TEST REPORT

APPLICANT	:	Mid Ocean Brands B.V.
ADDRESS	:	7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
SAMPLE DESCRIPTION	:	Double wall recycled SS bottle with double lid opening for easy cleaning
MODEL NO.	:	MO2316
MATERIAL NO.	:	Stainless steel
BUYER	:	Mid Ocean Brands B.V.
SUPPLIER CODE	:	118449
COUNTRY OF ORIGIN	:	China
COUNTRY OF DESTINATION	:	EU
PRODUCT MATERIAL	:	PP SiliconeStanless steel
SAMPLE RECEIVED DATE	:	15-May-2024
SAMPLE RESUBMISSION DATE	:	03-Jun-2024
TURN AROUND TIME	:	15-May-2024 to 12-Jun-2024
REVISED DATE	:	29-Oct-2024

The following test item(s) was/were performed on submitted sample(s) and/or component(s) confirmed by applicant

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Specific Release of Heavy Metals	Fiche MCDA n° 1 (V02 - 01/04/2017, Resolution CM/Res(2013)9	Pass
Total Lead Content	REACH Annex XVII, Entry 63	Pass
Overall Migration-PP	Regulation (EU) No. 10/2011 and its amendments, Fiche MCDA n° 3 (V03-09/09/2021)	Pass
Overall Migration-Silicone	Resolution AP (2004) 5	Pass
Overall Migration-Silicone	French Décret 2007-766 with amendments and French Arrêté du 25 Novembre 1992	Pass
Total Bisphenol A (BPA) Content	French Décret 2007-766 and its amendments, and French Law No. 2012/1442	Pass
Volatile Organic Matter (VOM)	French Décret 2007-766 with amendments and French Arrêté du 25 Novembre 1992	Pass
Peroxide Value	French Décret 2007-766 with amendments and French Arrêté du 25 Novembre 1992	Pass
Specific migration of Organotin (as tin)	French Décret 2007-766 with amendments and French Arrêté du 25 Novembre 1992	Pass
Specific Migration of Bisphenol A	Regulation (EU) No. 10/2011 and its amendments, Fiche MCDA n° 3 (V03-09/09/2021)	Pass
Total Cadmium Content	REACH Annex XVII, Entry 23	Pass
Phthalates Content	REACH Annex XVII, Entry 51 & 52	Pass
Polycyclic Aromatic Hydrocarbons (PAHs)	REACH Annex XVII, Entry 50	Pass
Specific Migration of Heavy Metal	Regulation (EU) No. 10/2011 and its amendments, Fiche MCDA n° 3 (V03-09/09/2021)	Pass
Specific Migration of Primary Aromatic Amines	Regulation (EU) No. 10/2011 and its amendments, Fiche MCDA n° 3 (V03-09/09/2021)	Pass
Mechanical dishwashing resistance of utensils-Part 1: Reference test method for domestic articles	EN 12875-1: 2005	See Test Result
Mechanical dishwashing resistance of utensils-Part 2: Inspection of non-metallic articles	Refer to EN 12875-2:2001	See Test Result

Remark :
This report cancels and supersedes report number EFHZ24052285-CG-01 issued on Jun 12, 2024.
Modification description: Per client's request, resubmit Component No. 2 on Oct 18, 2024 for releated tests and the test report is revised accordingly.

Samples are obtained by express delivery, Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Hangzhou) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. Unless otherwise stated from the customer, regulation or the standard specification, Eurofins will consider the measurement uncertainty as calculated by our laboratory and apply according to ILAC G8:09/2019-(binary acceptance base on guard band). If you happen to have any comments, please do it by sending email to info.hz@cpt.eurofinscn.com and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Hangzhou) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint.hz@cpt.eurofinscn.com and referring to this report number.

