

Test Report No.: 68.431.22.3202.01

Dated: 2022-07-08



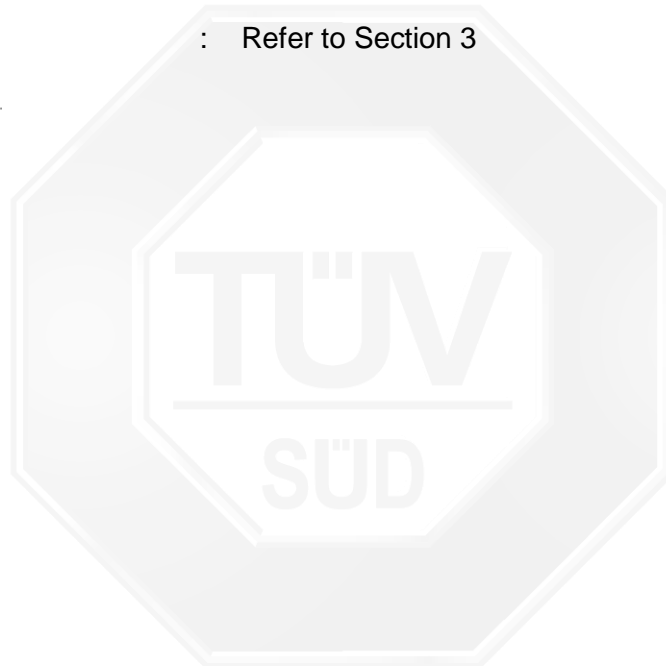
Applicant : Tide ocean SA
Maiengasse 30
4056 Basel – Switzerland

Sample Description : Polypropylene Report
Plate & Granules for material G1.30.00PP.NC.XX00.IN&
G1.06.00PP.NC.XX00.IN

Test Sample Receipt Date, Location : 2022-06-17, Shenzhen

Test Period, Location : From 2022-06-21 to 2022-07-01, Shenzhen

Test Result(s) : Refer to Section 3



Laboratory:
TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998
Fax: +86 755 8828 5299
E-mail: info@tuvsud.com
Web : <http://www.tuvsud.cn>

Regd. Office:
TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China
Page 1 of 13

Test Report No.: 68.431.22.3202.01

Dated: 2022-07-08



Purpose Of Examination / Conclusion:

No.	Test Item(s)	Conclusion
	As specified by client, to test per the selected requirement(s) for the tested item(s) as stated in the Regulation (EC) No.1935/2004	
1	Overall Migration	Pass
2	Specific Migration of PAA	Pass
3	Specific Migration of PAAs	Pass
4	Specific Migration of Heavy Metals	Pass
5	FDA CFR Title 21 Part 177.1520 Test for compliance with the selected requirement(s) in U.S. F.D.A. C.F.R. 21. Part 177.1520	Pass
6	EN 71-3:2019+A1:2021- Migration of certain elements	Pass
7	ASTM F963-17 Section 4.3.5.1(2) and Section 4.3.5.2 - Soluble Heavy Elements	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 expanded uncertainty for "Pass", "Fail" and "Inconclusive" is 95%.

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

Prepared by:

Reviewed by:



