

TEST REPORT

Test Report # 20A-006037(A3)(R1) Date of Report Issue: September 29, 2020
Date of Sample Received: September 10, 2020 Pages: Page 1 of 13

CLIENT INFORMATION:

Company: Mid Ocean Brands B.V.
Address: 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong



SAMPLE INFORMATION:

Product Name: Electric salt or pepper mill
Style No.: - Labeled Age Grade: -
Order No.(PO No.): - Client Request Age Grade: -
Country of Origin: - Recommended Age Grade: -
Country of Distribution: Europe Tested Age Grade: -
Model No.: MO8816
Composition/Main Material: PS, stainless steel,ABS
Buyer Name: Mid Ocean Brands B.V.
Supplier Name: 100396
Testing Period: 09/11/2020-09/21/2020

OVERALL RESULT:

PASS

Please refer to the following pages for test result summary and appropriate notes.

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Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and method /regulation section(s) tested as described herein.

If it is not further specified in the report, the decision rule for stating conformity is based on the QIMA decision rule.

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TEST RESULTS SUMMARY:

At the request of the client, the following tests were conducted:

CONCLUSION	TEST(S) CONDUCTED
PASS	Client's requirement, Bisphenol A content
PASS	Regulation (EC) No. 1907/2006 REACH Annex XVII as amended, Item 51 and 52 Phthalates – Mouthable (DBP, BBP, DEHP, DIBP, DnOP, DINP, DIDP)
PASS	Council of Europe Resolution CM/Res(2013)9, Metals and Alloys Used in Food Contact Materials –Extractable 21 elements
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011 and its amendment (EU) 2016/1416-Overall migration
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011 and its amendment (EU) 2016/1416-Specific migration of heavy metals
PASS	Regulation (EC) No 1935/2004, (EU) No 10/2011 - Specific migration of acrylonitrile
PASS	EC Directive 84/500/EEC as amended by Directive 2005/31/EC, Release of Lead and Cadmium from Ceramic Articles

Remark: *Revised information and supersedes the previous report no. 20A-006037(A3) date: 09/28/2020



DETAILED RESULTS:

Client's requirement, Bisphenol A content

Test Method: In-House Method
 Analytical Method: Gas Chromatography-Mass Spectrometer
 Liquid Chromatography-Mass Spectrometer (LC-MS)

Specimen No.		1	2	---	---	Client's limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Bisphenol A (BPA)	80-05-7	ND	ND	---	---	Not Detected
Conclusion		PASS	PASS	---	---	

Note:
 mg/kg=milligram per kilogram
 ND=Not Detected(Reporting limit = 1mg/kg)



DETAILED RESULTS:

Regulation (EC) No. 1907/2006 REACH Annex XVII as amended, Item 51 and 52 Phthalates – Mouthable (DBP, BBP, DEHP, DIBP, DnOP, DINP, DIDP)

Test Method: CPSC-CH-C1001-09.4

Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		1+2	---	---	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	---	---	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	---	---	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	---	---	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	---	---	1000
Sum of DBP, BBP, DEHP, DIBP		ND	---	---	1000
Di-n-octyl phthalate (DnOP)	117-84-0	ND	---	---	
Diisononyl phthalate (DINP)	28553-12-0 68515-48-0	ND	---	---	
Diisodecyl phthalate (DIDP)	26761-40-0 68515-49-1	ND	---	---	
Sum of DnOP, DINP, DIDP		ND	---	---	1000
Conclusion		PASS	---	---	

Note:

mg/kg (Milligrams per kilogram) = ppm (Parts per million) = 0.0001 % m/m (Percent by mass)

LT = Less than

ND = Not detected (Reporting Limit = 150 mg/kg)

Composite results are based on specimen of least mass resulting in highest potential concentration.



DETAILED RESULTS:

Council of Europe Resolution CM/Res(2013)9, Metals and Alloys Used in Food Contact Materials – Extractable 21 elements

Test Method: ISO 17294-2:2016
 Analytical Method: Inductively Coupled Plasma-Mass Spectrometry

Test Condition:

Simulant: 0.5% citric acid Temperature: 40 °C Duration: 2 hours

Specimen No.	4		RL (mg/kg)	1 st +2 nd Migration (mg/kg)	3 rd Migration (mg/kg)
Test Item	1 st +2 nd Migration (mg/kg)	3 rd Migration (mg/kg)			
Aluminum (Al)	ND	ND	0.5	35	5
Antimony (Sb)	ND	ND	0.01	0.28	0.04
Arsenic (As)	ND	ND	0.001	0.014	0.002
Barium (Ba)	ND	ND	0.1	8.4	1.2
Beryllium (Be)	ND	ND	0.005	0.07	0.01
Cadmium (Cd)	ND	ND	0.001	0.035	0.005
Chromium (Cr)	ND	ND	0.1	1.75	0.25
Cobalt (Co)	ND	ND	0.01	0.14	0.02
Copper (Cu)	ND	ND	0.5	28	4
Iron (Fe)	ND	ND	5	280	40
Lead (Pb)	ND	ND	0.005	0.07	0.01
Lithium (Li)	ND	ND	0.005	0.336	0.048
Manganese (Mn)	ND	ND	0.5	12.6	1.8
Mercury (Hg)	ND	ND	0.0005	0.021	0.003
Molybdenum (Mo)	ND	ND	0.05	0.84	0.12
Nickel (Ni)	ND	ND	0.05	0.98	0.14
Silver (Ag)	ND	ND	0.05	0.56	0.08
Thallium (Tl)	ND	ND	0.00005	0.0007	0.0001
Tin (Sn)	ND	ND	5	700	100
Vanadium (V)	ND	ND	0.005	0.07	0.01
Zinc (Zn)	ND	ND	0.5	35	5
Conclusion	PASS	PASS			

Note:
 mg/kg = Milligrams per kilogram foodstuff
 LT = Less than
 ND = Not detected. Result value is less than reporting limit (RL).



DETAILED RESULTS:

Council of Europe Resolution CM/Res(2013)9, Metals and Alloys Used in Food Contact Materials – Extractable 21 elements

Test Method: ISO 17294-2:2016
 Analytical Method: Inductively Coupled Plasma-Mass Spectrometry

Test Condition:

Simulant: 0.5% citric acid Temperature: 40 °C Duration: 2 hours

Specimen No.	5		RL (mg/kg)	1 st +2 nd Migration (mg/kg)	3 rd Migration (mg/kg)
Test Item	1 st +2 nd Migration (mg/kg)	3 rd Migration (mg/kg)			
Aluminum (Al)	ND	ND	0.5	35	5
Antimony (Sb)	ND	ND	0.01	0.28	0.04
Arsenic (As)	ND	ND	0.001	0.014	0.002
Barium (Ba)	ND	ND	0.1	8.4	1.2
Beryllium (Be)	ND	ND	0.005	0.07	0.01
Cadmium (Cd)	ND	ND	0.001	0.035	0.005
Chromium (Cr)	ND	ND	0.1	1.75	0.25
Cobalt (Co)	ND	ND	0.01	0.14	0.02
Copper (Cu)	ND	ND	0.5	28	4
Iron (Fe)	ND	ND	5	280	40
Lead (Pb)	ND	ND	0.005	0.07	0.01
Lithium (Li)	ND	ND	0.005	0.336	0.048
Manganese (Mn)	ND	ND	0.5	12.6	1.8
Mercury (Hg)	ND	ND	0.0005	0.021	0.003
Molybdenum (Mo)	ND	ND	0.05	0.84	0.12
Nickel (Ni)	ND	ND	0.05	0.98	0.14
Silver (Ag)	ND	ND	0.05	0.56	0.08
Thallium (Tl)	ND	ND	0.00005	0.0007	0.0001
Tin (Sn)	ND	ND	5	700	100
Vanadium (V)	ND	ND	0.005	0.07	0.01
Zinc (Zn)	ND	ND	0.5	35	5
Conclusion	PASS	PASS			

Note:
 mg/kg = Milligrams per kilogram foodstuff
 LT = Less than
 ND = Not detected. Result value is less than reporting limit (RL).



DETAILED RESULTS:

Regulation (EC) No 1935/2004, (EU) No 10/2011 and its amendment (EU) 2016/1416- Overall migration

Test method: EN1186-1:2002: for selection of conditions and test methods
 EN1186-3:2002: aqueous food simulants by total immersion

Specimen No.		1	2	---	Maximum permissible Limit (mg/dm ²)
Simulant used	Test condition	Result (mg/dm ²)	Result (mg/dm ²)	Result (mg/dm ²)	
3% acetic acid	2 hours at 70°C	ND	ND	---	10
20% ethanol	2 hours at 70°C	ND	ND	---	10
Conclusion		PASS	PASS	---	

Note:

mg/dm² = milligram per square decimeter

ND = Not Detected (Reporting limit = 3 mg/dm²)

The migration results are based on the first migration.



DETAILED RESULTS:

Regulation (EC) No 1935/2004, (EU) No 10/2011 and its amendment (EU) 2016/1416- Specific migration of heavy metals

Test method: Sample preparation in 3% acetic acid at 40°C for 2hours ,ISO 17294-2:2016

Analytical Method: Inductively Coupled Plasma-Mass Spectrometry

Specimen No.		1	2	---	---	Maximum permissible Limit (mg/kg)
Test Item	Detection limit	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Barium	0.1	ND	ND	---	---	1
Cobalt	0.05	ND	ND	---	---	0.05
Copper	0.5	ND	ND	---	---	5
Iron	1.0	ND	ND	---	---	48
Lithium	0.1	ND	ND	---	---	0.6
Manganese	0.1	ND	ND	---	---	0.6
Zinc	1.0	ND	ND	---	---	5
Aluminum	0.1	ND	ND	---	---	1
Nickel	0.01	ND	ND	---	---	0.02
Conclusion		PASS	PASS	---	---	

Note:

mg/kg=milligram per kilogram

ND= Not Detected

The migration results are based on the first migration.



