



### **TEST REPORT**

Reference No	:	WTF18F09124397X1C
Applicant	(1)	Mid Ocean Brands B V

Address ...... : 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon,

Hong Kong

Manufacturer.....: 114103

Sample Name.....: Lanyard and luggage straps

Model No. ..... : ML1001, ML1002, ML1003, ML1004, ML1005, ML1006, ML1101,

ML1102, ML1103, ML1203, ML1104, ML1204, ML1007, ML1008, ML1009, ML1010, ML1011, ML1012, ML2001, ML2004, ML2005, ML1013, ML1014, ML1015, ML1016, ML1316, ML1303, ML1411, ML1211, ML1131, ML1132, ML1133, ML1134, ML1234, ML1018,

ML1019, ML1020, ML3003, ML1017, ML3001

**Test Requested**.....: 1) Determine the specified AZO Colorants contents in the submitted sample in according to the Entries 43 in Annex XVII of the REACH

Regulation (EC) No.1907/2006 and the Amendment Regulation (EC) No.552/ 2009 & No.126/ 2013 (previously restricted under

Directive 2002/61/EC).

2) Determination of Lead content in the submitted sample in accordance with REACH regulation Annex XVII Entries 63 (EC) No. 1907/2006 and the amendment No. 836/2012 and (EU) 2015/628

3) Determination of Cadmium content in the submitted sample in accordance with REACH regulation Annex XVII Entries 23 (EC) No. 1907/2006 and the amendment No. 552/2009, No. 494/2011, No.

835/2012 and (EU) 2016/217

4) As requested by the applicant, to test Colour Fastness to Rubbing

in the submitted sample.

Test Method ......: Please refer to next page (s)

Test Conclusion .....: Please refer to next page (s)

Date of Receipt sample.... : 2018-09-20

Date of Test...... : 2018-09-20 to 2018-09-26

Date of Issue ..... 2018-10-13

Test Result .....: Please refer to next page (s)

revising, and replaced report WTF18F09124397C.

#### Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of reporter and reviewer.

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#### **Test Result:**

#### 1) AZO

Test Method: With reference to BS EN 14362-1: 2012 and BS EN 14362-3: 2012, analysis was performed by Gas Chromatographic Mass Spectrometry (GC-MS)

No.	Amines Substances	CAS No.	Limit	Result (mg/kg)	
NO.	Ailliles Substances	CAS NO.	(mg/kg)	No.3	No.7
1 🖑	4-Aminobiphenyl	92-67-1	30	IND IN	ND
2	Benzidine	92-87-5	30	ND	ND
3	4-chloro-o-Toluidine	95-69-2	30	ND	ND"
4	2-Naphthylamine	91-59-8	30	ND +	ND
5	o-Aminoazotoluene	97-56-3	30	ND	ND
6	2-Amino-4-nitrotoluene	99-55-8	30	ND	o ND ○
7	p-Chloroaniline	106-47-8	30	WND W	ND
8	2,4-diaminoanisol	615-05-4	30	ND	ND
9	4,4'-Diaminodiphenylmethane	101-77-9	30	ND.	ND
10	3,3'-Dichlorobenzidine	91-94-1	30	ND A	ND
11	3,3'-Dimethoxybenzidine	119-90-4	30	ND	ND
12	3,3'-Dimethylbenzidine	119-93-7	30	ND.	ND
13	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	A 30	ND W	ND
14	p-cresinin	120-71-8	30	ND	ND
15	4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	30	M ND M	ND
16	4,4'-Oxydianiline	101-80-4	30	ND O	ND
17	4,4'-Thiodianiline	139-65-1	30	ND	ND
18	o-Toluidine	95-53-4	30	ND OF	ND
19	2,4-Toluylendiamine	95-80-7	30	ND	ND
20	2,4,5 – Trimethylaniline	137-17-7	30	- ND	ND.
21	o-anisidine	90-04-0	30	ND ND	ND
22	4-aminoazobenzene	60-09-3	30	ND	ND
23	2,4-Xylidin	95-68-1	30	ND ND	ND
24	2,6-Xylidin	87-62-7	30	ND A	ND
21,	Conclusion	LIE - LITE	102 11	Pass	Pass



No.	Amines Substances	CAS No.	Limit	Result (mg/kg)	
NO.	Amines Substances	CAS No.	(mg/kg)	No.9	No.10
1+	4-Aminobiphenyl	92-67-1	30	ND	ND.
2	Benzidine	92-87-5	30	ND	ND
3	4-chloro-o-Toluidine	95-69-2	30	ND	ND
4	2-Naphthylamine	91-59-8	30	ND	ND
5	o-Aminoazotoluene	97-56-3	30	ND	ND
6	2-Amino-4-nitrotoluene	99-55-8	30	ND	ND <sub>0</sub>
7	p-Chloroaniline	106-47-8	30	ND	ND
8	2,4-diaminoanisol	615-05-4	30	ND	ND
9	4,4'-Diaminodiphenylmethane	101-77-9	30	ND	→ ND
10	3,3'-Dichlorobenzidine	91-94-1	30	an DO an	ND
11	3,3'-Dimethoxybenzidine	119-90-4	30	ND	ND
12	3,3'-Dimethylbenzidine	119-93-7	30	ND.	MD ND
13	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	30	ND	ND
14	p-cresinin	120-71-8	30	ND	ND <sub>0</sub>
15	4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	30	ND -	ND
16	4,4'-Oxydianiline	101-80-4	A 30	ND	ND
17	4,4'-Thiodianiline	139-65-1	30	ND	ND
18	o-Toluidine	95-53-4	30	MD M	ND
19	2,4-Toluylendiamine	95-80-7	30	ND	ND
20	2,4,5 – Trimethylaniline	137-17-7	30	ND	ND <sub>2</sub>
21	o-anisidine	90-04-0	30	ND +	ND
22	4-aminoazobenzene	60-09-3	30	ND	ND
23	2,4-Xylidin	95-68-1	30	ND	ND
24	2,6-Xylidin	87-62-7	30	ND w	ND
٢	Conclusion	70, -	- 4	Pass	Pass