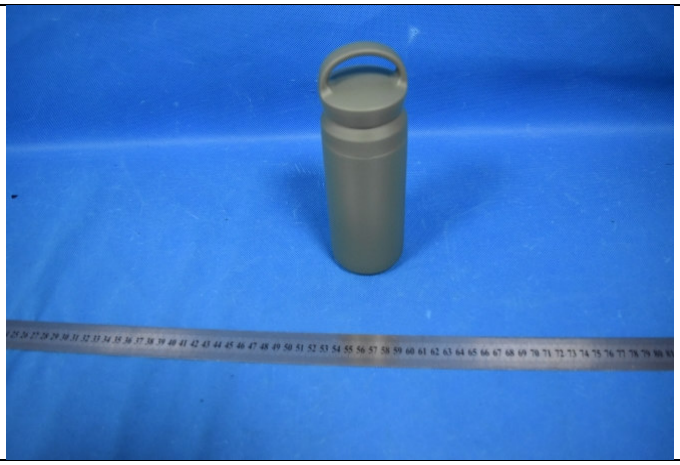
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********** FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) **********

Signed for and on behalf of
Eurofins Product Testing Service (Hangzhou) Co., Ltd

Sara Liu
Quality Manager

SAMPLE PHOTO(S)

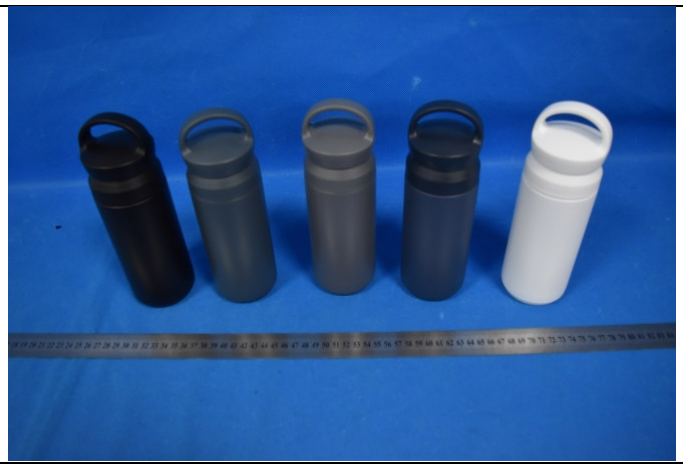


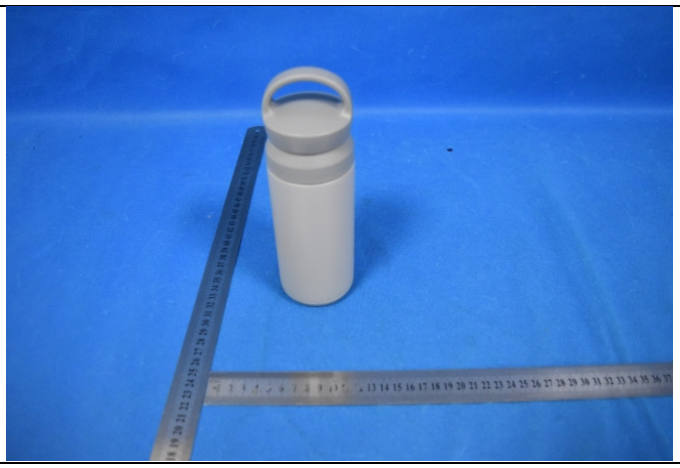
A

EFHZ24052285-CG-01+Rev1

TO BE CONTINUED

REFERENCE SAMPLE PHOTO(S)





The reference samples have not been tested in current report, but according to customer's request, the pictures have also been included. For sample tested in current report, please refer to "sample photos".

TO BE CONTINUED

COMPONENT LIST

Component No.	Component	Sample No.
1	Semi-transparent silicone ring	A
2	Dark green PP lid	A
3	Silver stainless steel 304 (inner)	A
4	Silver stainless steel excluding coating (outer)	A
5	Dark green coating on metal	A

TO BE CONTINUED

TEST RESULT

Specific Release of Heavy Metals

Test Request: In accordance with DGCCRF Food contact suitability of metals and alloys – Fiche MCDA n ° 1 (V02 – 01/04/2017), and Council of Europe Resolution CM/Res(2013)9 on metals and alloys, used in food contact materials and articles.

Test Method: With reference to Resolution CM/Res(2013)9, analysis was performed by ICP-MS.

