	Conclusion
1.	Overall Migration	Pass
2	Specific Migration of PAA	Pass
3	Specific Migration of PAAs	Pass
4	Specific Migration of Heavy Metals	Pass
5	Specific Migration of Bisphenol A (BPA)	Pass
6	Specific Migration of Hexamethylenediamine (HMDA)	Pass
7	Peroxide	Pass
	Sensory Test	
8	Test for compliance with German Food and Feed Acts LFGB Section 31 and Regulation (EC) No. 1935/2004 Article 3(1)	Pass

Remarks:

- (1) The results relate only to the items tested.
- (2) Samples are tested as received.
- (3) The test item and samples were specified by the client
- (4) "Pass" means the measured result is within a limit, even when extended by expanded uncertainty. "Fail" means the measured result is beyond a limit, even when extended by expanded uncertainty. "Inconclusive" means the measured result can be within or beyond a limit when extended by expanded uncertainty. The confidence level of the expended uncertainty for "Pass", "Fail" and "Inconclusive" is 95%.

Dated: 2022-01-06



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

Prepared by:

Reviewed by:

Cara Xiang Senior Project Coordinator

Ken Chen Project Manager

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Web: http://www.tuvsud.cn

Dated: 2022-01-06



1. Description of the Submitted Sample:

Sample Description	Chopula + Mini Chopula
	and a sure of the



Regd. Office:

Dated: 2022-01-06



2. List of Materials as identified by the Laboratory:

T. No.	Sample No.	Colour and Description	Photograph
T1	001	Black Nylon + PA66 plastic (Functional head)	567896012345678970123456789801234567898012345678
T2	002	Whole product (Spatula)	

Web: http://www.tuvsud.cn

Dated: 2022-01-06



3. Test Result

3.1 Overall Migration

Test method: As specified in Regulation (EU) No. 10/2011 ANNEX III and V,test with reference to:

EN 1186-1:2002(Guide to the selection of conditions and test methods for overall migration)

EN 1186-3:2002 (Total Immersion method) EN 1186-14:2002 (Substitute Test method)

[Reporting Limit: 3mg/dm²]

	TEST		RESULTS [mg/dm²]			
TEST ITEM	CONDITIONS	SAMPLE 001 1 st Migration	SAMPLE 001 2 nd Migration		LIMIT [mg/dm²]	
3% Acetic acid	100°C for 4 Hours	11.5	ND	ND	<10	
10% Ethanol	100°C for 4 Hours	8.0	ND	ND	<10	
95% Ethanol	60°C for 7 Hours	7.0	5.8	4.2	<10	
Isooctane	60°C for 3 Hours	ND	ND	ND	<10	
Conclusion:			Pass*			

- 2. "<" denotes less than
- 3. "mg/dm2" denotes milligram per square decimeter
- 4. "ND" denotes below the Report Limit
- 5. The specification was quoted from Regulation (EU) No. 10/2011 and its amendments
- 6. "*" denotes the results of second migration should lower than first migration, the result of third migration should lower than second migration.

Dated: 2022-01-06



3.2 Specific Migration of PAA

Test method: with reference to EN 13130-1:2004, follow by Ultraviolet and visible spectrophotometry (UV-Vis).

Test Conditions: 3% Acetic acid: 100 °C for 2 Hours

	RESULT [mg/kg]			REPORT	LIMIT	
TEST ITEM	SAMPLE 001 1 st Migration		SAMPLE 001 3 rd Migration	LIMIT [mg/kg]	[mg/kg]	
Primary Aromatic Amine-Trial 1	ND	ND	ND	<0.01	<0.01	
Primary Aromatic Amine-Trial 2	ND	ND	ND	<0.01	<0.01	
Primary Aromatic Amine-Trial 3	ND	ND	ND	<0.01	<0.01	
Conclusion:	Pass	Pass	Pass			

- 2. "<" denotes less than
- 3. "mg/kg" denotes milligram per kilogram
- 4. "ND" denotes below the Report Limit
- 5. The specification was quoted from Regulation (EU) No. 284/2011

Dated: 2022-01-06



3.3 Specific Migration of PAAs

Test method: with reference to EN 13130-1:2004, follow by Liquid chromatography tandem mass spectrometer (LC-MS/MS). [Reporting Limit:0.002 mg/kg]