Eva Liang
Project Manager

Vincent Luo
Project Manager

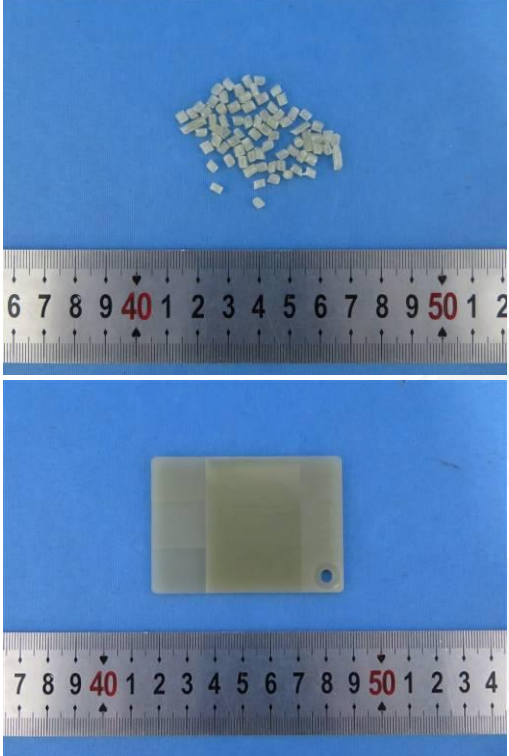
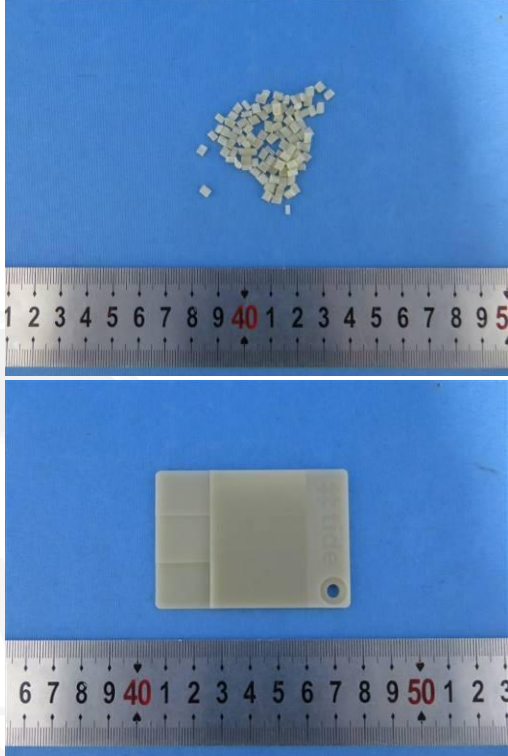
Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details,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

Laboratory:
TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998
Fax: +86 755 8828 5299
E-mail: info@tuv sud.com
Web : <http://www.tuvsud.cn>

Regd. Office:
TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

1. Description of the Submitted Sample:

Sample Description	Polypropylene Report Plate & Granules for material G1.30.00PP.NC.XX00.IN& G1.06.00PP.NC.XX00.IN	
		
G1.30.00PP.NC.XX00.IN		G1.06.00PP.NC.XX00.IN

Laboratory:

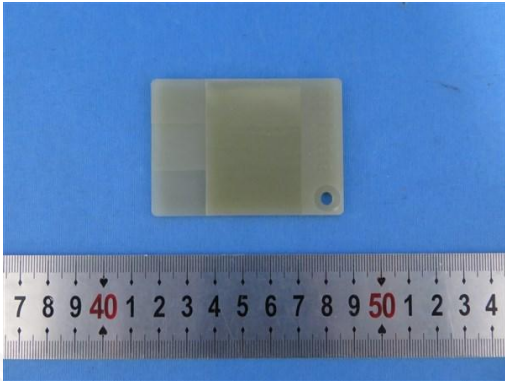
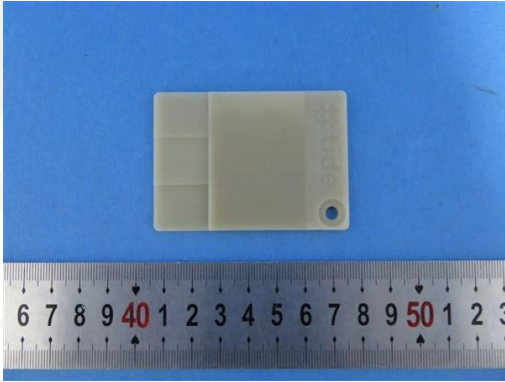
TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998
Fax: +86 755 8828 5299
E-mail: info@tuv sud.com
Web : http://www.tuv sud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

2. List of Materials as identified by the Laboratory:

T. No.	Sample No.	Colour and Description	Photograph
T1	001	Translucent PP-CO plastic (G1.30.00PP.NC.XX00.IN)	
T2	002	Translucent PP-CO plastic (G1.06.00PP.NC.XX00.IN)	