Simulant Used: 0.5% Citric acid

Test Condition: 70℃ 2hours

Test Item(s)	Unit	MDL	Result			
			3			
			1st + 2nd Migration		3rd Migration	
			Result	7xSRL*2	Result	SRL*1
Aluminum (Al)	mg/kg	0.5	ND	35	ND	5
Antimony (Sb)	mg/kg	0.01	ND	0.28	ND	0.04
Chromium (Cr)	mg/kg	0.05	ND	1.75	ND	0.25
Cobalt (Co)	mg/kg	0.005	ND	0.14	ND	0.02
Copper (Cu)	mg/kg	0.5	ND	28	ND	4
Iron (Fe)	mg/kg	5	ND	280	ND	40
Manganese (Mn)	mg/kg	0.2	ND	12.6	ND	1.8
Molybdenum (Mo)	mg/kg	0.01	ND	0.84	ND	0.12
Nickel (Ni)	mg/kg	0.01	ND	0.98	ND	0.14
Silver (Ag)	mg/kg	0.01	ND	0.56	ND	0.08
Tin (Sn) *3	mg/kg	5	ND	700	ND	100
Vanadium (V)	mg/kg	0.001	ND	0.07	ND	0.01
Zinc (Zn)	mg/kg	0.5	ND	35	ND	5
Arsenic (As)	mg/kg	0.0005	ND	0.014	ND	0.002
Barium (Ba)	mg/kg	0.1	ND	8.4	ND	1.2
Beryllium (Be)	mg/kg	0.001	ND	0.07	ND	0.01
Cadmium (Cd)	mg/kg	0.001	ND	0.035	ND	0.005
Lead (Pb)	mg/kg	0.001	ND	0.07	ND	0.01
Lithium (Li)	mg/kg	0.005	ND	0.336	ND	0.048
Mercury (Hg)	mg/kg	0.0005	ND	0.021	ND	0.003
Thallium (Tl)	mg/kg	0.00005	ND	0.0007	ND	0.0001
Magnesium (Mg)	mg/kg	0.1	ND	-	ND	-
Titanium (Ti)	mg/kg	0.1	ND	-	ND	-

Remark:
mg/kg =milligram per kilogram
MDL = method detection limit
ND = not detected (<MDL)
SRL = Specific Release Limit
*1 Compliance is established on the result from the third migration test for repeated used articles.
*2 Meantime, the sum of the results of the first and second tests should not exceed 7 times the SRL
*3 Except in field of application under Regulation (EC) No.1881/2006.(canned food container)
Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Total Lead Content

Test Request: Total lead content as specified in entry 63 of annex XVII of REACH Regulation (EC) No 1907/2006 and its amendment Regulation (EU) No 2015/628.

Test Method: EPA 3050B:1996, EPA 3051A:2007, EPA 3052:1996
Acid digestion/ microwave digestion method was used and total lead content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result		
				1+2	3+4	5
Total Lead	mg/kg	500	10	ND	ND	ND

Test Item(s)	Unit	Limit	MDL	Result
				2
Total Lead	mg/kg	500	10	ND

Remark:
According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.
mg/kg = milligram per kilogram
MDL = method detection limit
ND = Not detected, less than MDL

Overall Migration-PP

Test Request: In accordance with Commission Regulation (EU) No. 10/2011 and its amendments, and DGCCRF Food contact suitability of organic materials from synthetic materials – Fiche MCDA n° 3 (V03-09/09/2021).

Test Method: With reference to EN1186-1:2002 for selection of conditions and test methods;
EN1186-3:2022 overall migration in evaporable simulants by total immersion method.

Simulant Used	Time	Temperature	Unit	Limit	Result		
					2		
					1st	2nd	3rd
Ethanol 50%	2hours	70° C	mg/dm²	10	ND	ND	ND
Acetic Acid 3%	2hours	70° C	mg/dm²	10	ND	ND	ND

Remark:

ND = not detected, less than 3.0 mg/dm²
mg/dm² = milligram per square decimeter
Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Overall Migration-Silicone

Test Request: In accordance with Council of Europe Resolution AP (2004) 5.

Test Method: With reference to EN1186-1:2002 for selection of conditions and test methods;
EN1186-3:2022 overall migration in evaporable simulants by total immersion method.

Simulant Used	Time	Temperature	Unit	Limit	Result		
					1		
					1st	2nd	3rd
Ethanol 50%	2hours	70° C	mg/dm²	10	ND	ND	ND
Acetic Acid 3%	2hours	70° C	mg/dm²	10	ND	ND	ND

Remark:

ND = not detected, less than 3.0 mg/dm²
mg/dm² = milligram per square decimeter
Test condition & simulant were specified by client.

Overall Migration-Silicone

Test Request: In accordance with French Décret 2007-766 with amendments and French Arrêté du 25 Novembre 1992.

Test Method: With reference to EN1186-1:2002 for selection of conditions and test methods;
EN1186-3:2022 overall migration in evaporable simulants by total immersion method.