Test Conditions: 3% Acetic Acid: 100 °C for 2 Hours

	RESUL	LINALT		
TEST ITEM	SAMPLE 001	SAMPLE 001	SAMPLE 001	LIMIT
	1 st Migration	2 nd Migration	3 rd Migration	[mg/kg]
4-Aminobiphenyl (4-ABP)-Trial 1	ND	ND	ND	<0.002
4-Aminobiphenyl (4-ABP)-Trial 2	ND	ND	ND	<0.002
4-Aminobiphenyl (4-ABP)-Trial 3	ND	ND	ND	<0.002
Aniline (ANL)-Trial 1	ND	ND	ND	<0.002
Aniline (ANL)-Trial 2	ND	ND	ND	<0.002
Aniline (ANL)-Trial 3	ND	ND	ND	<0.002
o-Anisidine (o-ASD)-Trial 1	ND	ND	ND	<0.002
o-Anisidine (o-ASD)-Trial 2	ND	ND	ND	<0.002
o-Anisidine (o-ASD)-Trial 3	ND	ND	ND	<0.002
Benzidine (BNZ)-Trial 1	ND	ND	ND	<0.002
Benzidine (BNZ)-Trial 2	ND	ND	ND	<0.002
Benzidine (BNZ)-Trial 3	ND	ND	ND	<0.002
4-Chloro-Aniline (4-CA)-Trial 1	ND	ND	ND	<0.002
4-Chloro-Aniline (4-CA)-Trial 2	ND	ND	ND	<0.002
4-Chloro-Aniline (4-CA)-Trial 3	ND	ND	ND	<0.002
4-Chloro-o-Toluidine (4-CoT)-Trial 1	ND	ND	ND	<0.002
4-Chloro-o-Toluidine (4-CoT)-Trial 2	ND	ND	ND	<0.002
4-Chloro-o-Toluidine (4-CoT)-Trial 3	ND	ND	ND	<0.002
2,4-Dimethylaniline (2,4-DMA)-Trial 1	ND	ND	ND	<0.002
2,4-Dimethylaniline (2,4-DMA)-Trial 2	ND	ND	ND	<0.002
2,4-Dimethylaniline (2,4-DMA)-Trial 3	ND	ND	ND	<0.002
4,4'-Diaminodiphenylether (4,4'-DPE)-Trial 1	ND	ND	ND	<0.002
4,4'-Diaminodiphenylether (4,4'-DPE)-Trial 2	ND	ND	ND	<0.002
4,4'-Diaminodiphenylether (4,4'-DPE)-Trial 3	ND	ND	ND	<0.002
4,4*-Methylenedianiline (4,4*-MDA)-Trial 1	ND	ND	ND	<0.002
4,4*-Methylenedianiline (4,4*-MDA)-Trial 2	ND	ND	ND	<0.002
4,4*-Methylenedianiline (4,4*-MDA)-Trial 3	ND	ND	ND	<0.002
4,4'-Methylenedi-o-toluidine (4,4'-MDoT)-	ND	ND	ND	<0.002
Trial 1	110	140	ND	\0.00Z
4,4'-Methylenedi-o-toluidine (4,4'-MDoT)- Trial 2	ND	ND	ND	<0.002
4,4'-Methylenedi-o-toluidine (4,4'-MDoT)-	ND	ND	ND	<0.002
Trial 3 2-Methoxy-5-Methylaniline (2-M-5-MA)-Trial 1	ND	ND	ND	<0.002

Laboratory:

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SAMPLE 001 SAM	T	dstuff]	.TS [mg/kg foo	RESUL	
1st Migration 2nd Migratio	LIMIT	SAMPLE 001			TEST ITEM
2-Methoxy-5-Methylaniline (2-M-5-MA)-Trial 2 ND ND ND 2-Methoxy-5-Methylaniline (2-M-5-MA)-Trial 3 ND ND ND m-Phenylenediamine (m-PDA)-Trial 1 ND ND ND m-Phenylenediamine (m-PDA)-Trial 2 ND ND ND m-Phenylenediamine (m-PDA)-Trial 3 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 1 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 2 ND ND ND MPDA)-Trial 3 ND ND ND 0-Toluidine (o-T)-Trial 1 ND ND ND ND ND ND ND ND 0-Toluidine (o-T)-Trial 3 ND ND ND ND 0-Toluidine (o-T)-Trial 3 ND ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND	[mg/kg]	3 rd Migration	2 nd Migration	1 st Migration	
2-Methoxy-5-Methylaniline (2-M-5-MA)-Trial 3 ND ND ND m-Phenylenediamine (m-PDA)-Trial 1 ND ND ND m-Phenylenediamine (m-PDA)-Trial 2 ND ND ND m-Phenylenediamine (m-PDA)-Trial 3 ND ND ND Methoxy-mphenylenediamine (4-M-mPDA)-Trial 1 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 2 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 3 ND ND ND 0-Toluidine (0-T)-Trial 2 ND ND ND 0-Toluidine (0-T)-Trial 3 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 2,4-Toluenediamine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethy	<0.002			ND	,
m-Phenylenediamine (m-PDA)-Trial 1 ND ND ND m-Phenylenediamine (m-PDA)-Trial 2 ND ND ND m-Phenylenediamine (m-PDA)-Trial 3 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 1 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 3 ND ND ND 0-Toluidine (o-T)-Trial 1 ND ND ND ND ND ND ND 0-Toluidine (o-T)-Trial 2 ND ND ND 0-Toluidine (o-T)-Trial 3 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2 ND	<0.002	ND	ND	ND	2-Methoxy-5-Methylaniline (2-M-5-MA)-Trial
m-Phenylenediamine (m-PDA)-Trial 2 ND ND ND m-Phenylenediamine (m-PDA)-Trial 3 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 1 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 2 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 3 ND ND ND 0-Toluidine (o-T)-Trial 1 ND ND ND 0-Toluidine (o-T)-Trial 2 ND ND ND 0-Toluidine (o-T)-Trial 3 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,4,5-Trimethylanili	<0.002	ND	ND	ND	
m-Phenylenediamine (m-PDA)-Trial 3 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 1 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 2 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 3 ND ND ND 0-Toluidine (0-T)-Trial 1 ND ND ND 0-Toluidine (0-T)-Trial 2 ND ND ND 0-Toluidine (0-T)-Trial 3 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,6-Toluened	<0.002		ND		` '
4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 1 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 2 ND ND ND 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 3 ND ND ND ND-Toluidine (o-T)-Trial 1 ND ND ND 0-Toluidine (o-T)-Trial 2 ND ND ND 0-Toluidine (o-T)-Trial 3 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 1 ND ND ND 2,6-Tolue	<0.002				` ,
4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 2 4-Methoxy-mphenylenediamine (4-M-mPDA)-Trial 3 0-Toluidine (o-T)-Trial 1 ND	<0.002	ND	ND	ND	4-Methoxy-mphenylenediamine (4-M-
mPDA)-Trial 3 ND ND ND o-Toluidine (o-T)-Trial 1 ND ND ND o-Toluidine (o-T)-Trial 2 ND ND ND o-Toluidine (o-T)-Trial 3 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 3 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 1 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 3 ND ND ND 2,6-Toluenediamine (2,6-DMA)-Trial 1 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 2 ND	<0.002	ND	ND	ND	4-Methoxy-mphenylenediamine (4-M-
o-Toluidine (o-T)-Trial 2 ND ND ND o-Toluidine (o-T)-Trial 3 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 3 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 1 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 3 ND ND ND 2,6-Toluenediamine (2,6-DMA)-Trial 1 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 2 ND ND ND	<0.002	ND	ND	ND	