DETAILED RESULTS:

Regulation (EC) No 1935/2004, (EU) No 10/2011 - Specific migration of acrylonitrile

Test method: EN 13130-1:2004 & EN 13130-3:2004

Specimen No.		1	2	---	---	---	Limit (mg/kg)
Test Item	Test condition	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Acrylonitrile	40°C, 2h 3% Acetic acid	ND	ND	---	---	---	Not Detected
Conclusion		PASS	PASS	---	---	---	

Note :

mg/kg = milligram per kilogram = ppm

ND = Not Detected (Reporting Limit= 0.01mg/kg)



DETAILED RESULTS:

EC Directive 84/500/EEC as amended by Directive 2005/31/EC, Release of Lead and Cadmium from Ceramic Articles

Test Method: 84/500/EEC & 2005/31/EC

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	3-A	3-B	3-C	3-D	Average (mg/dm ²)	Limit (mg/dm ²)
Test Item	Result (mg/dm ²)	Result (mg/dm ²)	Result (mg/dm ²)	Result (mg/dm ²)		
Volume of Acid Used, mL	62	62	62	62		
Leachable Lead (Pb)	ND	ND	ND	ND	ND	0.8
Leachable Cadmium (Cd)	ND	ND	ND	ND	ND	0.07
Conclusion	PASS	PASS	PASS	PASS	PASS	

Note:

mL = Millilitres; dm² = Square decimeters

mg/dm² = Milligrams per square decimeter

NA = Not applicable

LT = Less than

ND = Not detected (Reporting Limit: Pb = 0.2 mg/dm²; Cd = 0.02 mg/dm²)

	Category	Leachable Pb	Leachable Cd
X	1: Articles which cannot be filled and articles which can be filled, the internal depth of which, measured from the lowest point to the horizontal plane passing through the upper rim, does not exceed 25mm	0.8 mg/dm ²	0.07 mg/dm ²
	2: All other articles which can be filled	4.0 mg/L	0.3 mg/L
	3: Cooking ware; packaging and storage vessels having a capacity of more than three litres	1.5 mg/L	0.1 mg/L
	4. Drinking rim*	2 mg/item	0.2 mg/item

*Requirement is according to DGCCRF DM-4B-COM-002 (Inorganic materials (except metals and alloys), 4.1.1



SPECIMEN DESCRIPTION:

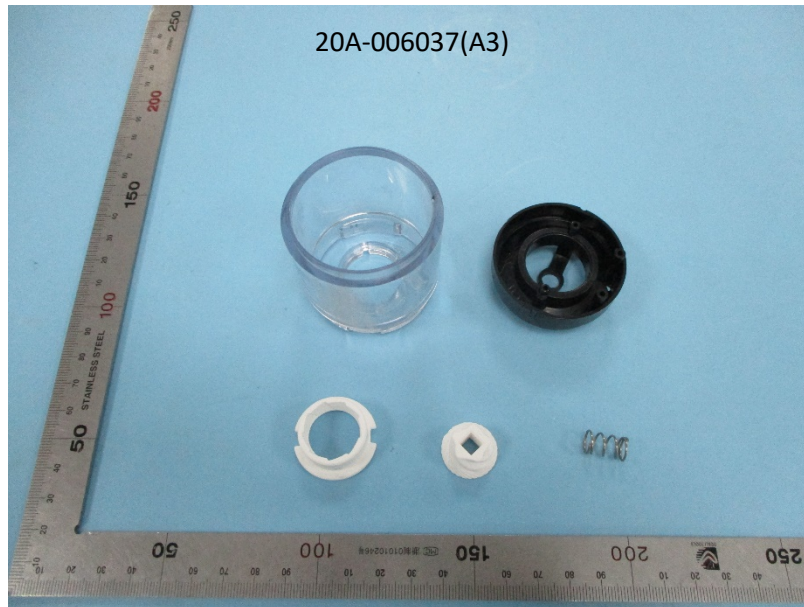
Specimen No.	Specimen Description	Location
1	Transparent plastic	Middle plastic cup
2	Black plastic	Pedestal of middle plastic cup
3	White ceramic	Ceramic gasket
4	Silvery metal	Spring
5	Silvery metal	Middle pole
6	Electric salt or pepper mill	Finished product



SAMPLE PHOTO:



***SAMPLE PHOTO:**



-End Report-