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 ITEM	TEST CONDITIONS	RESULTS [mg/dm ²]			LIMIT [mg/dm ²]
		SAMPLE 001 1 st Migration	SAMPLE 001 2 nd Migration	SAMPLE 001 3 rd Migration	
3% Acetic acid	70°C for 2 Hours	ND	ND	ND	<10
10% Ethanol	70°C for 2 Hours	ND	ND	ND	<10
95% Ethanol	60°C for 2 Hours	ND	ND	ND	<10
Isooctane	40°C for 0.5 Hour	ND	ND	ND	<10
Conclusion:		Pass*			--

TEST ITEM	TEST CONDITIONS	RESULTS [mg/dm ²]			LIMIT [mg/dm ²]
		SAMPLE 002 1 st Migration	SAMPLE 002 2 nd Migration	SAMPLE 002 3 rd Migration	
3% Acetic acid	70°C for 2 Hours	ND	ND	ND	<10
10% Ethanol	70°C for 2 Hours	ND	ND	ND	<10
95% Ethanol	60°C for 2 Hours	ND	ND	ND	<10
Isooctane	40°C for 0.5 Hour	ND	ND	ND	<10
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 Reporting 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.

Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd.
 Shenzhen Branch
 Building 12&13, Zhiheng Wisdomland Business Park,
 Guankou Erlu, Nantou, Nanshan District, Shenzhen,
 Guangdong, China

Phone : +86 755 8828 6998
 Fax: +86 755 8828 5299
 E-mail: info@tuv sud.com
 Web : http://www.tuv sud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.
 Shenzhen Branch
 Building 12&13, Zhiheng Wisdomland Business Park,
 Guankou Erlu, Nantou, Nanshan District, Shenzhen,
 Guangdong, China



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: 70 °C for 2 Hours

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

TEST ITEM	RESULT [mg/kg]			REPORTING LIMIT [mg/kg]	LIMIT [mg/kg]
	SAMPLE 002 1 st migration	SAMPLE 002 2 nd Migration	SAMPLE 002 3 rd Migration		
Primary Aromatic Amine	ND	ND	ND	<0.01	<0.01
Conclusion:	Pass	Pass	Pass	--	--

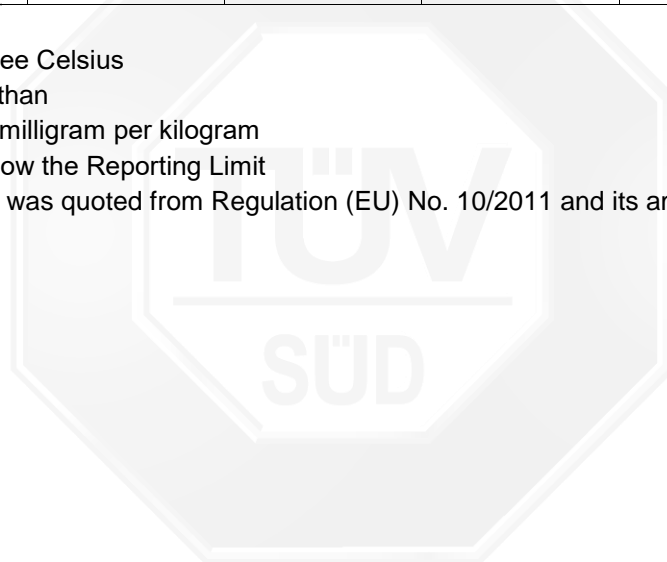
Note 1. "°C" denotes degree Celsius

2. "<" denotes less than

3. "mg/kg" denotes milligram per kilogram

4. "ND" denotes below the Reporting Limit

5. The specification was quoted from Regulation (EU) No. 10/2011 and its amendments



Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998
Fax: +86 755 8828 5299
E-mail: info@tuv sud.com
Web : http://www.tuv sud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