o-Toluidine (o-T)-Trial 3 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 3 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 1 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 3 ND ND ND 2,6-Toluenediamine (2,6-DMA)-Trial 1 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 2 ND ND ND	<0.002	ND	ND	ND	o-Toluidine (o-T)-Trial 1
2,4-Toluenediamine (2,4-TDA)-Trial 1 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 1 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 2 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 3 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 1 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 2 ND ND ND	<0.002	ND	ND	ND	o-Toluidine (o-T)-Trial 2
2,4-Toluenediamine (2,4-TDA)-Trial 2 ND ND ND 2,4-Toluenediamine (2,4-TDA)-Trial 3 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND ND ND 3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2 ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 3 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 1 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 2 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 1 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 2 ND ND ND	<0.002	ND	ND	ND	o-Toluidine (o-T)-Trial 3
2,4-Toluenediamine (2,4-TDA)-Trial 3 ND	<0.002	ND	ND	ND	2,4-Toluenediamine (2,4-TDA)-Trial 1
3,3-Dimethylbenzidine (3,3-DMB)-Trial 1 ND	<0.002	ND	ND	ND	2,4-Toluenediamine (2,4-TDA)-Trial 2
3,3-Dimethylbenzidine (3,3-DMB)-Trial 2 ND	<0.002	ND	ND	ND	2,4-Toluenediamine (2,4-TDA)-Trial 3
3,3-Dimethylbenzidine (3,3-DMB)-Trial 3 ND	<0.002	ND	ND	ND	3,3-Dimethylbenzidine (3,3-DMB)-Trial 1
2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1 ND ND ND ND ND ND 2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2 ND	<0.002	ND	ND	ND	3,3-Dimethylbenzidine (3,3-DMB)-Trial 2
2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2 ND	<0.002	ND	ND	ND	3,3-Dimethylbenzidine (3,3-DMB)-Trial 3
2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 3 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 1 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 2 ND ND ND 2,6-Toluenediamine (2,6-TDA)-Trial 3 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 1 ND ND ND 2,6-Dimethylaniline (2,6-DMA)-Trial 2 ND ND ND	<0.002	ND	ND	ND	2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 1
2,6-Toluenediamine (2,6-TDA)-Trial 1NDND2,6-Toluenediamine (2,6-TDA)-Trial 2NDND2,6-Toluenediamine (2,6-TDA)-Trial 3NDND2,6-Dimethylaniline (2,6-DMA)-Trial 1NDND2,6-Dimethylaniline (2,6-DMA)-Trial 2NDND	<0.002	ND	ND	ND	2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 2
2,6-Toluenediamine (2,6-TDA)-Trial 2NDND2,6-Toluenediamine (2,6-TDA)-Trial 3NDND2,6-Dimethylaniline (2,6-DMA)-Trial 1NDND2,6-Dimethylaniline (2,6-DMA)-Trial 2NDND	<0.002	ND	ND	ND	2,4,5-Trimethylaniline (2,4,5-TMA)-Trial 3
2,6-Toluenediamine (2,6-TDA)-Trial 3NDNDND2,6-Dimethylaniline (2,6-DMA)-Trial 1NDNDND2,6-Dimethylaniline (2,6-DMA)-Trial 2NDNDND	<0.002	ND	ND	ND	2,6-Toluenediamine (2,6-TDA)-Trial 1
2,6-Dimethylaniline (2,6-DMA)-Trial 1NDNDND2,6-Dimethylaniline (2,6-DMA)-Trial 2NDNDND	<0.002	ND	ND	ND	2,6-Toluenediamine (2,6-TDA)-Trial 2
2,6-Dimethylaniline (2,6-DMA)-Trial 2 ND ND ND	<0.002	ND	ND	ND	2,6-Toluenediamine (2,6-TDA)-Trial 3
	<0.002	ND	ND	ND	2,6-Dimethylaniline (2,6-DMA)-Trial 1
2.6-Dimethylaniline (2.6-DMA)-Trial 3 ND ND ND	<0.002	ND	ND	ND	2,6-Dimethylaniline (2,6-DMA)-Trial 2
, , (,0 ,)	<0.002	ND	ND	ND	2,6-Dimethylaniline (2,6-DMA)-Trial 3
p-Phenylenediamine (p-PDA)-Trial 1 ND ND ND	< 0.002	ND	ND	ND	p-Phenylenediamine (p-PDA)-Trial 1
p-Phenylenediamine (p-PDA)-Trial 2 ND ND ND	<0.002	ND	ND	ND	p-Phenylenediamine (p-PDA)-Trial 2
p-Phenylenediamine (p-PDA)-Trial 3 ND ND ND	<0.002	ND	ND	ND	p-Phenylenediamine (p-PDA)-Trial 3
1,5-Diaminenaphthalene (1,5-DAN)-Trial 1 ND ND ND	<0.002	ND	ND	ND	1,5-Diaminenaphthalene (1,5-DAN)-Trial 1
1,5-Diaminenaphthalene (1,5-DAN)-Trial 2 ND ND ND	<0.002	ND	ND	ND	1,5-Diaminenaphthalene (1,5-DAN)-Trial 2
1,5-Diaminenaphthalene (1,5-DAN)-Trial 3 ND ND ND	<0.002	ND	ND	ND	1,5-Diaminenaphthalene (1,5-DAN)-Trial 3
2-naphthylamine-Trial 1 ND ND ND	<0.002	ND	ND	ND	
2-naphthylamine-Trial 2 ND ND ND	<0.002	ND	ND	ND	2-naphthylamine-Trial 2
2-naphthylamine-Trial 3 ND ND ND	<0.002	ND	ND	ND	2-naphthylamine-Trial 3