Simulant Used	Time	Temperature	Unit	Limit	Result		
					1		
					1st	2nd	3rd
Ethanol 50%	2hours	70° C	mg/dm²	10	ND	ND	ND
Acetic Acid 3%	2hours	70° C	mg/dm²	10	ND	ND	ND

Remark:

ND = not detected, less than 3.0 mg/dm²
mg/dm² = milligram per square decimeter
Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Total Bisphenol A (BPA) Content

Test Request: In accordance with French Décret 2007-766 and its amendments, and French Law No. 2012/1442.

Test Method: With reference to EPA 3550C:2007, EPA 8321B:2007, solvent extraction and determination by LC-MS.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result	
					1	2
Bisphenol A	80-05-7	mg/kg	ND	0.10	ND	ND

Remarks:
1 mg/kg = 1 ppm = 0.0001%
MDL = method detection limit
ND = Not detected, less than MDL

Volatile Organic Matter (VOM)

Test Request: In accordance with French Décret 2007-766 and its amendments , and French Arrêté du 25 Novembre 1992.

Test Method: With reference to French Arrêté du November 1992 Annex III.

Test Item(s)	Unit	Limit	MDL	Result
				1
Volatile Organic Matter (VOM)	%	0.5	0.10	0.22

Remark:
Test Condition: 200℃, 4 hours
% = percentage of weight by weight, w/w
MDL = method detection limit
ND = not detected, less than MDL

Peroxide Value

Test Request: In accordance with French Décret 2007-766 and its amendments, and French Arrêté du 25 Novembre 1992 for silicone materials.

Test Method: With reference to European pharmacopoeia, 9.0 part 2.5.5. Peroxide Value method A.

Test Item(s)	Limit	Result
		1
Peroxide Value	Absent	Absent

TO BE CONTINUED

TEST RESULT

Specific migration of Organotin (as tin)

Test Request: In accordance with French Décret 2007-766 and its amendments, and French Arrêté du 25 November 1992 for silicone materials.
Test Method: With reference to EN 13130-1:2004, analysis was performed by ICP-MS.
Simulant Used: Acetic Acid 3%
Test Condition: 70℃ 2hours

Test Item(s)	Unit	Limit	MDL	Result		
				1		
				1st	2nd	3rd
Specific migration of Organotin (as tin)	mg/kg	0.1	0.01	ND	ND	ND

Remark:
mg/kg = milligram per kilogram
MDL = method detection limit
ND = not detected (<MDL)

Specific Migration of Bisphenol A

Test Request: In accordance with French Décret 2007-766 and its amendments, and French Arrêté du 25 November 1992 for silicone materials.
Test Method: With reference to EN 13130-1:2004, analysis was performed by LC-MS.
Simulant Used: Acetic Acid 3%
Test Condition: 70℃ 2hours

Test Item	Unit	Limit	MDL	Result		
				1		
				1st Test	2nd Test	3rd Test
2,2-bis(4-hydroxyphenyl) Propane (Bisphenol A)	mg/kg	0.05	0.01	ND	ND	ND

Remark:
(1) mg/kg = milligram per kilogram
(2) ND = not detected, less than MDL
(3) MDL = method detection limit
(4) Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Total Cadmium Content

Test Request: Total cadmium content as specified in Commission Regulation (EU) 2016/217 amending entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EPA 3050B:1996, EPA 3052:1996, EN 1122:2001 Method B, acid digestion method was used and total cadmium content was determined by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result
				1+2
Total Cadmium	mg/kg	100	5	ND

Test Item(s)	Unit	Limit	MDL	Result
				5
Total Cadmium	mg/kg	1000	5	ND

Test Item(s)	Unit	Limit	MDL	Result
				2
Total Cadmium	mg/kg	100	5	ND

Remark:
According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.
mg/kg = milligram per kilogram
MDL = method detection limit
ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Phthalates Content

Test Request: Phthalates content as specified in entry 51&52 of annex XVII of REACH Regulation (EC) No 1907/2006 and its amendment Commission Regulation (EU) 2018/2005.

