

TEST REPORT

<u>APPLICANT</u>	: Mid Ocean Brands B.V.
<u>ADDRESS</u>	: 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong
<u>SAMPLE DESCRIPTION</u>	: Manual hand fan in wood; Rainbow wooden hand fan
<u>ITEM NO.</u>	: MO9532; MO6446
<u>SAMPLE RECEIVED DATE</u>	: 05-Jul-2023
<u>TURN AROUND TIME</u>	: 05-Jul-2023 to 14-Jul-2023
<u>REVISED DATE</u>	: 27-Jul-2023

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

TEST REQUESTED	TEST METHOD/REGULATION	RESULT
Colour Fastness to Rubbing	ISO 105-X12:2016	Pass
Banned AZO Dyes	REACH Annex XVII, Entry 43	Pass
Nickel Release	REACH Annex XVII, Entry 27	Pass
Total Lead Content	REACH Annex XVII, Entry 63	Pass
Formaldehyde Release	EN 717-3-1996	Pass
Pentachlorophenol (PCP) Content	Regulation (EU) 2019/1021	Pass

Note : This report cancels and supersedes report number EFSH23070310-CG-01+Rev 1 issued on Jul 26th, 2023. Modification description: as per client's request, add reference sample photo(s) in the revised report.

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 (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to info.sh@eurofins.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 (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint@eurofins.com and referring to this report number.



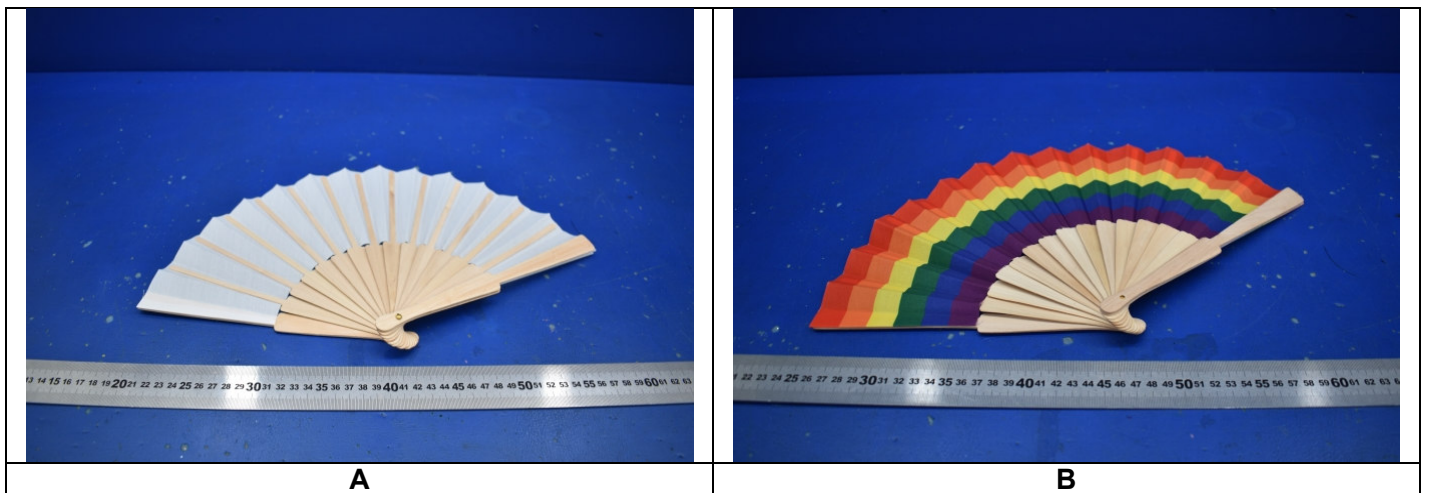
Eurofins (Shanghai) contact information**Customer service:** SunnyZhang@eurofins.com/ +86 216 1819 181**Sales specialist:** Jack.Zhang@cpt.eurofinscn.com/ +86 18601770010

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

Signed for and on behalf of
Eurofins Product Testing Service (Shanghai) Co., LtdJoyce Liu
Operation Director

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 (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to info.sh@eurofins.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 (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to chinacomplaint@eurofins.com and referring to this report number.

TEST SAMPLE PHOTO(S)



EFSH23070310-CG-01+Rev 2

REFERENCE SAMPLE PHOTO(S)



The reference sample(s) has not been tested in current report, but according to customer's request, the picture has also been included. For sample tested in current report, please refer to "Test sample photo".

TO BE CONTINUED

COMPONENT LIST

Component No.	Component	Sample No.
1	Gold plated metal	A, B
2	White fabric	A
3	Natural color wood	A, B
4	Red fabric	B
5	Orange fabric	B
6	Yellow fabric	B
7	Green fabric	B
8	Blue fabric	B
9	Purple fabric	B
10	Multi-color fabric	B

TO BE CONTINUED

TEST RESULT

Colour Fastness to Rubbing

ISO 105-X12:2016.

	(2)	(10)	Requirement:
Lengthwise-Dry	4-5	4-5	Grade 2-3
Lengthwise-Wet	4-5	4-5	Grade 2-3
Widthwise-Dry	4-5	4-5	Grade 2-3
Widthwise-Wet	4-5	4-5	Grade 2-3

Remark:

Grey Scale for Assessing Colour Change/Staining

Grade 5 Negligible or no change/staining

Grade 4 Slightly changed/stained

Grade 3 Noticeably changed/stained

Grade 2 Considerably changed/stained

Grade 1 Much changed/stained

The test was subcontracted to Eurofins Product Testing Service (Shanghai) Co., Ltd. Hangzhou Branch.