Laboratory:

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Building 12&13, Zhiheng Wisdomland Business Park, Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong, China Page 9 of 13

Dated: 2022-01-06



	RESUL	TS [mg/kg foo	dstuff]	LIMIT
TEST ITEM	SAMPLE 001	SAMPLE 001	SAMPLE 001	
	1 st Migration	2 nd Migration	3 rd Migration	[mg/kg]
o-aminoazotoluene-Trial 1	ND	ND	ND	<0.002
o-aminoazotoluene-Trial 2	ND	ND	ND	<0.002
o-aminoazotoluene-Trial 3	ND	ND	ND	<0.002
5-nitro-o-toluidine-Trial 1	ND	ND	ND	<0.002
5-nitro-o-toluidine-Trial 2	ND	ND	ND	<0.002
5-nitro-o-toluidine-Trial 3	ND	ND	ND	<0.002
3,3'-dichlorobenzidine-Trial 1	ND	ND	ND	<0.002
3,3'-dichlorobenzidine-Trial 2	ND	ND	ND	<0.002
3,3'-dichlorobenzidine-Trial 3	ND	ND	ND	<0.002
3,3'-dimethoxybenzidine-Trial 1	ND	ND	ND	<0.002
3,3'-dimethoxybenzidine-Trial 2	ND	ND	ND	<0.002
3,3'-dimethoxybenzidine-Trial 3	ND	ND	ND	< 0.002
4,4'-methylene-bis-(2-chloro-aniline)-Trial 1	ND	ND	ND	<0.002
4,4'-methylene-bis-(2-chloro-aniline)-Trial 2	ND	ND	ND	< 0.002
4,4'-methylene-bis-(2-chloro-aniline)-Trial 3	ND	ND	ND	<0.002
4,4'-thiodianline-Trial 1	ND	ND	ND	< 0.002
4,4'-thiodianline-Trial 2	ND	ND	ND	< 0.002
4,4'-thiodianline-Trial 3	ND	ND	ND	<0.002
4-amino azobenzene-Trial 1	ND	ND	ND	<0.002
4-amino azobenzene-Trial 2	ND	ND	ND	<0.002
4-amino azobenzene-Trial 3	ND	ND	ND	< 0.002
Conclusion:	Pass	Pass	Pass	

- 2. "<" denotes less than
- 3. "mg/kg" denotes milligram per kilogram
- 4. "ND" denotes below the Report Limit
- 5. The specification was quoted from Regulation (EU) No. 284/2011

Dated: 2022-01-06



Specific Migration of Heavy Metals 3.4

Test method: with reference to EN 13130-1:2004, follow by Inductively Coupled Plasma Mass

Spectrometry (ICP-MS).

Test Conditions: 3% Acetic Acid: 100 °C for 2 Hours

	RESU	LT [mg/kg foo	dstuff]	REPORT	LIMIT
TEST ITEM	SAMPLE 001	SAMPLE 001		LIMIT	
	1 st Migration	2 nd Migration	3 rd Migration	[mg/kg]	[mg/kg]
Aluminium (AI)	ND	ND	ND	<0.1	<1
Antimony (Sb)	ND	ND	ND	<0.01	<0.04
Arsenic (As)	ND	ND	ND	<0.01	<0.01
Barium (Ba)	ND	ND	ND	<0.1	<1
Cadmium (Cd)	ND	ND	ND	<0.002	<0.002
Chromium (Cr)	ND	ND	ND	<0.01	<0.01
Cobalt (Co)	ND	ND	ND	<0.05	< 0.05
Copper (Cu)	ND	ND	ND	<0.5	<5
Iron (Fe)	ND	ND	ND	<1.0	<48
Lead (Pb)	ND	ND	ND	<0.01	<0.01
Lithium (Li)	ND	ND	ND	<0.1	<0.6
Manganese (Mn)	ND	ND	ND	<0.05	<0.6
Mercury (Hg)	ND	ND	ND	<0.01	<0.01
Nickel (Ni)	ND	ND	ND	<0.01	<0.02
Zinc (Zn)	ND	ND	ND	<1.0	<5
Sum of Eu, Gd, La, Tb	ND	ND	ND	<0.04	< 0.05
Conclusion:		Pass*			