Test Method: EPA 3550C:2007, EPA 8270E:2018, solvent extraction and quantification by GC-MS.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result	
					1+2	5
Dibutylphthalate (DBP)	84-74-2	%	-	0.005	ND	ND
Benzyl butyl phthalate (BBP)	85-68-7	%	-	0.005	ND	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	-	0.005	ND	ND
Di-isobutyl phthalate (DiBP)	84-69-5	%	-	0.005	ND	ND
Sum of (DEHP+DBP+BBP+DIBP)	-	%	0.1	-	ND	ND
Di-n-octylphthalate（DNOP）	117-84-0	%	-	0.005	ND	ND
Diisononyl phthalate (DINP)	28553-12-0	%	-	0.005	ND	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND	ND
Sum (DNOP + DINP + DIDP)	-	%	0.1	-	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					2
Dibutylphthalate (DBP)	84-74-2	%	-	0.005	ND
Benzyl butyl phthalate (BBP)	85-68-7	%	-	0.005	ND
Diethylhexylphthalate (DEHP)	117-81-7	%	-	0.005	ND
Di-isobutyl phthalate (DiBP)	84-69-5	%	-	0.005	ND
Sum of (DEHP+DBP+BBP+DIBP)	-	%	0.1	-	ND
Di-n-octylphthalate（DNOP）	117-84-0	%	-	0.005	ND
Diisononyl phthalate (DINP)	28553-12-0	%	-	0.005	ND
Diisodecyl phthalate (DIDP)	26761-40-0	%	-	0.005	ND
Sum (DNOP + DINP + DIDP)	-	%	0.1	-	ND

Remarks:
According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.
1 mg/kg = 1 ppm = 0.0001%
MDL = method detection limit
ND = Not detected, less than MDL
“- “ = Not Regulated

TO BE CONTINUED

TEST RESULT

Polycyclic Aromatic Hydrocarbons (PAHs)

Test Request: Polycyclic Aromatic Hydrocarbons (PAHs) content as specified in Regulation (EU) 2015/326 amending entry 50 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: Solvent extraction and quantification by gas chromatography-mass selective detection (GC-MS) with respect to AfPS GS 2019:01 PAK

Test Item(s)	CAS No.	Unit	Limit	MDL	Result	
					1+2	5
Benz(a)anthracene	56-55-3	mg/kg	1	0.2	ND	ND
Chrysene	218-01-9	mg/kg	1	0.2	ND	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	1	0.2	ND	ND
Benzo-(j)-fluoranthen	205-82-3	mg/kg	1	0.2	ND	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	1	0.2	ND	ND
Benzo(a)pyrene	50-32-8	mg/kg	1	0.2	ND	ND
Dibenz(a,h)anthracene	53-70-3	mg/kg	1	0.2	ND	ND
Benzo(e)pyrene	192-97-2	mg/kg	1	0.2	ND	ND

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					2
Benz(a)anthracene	56-55-3	mg/kg	1	0.2	ND
Chrysene	218-01-9	mg/kg	1	0.2	ND
Benzo(b)fluoranthene	205-99-2	mg/kg	1	0.2	ND
Benzo-(j)-fluoranthen	205-82-3	mg/kg	1	0.2	ND
Benzo(k)fluoranthene	207-08-9	mg/kg	1	0.2	ND
Benzo(a)pyrene	50-32-8	mg/kg	1	0.2	ND
Dibenz(a,h)anthracene	53-70-3	mg/kg	1	0.2	ND
Benzo(e)pyrene	192-97-2	mg/kg	1	0.2	ND

Remarks:
According to client's request, tests are combination tests. The experimental results are the total result of mixed samples.
mg/kg = milligram per kilogram
MDL = method detection limit
ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Specific Migration of Heavy Metal

Test Request: To determine the Specific Migration of Heavy Metal in accordance with Commission Regulation (EU) No 10/2011 and its amendments, and DGCCRF Food contact suitability of organic materials from synthetic materials – Fiche MCDA n° 3 (V03-09/09/2021).

Test Method: With reference to Regulation (EU) 10/2011 for selection of test condition and EN 13130-1:2004 for test preparation method; analysis was performed by ICP-MS.