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: 70 °C for 2 Hours

TEST ITEM	RESULTS [mg/kg foodstuff]			LIMIT [mg/kg]
	SAMPLE 001 1 st Migration	SAMPLE 001 2 nd Migration	SAMPLE 001 3 rd Migration	
4-Aminobiphenyl (4-ABP)	ND	ND	ND	<0.002
Aniline (ANL)	ND	ND	ND	<0.002
o-Anisidine (o-ASD)	ND	ND	ND	<0.002
Benzidine (BNZ)	ND	ND	ND	<0.002
4-Chloro-Aniline (4-CA)	ND	ND	ND	<0.002
4-Chloro-o-Toluidine (4-CoT)	ND	ND	ND	<0.002
2,4-Dimethylaniline (2,4-DMA)	ND	ND	ND	<0.002
4,4'-Diaminodiphenylether (4,4'-DPE)	ND	ND	ND	<0.002
4,4*-Methylenedianiline (4,4*-MDA)	ND	ND	ND	<0.002
4,4'-Methylenedi-o-toluidine (4,4'-MDoT)	ND	ND	ND	<0.002
2-Methoxy-5-Methylaniline (2-M-5-MA)	ND	ND	ND	<0.002
m-Phenylenediamine (m-PDA)	ND	ND	ND	<0.002
4-Methoxy-mphenylenediamine (4-M-mPDA)	ND	ND	ND	<0.002
o-Toluidine (o-T)	ND	ND	ND	<0.002
2,4-Toluenediamine (2,4-TDA)	ND	ND	ND	<0.002
3,3-Dimethylbenzidine (3,3-DMB)	ND	ND	ND	<0.002
2,4,5-Trimethylaniline (2,4,5-TMA)	ND	ND	ND	<0.002
2,6-Toluenediamine (2,6-TDA)	ND	ND	ND	<0.002
2,6-Dimethylaniline (2,6-DMA)	ND	ND	ND	<0.002
p-Phenylenediamine (p-PDA)	ND	ND	ND	<0.002
1,5-Diaminenaphthalene (1,5-DAN)	ND	ND	ND	<0.002
2-naphthylamine	ND	ND	ND	<0.002
o-aminoazotoluene	ND	ND	ND	<0.002
5-nitro-o-toluidine	ND	ND	ND	<0.002
3,3'-dichlorobenzidine	ND	ND	ND	<0.002
3,3'-dimethoxybenzidine	ND	ND	ND	<0.002
4,4'-methylene-bis-(2-chloro-aniline)	ND	ND	ND	<0.002
4,4'-thiodianiline	ND	ND	ND	<0.002
4-amino azobenzene	ND	ND	ND	<0.002
Conclusion:	Pass	Pass	Pass	--

Note 1. "°C" denotes degree Celsius

2. "<" denotes less than

3. "mg/kg" denotes milligram per kilogram

4. "ND" denotes below the Reporting Limit

5. The specification was quoted from Regulation (EU) No. 10/2011 and its amendments

Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998
Fax: +86 755 8828 5299
E-mail: info@tuvsud.com
Web : http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

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: 70 °C for 2 Hours

TEST ITEM	RESULTS [mg/kg foodstuff]			LIMIT [mg/kg]
	SAMPLE 002 1 st Migration	SAMPLE 002 2 nd Migration	SAMPLE 002 3 rd Migration	
4-Aminobiphenyl (4-ABP)	ND	ND	ND	<0.002
Aniline (ANL)	ND	ND	ND	<0.002
o-Anisidine (o-ASD)	ND	ND	ND	<0.002
Benzidine (BNZ)	ND	ND	ND	<0.002
4-Chloro-Aniline (4-CA)	ND	ND	ND	<0.002
4-Chloro-o-Toluidine (4-CoT)	ND	ND	ND	<0.002
2,4-Dimethylaniline (2,4-DMA)	ND	ND	ND	<0.002
4,4'-Diaminodiphenylether (4,4'-DPE)	ND	ND	ND	<0.002
4,4*-Methylenedianiline (4,4*-MDA)	ND	ND	ND	<0.002
4,4'-Methylenedi-o-toluidine (4,4'-MDoT)	ND	ND	ND	<0.002
2-Methoxy-5-Methylaniline (2-M-5-MA)	ND	ND	ND	<0.002
m-Phenylenediamine (m-PDA)	ND	ND	ND	<0.002
4-Methoxy-mphenylenediamine (4-M-mPDA)	ND	ND	ND	<0.002
o-Toluidine (o-T)	ND	ND	ND	<0.002
2,4-Toluenediamine (2,4-TDA)	ND	ND	ND	<0.002
3,3-Dimethylbenzidine (3,3-DMB)	ND	ND	ND	<0.002
2,4,5-Trimethylaniline (2,4,5-TMA)	ND	ND	ND	<0.002
2,6-Toluenediamine (2,6-TDA)	ND	ND	ND	<0.002
2,6-Dimethylaniline (2,6-DMA)	ND	ND	ND	<0.002
p-Phenylenediamine (p-PDA)	ND	ND	ND	<0.002
1,5-Diaminenaphthalene (1,5-DAN)	ND	ND	ND	<0.002
2-naphthylamine	ND	ND	ND	<0.002
o-aminoazotoluene	ND	ND	ND	<0.002
5-nitro-o-toluidine	ND	ND	ND	<0.002
3,3'-dichlorobenzidine	ND	ND	ND	<0.002
3,3'-dimethoxybenzidine	ND	ND	ND	<0.002
4,4'-methylene-bis-(2-chloro-aniline)	ND	ND	ND	<0.002
4,4'-thiodianiline	ND	ND	ND	<0.002
4-amino azobenzene	ND	ND	ND	<0.002
Conclusion:	Pass	Pass	Pass	--