TO BE CONTINUED

TEST RESULT

Banned AZO Dyes

Test Request: Banned AZO dyes as specified in entry 43 of annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EN ISO 14362-1:2017, sampling procedure and sample preparation according to Annex E4.2 and Annex E4.3.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result		
					2	4+5+6	7+8+9
4-methyl-m-phenylenediamine	95-80-7	mg/kg	30	5	ND	ND	ND
4-Amino-azobenzene (Note 2)	60-09-3	mg/kg	30	5	ND	ND	ND
2-Naphthylamine	91-59-8	mg/kg	30	5	ND	ND	ND
4,4'-methylenedi-o-toluidine	838-88-0	mg/kg	30	5	ND	ND	ND
Bis-(4-aminophenyl)methane	101-77-9	mg/kg	30	5	ND	ND	ND
4,4'-Oxydianiline	101-80-4	mg/kg	30	5	ND	ND	ND
4,4'-Thiodianiline	139-65-1	mg/kg	30	5	ND	ND	ND
Benzidine	92-87-5	mg/kg	30	5	ND	ND	ND
o-Toluidine	95-53-4	mg/kg	30	5	ND	ND	ND
5-Nitro-o-toluidine (Note 1)	99-55-8	mg/kg	30	5	ND	ND	ND
4-methoxy-m-phenylenediamine	615-05-4	mg/kg	30	5	ND	ND	ND
4,4'-Methylene-bis-(2-chloroaniline)	101-14-4	mg/kg	30	5	ND	ND	ND
o-Aminoazotoluene (Note 1)	97-56-3	mg/kg	30	5	ND	ND	ND
2,4,5-Trimethylaniline	137-17-7	mg/kg	30	5	ND	ND	ND
4-Aminobiphenyl	92-67-1	mg/kg	30	5	ND	ND	ND
o-Anisidine	90-04-0	mg/kg	30	5	ND	ND	ND
3,3'-Dichlorobenzidine	91-94-1	mg/kg	30	5	ND	ND	ND
4-Chloroaniline	106-47-8	mg/kg	30	5	ND	ND	ND
3,3'-Dimethoxybenzidine	119-90-4	mg/kg	30	5	ND	ND	ND
n.d.3,3'-Dimethybenzidine	119-93-7	mg/kg	30	5	ND	ND	ND
2-Methoxy-5-methylaniline	120-71-8	mg/kg	30	5	ND	ND	ND
4-Chloro-2-methylaniline	95-69-2	mg/kg	30	5	ND	ND	ND

Remarks:

Note 1: The CAS-numbers 97-56-3 and 99-55-8 are further reduced to CAS-numbers 95-53-4 and 95-80-7.

Note 2: 4-Amino-azobenzene(CAS No.:60-09-3) is reduced to aniline and 1,4-phenylenediamine.

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Nickel Release

Test Request: Nickel release as specified in regulation (EC) No 552/2009 amending entry 27 of annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EN 1811:2023

Test Item(s)	Unit	MDL	Test Result (*)
			1
Nickel Release-Trial 1	$\mu\text{g}\cdot\text{cm}^{-2}\cdot\text{week}^{-1}$	0.1	ND
Nickel Release-Trial 2	$\mu\text{g}\cdot\text{cm}^{-2}\cdot\text{week}^{-1}$	0.1	ND
Nickel Release-Trial 3	$\mu\text{g}\cdot\text{cm}^{-2}\cdot\text{week}^{-1}$	0.1	ND

Note:

MDL = method detection limit

ND = not detected, less than MDL.

$\mu\text{g}\cdot\text{cm}^{-2}\cdot\text{week}^{-1}$ =micrograms per square centimetre per week

Articles with non-nickel coating were tested according to EN 12472:2005+A1:2009, and followed by EN 1181:2023.

Remark:

* For materials and articles coming into direct and prolonged contact with the skin the migration limit is $0.5\ \mu\text{g}\cdot\text{cm}^{-2}\cdot\text{week}^{-1}$. According to EN 1811:2023, considering the combined measurement uncertainty of the method, these materials/articles shall be accepted and be permitted to be placed on the market if the measured nickel release value is less or equal to $0.88\ \mu\text{g}\cdot\text{cm}^{-2}\cdot\text{week}^{-1}$.

Limit ($\mu\text{g}\cdot\text{cm}^{-2}\cdot\text{week}^{-1}$)	Test result ($\mu\text{g}\cdot\text{cm}^{-2}\cdot\text{week}^{-1}$)	Conclusion according to EN1811:2023
0.5	≤ 0.88	Pass
	> 0.88	Fail

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, analysis was performed by ICP-OES.

Test Item(s)	Unit	Limit	MDL	Result				
				1	2	3	4+5+6	7+8+9
Lead (Pb)	mg/kg	500	10	11	ND	ND	ND	13

Remark:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

TO BE CONTINUED

TEST RESULT

Formaldehyde Release

Test Request: Formaldehyde content as per client's request

Test Method: EN 717-3-1996, formaldehyde release was determined by UV-Visible Spectrophotometer (UV-Vis) analysis.

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					3
Formaldehyde Release	50-00-0	mg/kg	80	5	ND

Remarks:

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

Pentachlorophenol (PCP) Content

Test Request: Pentachlorophenol and its salts and esters as specified in Regulation (EU) 2019/1021 of the European Parliament and of the Council on persistent organic pollutants as regards Annex I Part A.

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

Test Item(s)	CAS No.	Unit	Limit	MDL	Result
					3
Pentachlorophenol (PCP)	87-86-5	mg/kg	5	0.5	ND

Remarks:

As per client's request, only the appointed materials have been tested.

mg/kg = milligram per kilogram

MDL = method detection limit

ND = Not detected, less than MDL

END OF THE REPORT