Simulant Used: Acetic Acid 3%

Test Condition: 2hours at 70° C

Test Item(s)	Unit	Limit	MDL	Result		
				2		
				1st	2nd	3rd
Barium (Ba)	mg/kg	1	0.25	ND	ND	ND
Cobalt (Co)	mg/kg	0.05	0.01	ND	ND	ND
Copper (Cu)	mg/kg	5	0.25	ND	ND	ND
Iron (Fe)	mg/kg	48	0.25	ND	ND	ND
Lithium (Li)	mg/kg	0.6	0.5	ND	ND	ND
Manganese (Mn)	mg/kg	0.6	0.05	ND	ND	ND
Zinc (Zn)	mg/kg	5	0.5	ND	ND	ND
Aluminium (Al)	mg/kg	1	0.1	ND	ND	ND
Nickel (Ni)	mg/kg	0.02	0.01	ND	ND	ND
Antimony (Sb)	mg/kg	0.04	0.01	ND	ND	ND
Arsenic (As)	mg/kg	ND	0.01	ND	ND	ND
Cadmium (Cd)	mg/kg	ND	0.002	ND	ND	ND
Chromium (Cr)	mg/kg	ND	0.01	ND	ND	ND
Europium (Eu)	mg/kg	-	0.01	ND	ND	ND
Gadolinium (Gd)	mg/kg	-	0.01	ND	ND	ND
Lanthanum (La)	mg/kg	-	0.01	ND	ND	ND
Terbium (Tb)	mg/kg	-	0.01	ND	ND	ND
Sum of lanthanide substances	mg/kg	0.05	-	ND	ND	ND
Lead (Pb)	mg/kg	ND	0.01	ND	ND	ND
Mercury (Hg)	mg/kg	ND	0.01	ND	ND	ND

Remark:
mg/kg = milligram per kilogram
MDL = Method Detection Limit
ND = Not detected, less than MDL
Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

Specific Migration of Primary Aromatic Amines

Test Request: To determine the Specific Migration of Primary Aromatic Amine Metal in accordance with Commission Regulation (EU) No 10/2011 and its amendments, and DGCCRF Food contact suitability of organic materials from synthetic materials – Fiche MCDA n° 3 (V03-09/09/2021).

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

Simulant Used: Acetic Acid 3%

Test Condition: 2hours at 70° C

Test Item(s)	CAS No.	Unit	Limit	MDL	Result		
					2		
					1st	2nd	3rd
m-Phenylenediamine	108-45-2	mg/kg	Not Detectable	0.002	ND	ND	ND
2,4,5-trimethylaniline	137-17-7	mg/kg	Not Detectable	0.002	ND	ND	ND
2-methoxy-5-methylaniline	120-71-8	mg/kg	Not Detectable	0.002	ND	ND	ND
2-Naphthylamine	91-59-8	mg/kg	Not Detectable	0.002	ND	ND	ND
3,3´-dichlorobenzidine	91-94-1	mg/kg	Not Detectable	0.002	ND	ND	ND
o-Dianisidine	119-90-4	mg/kg	Not Detectable	0.002	ND	ND	ND
o-Tolidine	119-93-7	mg/kg	Not Detectable	0.002	ND	ND	ND
4,4-Methylene-bis-2-chloroaniline	101-14-4	mg/kg	Not Detectable	0.002	ND	ND	ND
4,4-Diaminodiphenylmethan	101-77-9	mg/kg	Not Detectable	0.002	ND	ND	ND
4,4-diamino-3,3-dimethyldiphenylmethane	838-88-0	mg/kg	Not Detectable	0.002	ND	ND	ND
4,4'-Oxydianilin	101-80-4	mg/kg	Not Detectable	0.002	ND	ND	ND
4,4-Thiodianilin	139-65-1	mg/kg	Not Detectable	0.002	ND	ND	ND
4-aminoazobenzene	60-09-3	mg/kg	Not Detectable	0.002	ND	ND	ND
4-aminobiphenyl	92-67-1	mg/kg	Not Detectable	0.002	ND	ND	ND
4-Chloroaniline	106-47-8	mg/kg	Not Detectable	0.002	ND	ND	ND
4-chloro-2-methylaniline	95-69-2	mg/kg	Not Detectable	0.002	ND	ND	ND
2,4-diaminoanisole	615-05-4	mg/kg	Not Detectable	0.002	ND	ND	ND
2,4-diaminotoluene	95-80-7	mg/kg	Not Detectable	0.002	ND	ND	ND