Note 1. "°C" denotes degree Celsius

2. "<" denotes less than

3. "mg/kg" denotes milligram per kilogram

4. "ND" denotes below the Reporting Limit

5. The specification was quoted from Regulation (EU) No. 10/2011 and its amendments

Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuvsud.com

Web : http://www.tuvsud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China



3.4 Specific Migration of Heavy Metals

Test method: with reference to EN 13130-1:2004, follow by Inductively Coupled Plasma Mass Spectrometry (ICP-MS).

Test Conditions: 3% Acetic Acid: 70 °C for 2 Hours

TEST ITEM	RESULT [mg/kg foodstuff]			REPORTING LIMIT [mg/kg]	LIMIT [mg/kg]
	SAMPLE 001 1 st Migration	SAMPLE 001 2 nd Migration	SAMPLE 001 3 rd Migration		
Aluminium (Al)	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 Reporting 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.

Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuv sud.com

Web : http://www.tuv sud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China



3.4 Specific Migration of Heavy Metals

Test method: with reference to EN 13130-1:2004, follow by Inductively Coupled Plasma Mass Spectrometry (ICP-MS).

Test Conditions: 3% Acetic Acid: 70 °C for 2 Hours

TEST ITEM	RESULT [mg/kg foodstuff]			REPORTING LIMIT [mg/kg]	LIMIT [mg/kg]
	SAMPLE 002 1 st Migration	SAMPLE 002 2 nd Migration	SAMPLE 002 3 rd Migration		
Aluminium (Al)	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 Reporting 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.

Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998

Fax: +86 755 8828 5299

E-mail: info@tuv sud.com

Web : http://www.tuv sud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China



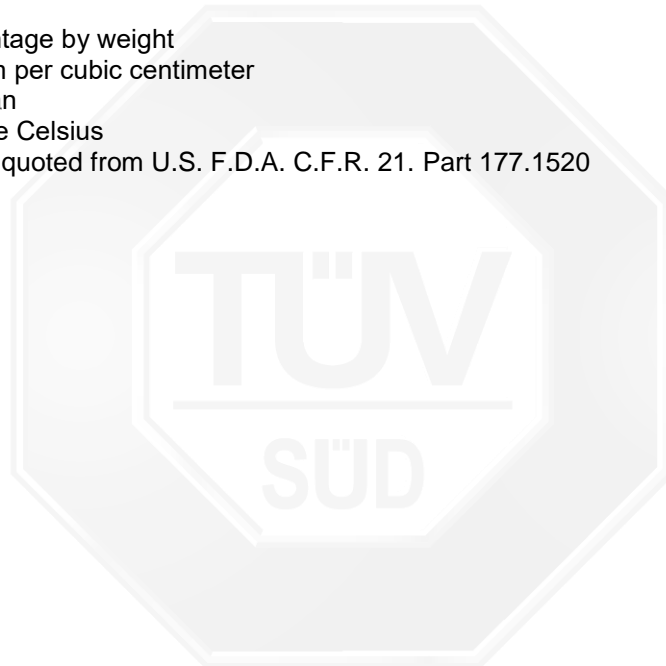
3.5 FDA CFR Title 21 Part 177.1520

Test for compliance with the selected requirement(s) in U.S. F.D.A. C.F.R. 21. Part 177.1520

