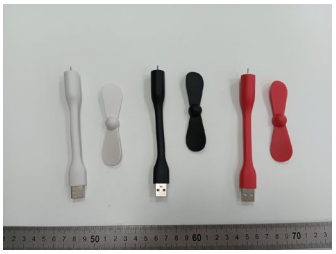
TEST REPORT

Test Report #	23A-008000(A1)	Date of Report Issue:	July 14, 2023
Date of Sample Received:	June 29, 2023	Pages:	Page 1 of 7

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:	USB Fan		
Style No.:	MO9063	Labeled Age Grade:	-
Order No.(PO No.):	-	Client Request Age Grade:	-
Country of Origin:	-	Recommended Age Grade:	-
Country of Distribution:	Europe	Tested Age Grade:	-
Composition/Main Material:	PVC		
Testing Period:	07/04/2023-07/14/2023		

OVERALL RESULT: **PASS**

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

QIMA (HANGZHOU) TESTING CO., LTD.

Jeremy Xu
Chemical Laboratory Supervisor

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 (https://www.qima.com/conditions-of-service#decisionRule).

TEST RESULTS SUMMARY:

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

CONCLUSION	TEST(S) CONDUCTED
PASS	Directive 2011/65/EU and its amendment Directive (EU) 2015/863, Restriction of the Use of Certain Hazardous Substances (RoHS), Heavy metals and Flame retardants content (Pb, Cd, Hg, Cr (VI), PBBs and PBDEs)
PASS	Directive 2011/65/EU and its amendment Directive (EU) 2015/863, Restriction of the Use of Certain Hazardous Substances (RoHS), Phthalates Content (DBP, BBP, DEHP, DIBP)

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 (https://www.qima.com/conditions-of-service#decisionRule).

DETAILED RESULTS:

Directive 2011/65/EU and its amendment Directive (EU) 2015/863, Restriction of the Use of Certain Hazardous Substances (RoHS), Heavy metals and Flame retardants content (Pb, Cd, Hg, Cr (VI), PBBs and PBDEs)

Test Method:	IEC 62321-3-1:2013 for Cadmium, Lead, Mercury, Chromium and Bromine by XRF IEC 62321-4:2013/AMD1:2017 for Mercury by ICP-OES IEC 62321-5:2013 for Lead, Cadmium and Chromium by ICP-OES IEC 62321-6:2015 for PBBs and PBDEs by GC-MS IEC 62321-7-1:2015, IEC62321-7-2:2017 for Hexavalent Chromium by UV- Vis#
Analytical Method:	X-ray Fluorescence Spectrometry Inductively Coupled Plasma-Optical Emission Spectrometry Gas Chromatography Mass Spectrometry UV-Visible Spectrophotometry

No.	Parts Name	Test Item (mg/kg)						Conclusion
		Pb	Cd	Hg	CrVI	PBBs	PBDEs	
1	White plastic packaging	BL	BL	BL	BL	BL	BL	PASS
2	White transparent plastic packaging	BL	BL	BL	BL	BL	BL	PASS
3	White plastic sticker	BL	BL	BL	BL	BL	BL	PASS
4	Style1-red rubber blade	BL	BL	BL	BL	BL	BL	PASS
5	Style1-red rubber main body	BL	BL	BL	BL	BL	BL	PASS
6	Style2-black rubber blade	BL	BL	BL	BL	BL	BL	PASS
7	Style2-Black rubber main body	BL	BL	BL	BL	BL	BL	PASS
8	Style3-White rubber blade	BL	BL	BL	BL	BL	BL	PASS
9	Style3-White rubber main body	BL	BL	BL	BL	BL	BL	PASS
10	All model-Socket-silver metal case	BL	BL	BL	BL	-	-	PASS
11	All model-Socket-white plastic main body	BL	BL	BL	BL	BL	BL	PASS
12	All model-Socket-gold metal pin	BL	BL	BL	BL	-	-	PASS
13	All model-Socket-silvery metal pin	BL	BL	BL	BL	-	-	PASS
14	Style1-Socket-White plastic sheet	BL	BL	BL	BL	BL	BL	PASS
15	Style2-Socket-Black plastic sheet	BL	BL	BL	BL	BL	BL	PASS
16	Style2-Black plastic connector	BL	BL	BL	BL	BL	BL	PASS
17	Style2-Black plastic tail end	BL	BL	BL	BL	BL	BL	PASS
18	Style1-White translucent plastic connector	BL	BL	BL	BL	BL	BL	PASS
19	Style1-White translucent plastic tail end	BL	BL	BL	BL	BL	BL	PASS
20	Thick black wire sheath	BL	BL	BL	BL	BL	BL	PASS
21	Fine black wire sheath	BL	BL	BL	BL	BL	BL	PASS
22	Red Line wire sheath	BL	BL	BL	BL	BL	BL	PASS
23	Motor-green plastic end cap	BL	BL	BL	BL	ND	ND	PASS
24	Motor-gold metal end cover	BL	BL	BL	BL	-	-	PASS
25	Motor-Soldering tin	BL	BL	BL	BL	-	-	PASS

DETAILED RESULTS:

No.	Parts Name	Test Item (mg/kg)						Conclusion
		Pb	Cd	Hg	CrVI	PBBs	PBDEs	
26	Motor-electric brush	BL	BL	BL	BL	-	-	PASS
27	Motor-electric brush-white plastic sticker	BL	BL	BL	BL	BL	BL	PASS
28	Motor-electric brush-pin	BL	BL	BL	BL	-	-	PASS
29	Motor-yellow cotton	BL	BL	BL	BL	BL	BL	PASS
30	Motor-black plastic sleeve	BL	BL	BL	BL	ND	ND	PASS
31	Motor-copper sheet	BL	BL	BL	BL	-	-	PASS
32	Motor-silver silicon steel sheet	BL	BL	BL	BL	-	-	PASS
33	Motor-Silver silicon steel sheet-green plastic patch	BL	BL	BL	BL	BL	BL	PASS
34	Motor-silver metal shaft	BL	BL	BL	BL	-	-	PASS
35	Motor-Silver metal shell	BL	BL	BL	BL	-	-	PASS
36	Motor-gold metal washer	BL	BL	BL	BL	-	-	PASS
37	Motor-magnet	BL	BL	BL	BL	-	-	PASS
38	Motor-white rubber shell	BL	BL	BL	BL	BL	BL	PASS
39	Silver metal wire	BL	BL	BL	BL	-	-	PASS
40	Silver copper wire	BL	BL	BL	BL	-	-	PASS
41	Motor-enameled wire	BL	BL	BL	BL	-	-	PASS
42	Motor-ceramic piece	BL	BL	BL	BL	-	-	PASS

Parameter	Unit	Requirement	Method Detection Limit (MDL)
Lead (Pb)	mg/kg	1000	15
Cadmium (Cd)	mg/kg	100	15
Mercury (Hg)	mg/kg	1000	15
Chromium VI (Cr VI)	mg/kg	1000	15
Group PBBs	mg/kg	1000	20
Group PBDEs	mg/kg	1000	20

As specified by client, with XRF analysis toxic harmful substance content, All kinds of matrixes screening of the element is limited see chart (Unit: mg/kg)

Elements	Polymer material	Metal material/ Inorganic nonmetallic material	Electronic component
Lead (Pb)	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(500-3σ)<X< (1500+3σ) ≤OL
Cadmium (Cd)	BL≤(70-3σ)<X(130+3σ)≤OL	BL≤(70-3σ)<X<(130+3σ)≤OL	LOD<X<(150+3σ)≤OL
Mercury (Hg)	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(700-3σ)<X<(1300+3σ)≤OL	BL≤(500-3σ)<X< (1500+3σ)≤OL
Chromium (Cr)	BL≤(700-3σ)<X	BL≤(700-3σ)<X	BL≤(500-3σ)<X
Bromine (Br)	BL≤(300-3σ)<X	-	BL≤(250-3σ)<X

Note:

1. Unit: mg/kg= Milligrams per kilogram, 1mg/kg=1ppm=0.0001%
2. MDL=Method Detection Limit
3. "-"= Not Regulated or Not Applicable
4. 3σ = Analysis shows that the instrument reproducibility
5. BL = Below Limit by XRF screening;
   OL = Over Limit by XRF screening.
6. ND=Not Detected (< MDL), Result reported with wet chemical confirmation test with ICP-OES
7. Ne=Negative, Absence of Cr(VI), the concentration of Cr (VI) in sample solution is less than 0.10μg/cm^2.
   Po = Positive, Presence of Cr(VI), the concentration of Cr (VI) in sample solution is more than 0.13μg/cm^2.
   Result reported with wet chemical confirmation test with UV-Vis.
8. "Results of XRF" is the result on total Br and total Cr while restricted substances are PBBs/PBDEs and Cr(VI).

DETAILED RESULTS:

Directive 2011/65/EU and its amendment Directive (EU) 2015/863, Restriction of the Use of Certain Hazardous Substances (RoHS), Phthalates Content (DBP, BBP, DEHP, DIBP)

Test Method: IEC 62321-8:2017
Analytical Method: Gas Chromatography/Mass Spectrometry

Specimen No.	1+2+3	4+5+6	7+8+9	11+14+15	16+17+18	**Limit (mg/kg)**
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
DBP	ND	ND	ND	ND	ND	**1000**
BBP	ND	ND	ND	ND	ND	**1000**
DEHP	ND	ND	ND	ND	ND	**1000**
DIBP	ND	ND	ND	ND	ND	**1000**
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	19+23	20+21+22	27+29+30	33+38	---	**Limit (mg/kg)**
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
DBP	ND	ND	ND	ND	---	**1000**
BBP	ND	ND	ND	ND	---	**1000**
DEHP	ND	ND	ND	ND	---	**1000**
DIBP	ND	ND	ND	ND	---	**1000**
Conclusion	PASS	PASS	PASS	PASS	---	

Note:
DBP = Dibutyl phthalate; BBP = Benzyl butyl phthalate; DEHP = Di-(2-ethylhexyl) phthalate
DIBP = Di-iso-Butylpthalate Phthalate;
mg/kg = Milligrams per kilogram
ND = Not detected (Reporting Limit =150mg/kg)

SAMPLE PHOTO:

-End Report-