Note 1. "°C" denotes degree Celsius

- 2. "<" denotes less than
- 3. "mg/kg" denotes milligram per kilogram
- 4. "ND" denotes below the Report Limit
- 5. The specification was quoted from Regulation (EU) No. 10/2011 and its amendments
- 6. "*" denotes the results of second migration should lower than first migration, the result of third migration should lower than second migration.

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3.5 Specific Migration of Bisphenol A (BPA)

Test method: As specified in Regulation (EU) No. 10/2011 ANNEX III and V, and followed by High

Performance Liquid Chromatography (HPLC).

Test Conditions: 95% Ethanol: 60 °C for 3.5 Hours

	R	RESULT [mg/dm²]			LIMIT
TEST ITEM		SAMPLE 001 2 nd Migration		LIMIT [mg/dm²]	[mg/dm²]
Bisphenol A	ND	ND	ND	<0.01	0.04
Conclusion:		Pass*			

Note 1. "°C" denotes degree Celsius

- 2. "<" denotes less than
- 3. "mg/dm2" denotes milligram per square decimeter
- 4. "ND" denotes below the Report Limit
- 5. The specification was quoted from Regulation (EU) No. 10/2011 and its amendments Regulation(EU)2018/213
- 6. "*" denotes the results of second migration should lower than first migration, the result of third migration should lower than second migration.

3.6 Specific Migration of Hexamethylenediamine (HMDA)

Test method: with reference to EN 13130-1 and CEN/TS 13130-21, follow by Gas Chromatography Mass Spectrometry (GC-MS).

Test Conditions: 3% Acetic Acid: 100 °C for 2 Hours

	RESULT [mg/kg foodstuff]			REPORT	LIMIT
TEST ITEM		SAMPLE 001 2 nd Migration		LIMIT [mg/kg]	[mg/kg]
Hexamethylenediamine	ND	ND	ND	<0.2	2.4
Conclusion:		Pass*			

- 2. "<" denotes less than
- 3. "mg/kg" denotes milligram per kilogram
- 4. "ND" denotes below the Report Limit
- 5. The specification was quoted from Regulation (EU) No. 10/2011 and its amendments
- 6. "*" denotes the results of second migration should lower than first migration, the result of third migration should lower than second migration.

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3.7 Peroxide

Test method: With reference to 58th Communication on the testing of plastics, Bundesgesundheitsbl. 40 (1997) 412.

TEST ITEM	RESULTS	MAXIMUM
	SAMPLE 001	PERMISSIBLE LIMIT
Peroxide Value	Absent	Absent
Conclusion	Pass	-

Note:

The specification was quoted from Recommendation of the BfR "Kunststoffe im Lebensmittelverkehr Part XV and Part VI

Sensory Test 3.8

Test for compliance with German Food and Feed Acts LFGB Section 31 and Regulation (EC) No. 1935/2004 Article 3(1)

Test method: With reference to DIN 10955:2004.

The submitted sample was treated with below test conditions. After this treatment, treated food simulant was examined by panels with regard to any divergence in smell and taste.

Test Item	Test Conditions	Grade Results	Recommend
rest item	rest conditions	Sample 002	Level
Transfer of smell	Distilled water:	1	<2.5
	100°C for 2 Hours		<2.5
Transfer of taste	Distilled water:	1	-0.5
	100°C for 2 Hours		<2.5
Conclusion		Pass	-

Note:

Explanation for grading are listed as below:

Grade 0 : No perceptible taste/smell deviation Grade 1 : Just perceptible taste/smell deviation

Grade 2 : Weak taste/smell deviation Grade 3 : Clear taste/smell deviation Grade 4 : Strong taste/smell deviation

-- END OF TEST REPORT--

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