TEST ITEMS	RESULTS		CFR Specification [PP/PE Copolymer]
	SAMPLE 001	SAMPLE 002	
Density [g/cc]	0.901	0.901	0.85 - 1.00
Maximum extractive in n-hexane 50°C for 2 hours [%]	1.56	1.12	5.5
Maximum extractive in xylene after reflux for 2 hours at 25 °C [%]	0.92	0.69	30
Conclusion	Pass	Pass	-

Note:

1. “%” denotes percentage by weight
2. “g/cc” denotes gram per cubic centimeter
3. “<” denotes less than
4. “°C” denotes degree Celsius
5. The specification is quoted from U.S. F.D.A. C.F.R. 21. Part 177.1520



Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China

Phone : +86 755 8828 6998
Fax: +86 755 8828 5299
E-mail: info@tuv sud.com
Web : http://www.tuv sud.cn

Regd. Office:

TÜV SÜD Certification and Testing (China) Co., Ltd.
Shenzhen Branch
Building 12&13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District, Shenzhen,
Guangdong, China



3.6 EN 71-3:2019+A1:2021- Migration of certain elements

Test with reference to EN 71-3:2019+A1:2021, determination by ICP-MS.

Parameter	MDL [mg/kg]	Limit in scraped-off toy materials [mg/kg]	Result(s) [mg/kg]	
			001	002
Soluble Aluminum	5.00	28130	<5.00	<5.00
Soluble Antimony	5.00	560	<5.00	<5.00
Soluble Arsenic	5.00	47	<5.00	<5.00
Soluble Barium	5.00	18750	<5.00	<5.00
Soluble Boron	5.00	15000	7.03	<5.00
Soluble Cadmium	5.00	17	<5.00	<5.00
Soluble Chromium III	0.04	460	<0.04	<0.04
Soluble Chromium VI	0.04	0.053	<0.04	<0.04
Soluble Cobalt	5.00	130	<5.00	<5.00
Soluble Copper	5.00	7700	<5.00	<5.00
Soluble Lead	5.00	23	<5.00	<5.00
Soluble Manganese	5.00	15000	<5.00	<5.00
Soluble Mercury	5.00	94	<5.00	<5.00
Soluble Nickel	5.00	930	<5.00	<5.00
Soluble Selenium	5.00	460	<5.00	<5.00
Soluble Strontium	5.00	56000	<5.00	<5.00
Soluble Tin	2.50	180000	<2.50	<2.50
Organic Tin	7.50	12	<7.50	<7.50
Soluble Zinc	5.00	46000	<5.00	<5.00
Conclusion			Pass	Pass

- Note 1. "<" denotes less than
 2. "mg/kg" denotes milligram per kilogram



3.7 ASTM F963-17 Section 4.3.5.1(2) & Section 4.3.5.2 - Soluble Heavy Elements

Test with reference to ASTM F963-17 Section 8.3, determination by ICP-MS.

Parameter	MDL [mg/kg]	Limit [mg/kg]	Result(s) [mg/kg]	
			001	002
Soluble Antimony (Sb)	5.0	60	<5.0	<5.0
Soluble Arsenic (As)	2.5	25	<2.5	<2.5
Soluble Barium (Ba)	5.0	1000	<5.0	<5.0
Soluble Cadmium (Cd)	5.0	75	<5.0	<5.0
Soluble Chromium (Cr)	5.0	60	<5.0	<5.0
Soluble Lead (Pb)	5.0	90	<5.0	<5.0
Soluble Mercury (Hg)	5.0	60	<5.0	<5.0
Soluble Selenium (Se)	5.0	500	<5.0	<5.0
Conclusion			Pass	Pass

- Note:
1. Adjusted analytical result
 2. "<" denotes less than
 3. "mg/kg" denotes milligram per kilogram

-- END OF TEST REPORT--