TO BE CONTINUED

TEST RESULT

2-methyl-5-nitroaniline	99-55-8	mg/kg	Not Detectable	0.002	ND	ND	ND
Benzidin	92-87-5	mg/kg	Not Detectable	0.002	ND	ND	ND
o-Aminoazotoluene	97-56-3	mg/kg	Not Detectable	0.002	ND	ND	ND
o-anisidine	90-04-0	mg/kg	Not Detectable	0.002	ND	ND	ND
o-Toluidin	95-53-4	mg/kg	Not Detectable	0.002	ND	ND	ND
p-Phenylenediamine	106-50-3	mg/kg	-	0.002	ND	ND	ND
2,4-Dimethylaniline	95-68-1	mg/kg	-	0.002	ND	ND	ND
2,6-Xylidine	87-62-7	mg/kg	-	0.002	ND	ND	ND
Aniline	62-53-3	mg/kg	-	0.002	ND	ND	ND
2,2'-methylenedianiline	6582-52-1	mg/kg	-	0.002	ND	ND	ND
2,4'-methylenedianiline	1208-52-2	mg/kg	-	0.002	ND	ND	ND
Total of other primary aromatic amines	-	mg/kg	0.01	-	ND	ND	ND

Remark:
Total of other primary aromatic amines are p-Phenylenediamine (CAS No.:106-50-3), 2,4-dimethylaniline(CAS No.:95-68-1), 2,6-dimethylaniline(CAS No.:87-62-7), aniline (CAS No.:62-53-3), 2,2'-methylenedianiline(CAS No.:6582-52-1), 2,4'-methylenedianiline(CAS No.:1208-52-2).
mg/kg = milligram per kilogram
ND = not detected, less than MDL
MDL = method detection limit
Test condition & simulant were specified by client.

TO BE CONTINUED

TEST RESULT

EN 12875-1:2005 Mechanical dishwashing resistance of utensils-Part 1: Reference test method for domestic articles

1) Number of tested sample: 1 Piece

2) Number of controlled sample: /

3) Test Procedure

Clause	Test item	Test methods
8.1	Preparation of test dish washer	When testing metal articles, after each regeneration of the ion exchanger with sodium chloride, run one test cycle(see 8.3) with no test specimens
8.2	Loading the test dishwasher	The test dishwasher shall be fully loaded, using dummy articles to fill excess capacity if necessary. Each specimen shall be placed in the appropriate basket making sure that the specimens will not come into contact with each other during testing. All surfaces shall be equally exposed to the water spray, and the specimens shall be positioned in a way that avoids the formation of water pools. It is permissible to simultaneously wash several different types of domestic articles of ceramic, glass, metal or plastics. Note The risk of interaction between different materials should be considered. Where there is such a risk, such specimens should not be tested together. If it is necessary to withdraw a test specimen during the test, it shall be replaced by a similar article.
8.3	Test cycle	The test cycle shall comprise the stages specified in EN 12875-1:2005
8.4	Parameter control	The parameters of the test cycle listed below shall be verified before starting the first test cycle and after every **10**th test cycles. as per client's request
8.5	Number of test cycles	Subject specimens **to 10 test cycles**, as per client's request

4) Test result:

(Refer to) EN 12875-2:2001 Mechanical dishwashing resistance of utensils-Part 2: Inspection of non-metallic articles (as per client's request)

After **10** cycle(s)

Product No	Color	Gloss	Clouding	Resistant deposites and iridescent layers	Other aspects
A	0	0	/	0	0

TO BE CONTINUED

TEST RESULT

Table 1 – Inspection criteria

Articles with or without decoration	Colour(1)	gloss	Clouding	Resistant deposits and iridescent layers(2)	Other aspects
Ceramic tableware	+	+		+	+(3) (4) (5)
Glass, glass ceramic ware	+	+	+(6)	+	+ (4) (5)
Vitreous enameled tableware	+	+		+	+(3) (4) (5)
Plastic articles	+	+	+(6)	+	+(3)(7)

(+) = to be inspected

(1) If several colours are present on one article to be inspected, the colour with the greatest change shall be chosen.

(2) For the elimination of easily removable deposits.

(3) e.g. crazing.

(4) The adherence of decorations shall be tested by repeated wiping with a moist cloth under slight pressure.

(5) Abrasion which is caused by friction during the dishwasher treatment shall be disregarded.

(6) Transparent articles only

(7) Swelling, deformation, cracking, or delamination

Table 2 – Evaluation of inspection criteria

Classification	Rating
0	No visible change
1	First discernible change
2	Clearly visible change

Remark:
Powder detergent: “Cascade” dishwasher detergent

END OF THE REPORT