11-16	Aminos Substances	CACNI	Limit	Result (mg/kg)	
No.	Amines Substances	CAS No.	(mg/kg)	No.11	No.13
1+	4-Aminobiphenyl	92-67-1	30	ND	→ ND
2	Benzidine	92-87-5	30	ND W	ND
3	4-chloro-o-Toluidine	95-69-2	30	ND	ND-
4 %	2-Naphthylamine	91-59-8	30	IND IN	ND
5	o-Aminoazotoluene	97-56-3	30	ND	ND
6	2-Amino-4-nitrotoluene	99-55-8	30	ND	ND ND
7	p-Chloroaniline	106-47-8	30	ND	ND
8	2,4-diaminoanisol	615-05-4	30	ND	ND
9	4,4'-Diaminodiphenylmethane	101-77-9	30	ND	→ ND
10	3,3'-Dichlorobenzidine	91-94-1	30	WND W	ND
11	3,3'-Dimethoxybenzidine	119-90-4	30	ND	ND
12	3,3'-Dimethylbenzidine	119-93-7	30	ND.	ND
13	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	30	ND +	ND
14	p-cresinin	120-71-8	30	ND	ND"
15	4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	30	ND -	ND.
16	4,4'-Oxydianiline	101-80-4	A 30	ND W	ND
17	4,4'-Thiodianiline	139-65-1	30	ND	ND
18	o-Toluidine	95-53-4	30	M ND M	ND
19	2,4-Toluylendiamine	95-80-7	30	ND	ND
20	2,4,5 – Trimethylaniline	137-17-7	30	ND	ND <sub>2</sub>
21	o-anisidine	90-04-0	30	, ND	ND
22	4-aminoazobenzene	60-09-3	30	ND	ND
23	2,4-Xylidin	95-68-1	30	ND —	ND.
24	2,6-Xylidin	87-62-7	30	ND M	ND
<b>,</b>	Conclusion	70, -		Pass	Pass

No.	Amines Substances	CAS No.	Limit	Result (mg/kg)	
NO.	Ammes Substances	CAS NO.	(mg/kg)	No.14	No.15
1	4-Aminobiphenyl	92-67-1	30	ND	ND
2	Benzidine	92-87-5	30	L ND	ND
3	4-chloro-o-Toluidine	95-69-2	30	ND	ND
4	2-Naphthylamine	91-59-8	30	ND	ND
5	o-Aminoazotoluene	97-56-3	30	MD M	ND
6	2-Amino-4-nitrotoluene	99-55-8	30	ND O	ND
7	p-Chloroaniline	106-47-8	30	ND	ND
8	2,4-diaminoanisol	615-05-4	30	ND -	ND
9	4,4'-Diaminodiphenylmethane	101-77-9	30	ND	ND
10	3,3'-Dichlorobenzidine	91-94-1	30	ND-	ND
11	3,3'-Dimethoxybenzidine	119-90-4	30	WND W	ND
12	3,3'-Dimethylbenzidine	119-93-7	30	ND	ND
13	3,3'-Dimethyl-4,4'-diaminodiphenylmethane	838-88-0	30	ND ND	ND
14	p-cresinin	120-71-8	30	ND ND	ND
15	4,4'-Methylen-bis-(2-chloroaniline)	101-14-4	30	ND	ND
16	4,4'-Oxydianiline	101-80-4	30	- ND	ND
17	4,4'-Thiodianiline	139-65-1	30	ND	ND
18	o-Toluidine	95-53-4	30	ND	ND
19	2,4-Toluylendiamine	95-80-7	30	MD M	ND
20	2,4,5 – Trimethylaniline	137-17-7	30	ND	ND
21	o-anisidine	90-04-0	30	ND	ND
22	4-aminoazobenzene	60-09-3	30	ND.	ND
23	2,4-Xylidin	95-68-1	30	ND	ND
24	2,6-Xylidin	87-62-7	30	ND	ND
	Conclusion			Pass	Pass

#### Note:

- ND = Not detected or less than the method detection limit
- mg/kg=Milligram per kilogram
- Method Detection Limit (mg/kg): Each 5mg/kg
- The CAS-numbers 97-56-3 and 99-55-8 are further reduced to CAS-numbers 95-53-4 and 95-80-7.
- AZO colorants that are able to form 4-aminoazobenzene, generate under the condition of this method aniline and 1,4-phenylenediamine. The presence of these colorants cannot be reliably ascertained without additional information, e.g. the chemical structure of the colorant used.
- The CAS-numbers 95-68-1 and 87-62-7 are not proscribed under REACH Regulation (EC) No 1907/2006
- As per client's requirement, the results specimen No.3, No.7, No.9, No.10 and No.11 were quoted from Report No. WTF18F01101769C.

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#### 2) Lead (Pb)

Test Method: With reference to IEC 62321-5:2013, the analysis was performed by ICP-OES.

TOTALIA MENTE	MDL	WILL MY	Limit			
Test Item	(mg/kg)	No.1	No.2	No.3	No.4	(mg/kg)
Lead(Pb)	2	ND	ND	ND	ND	500
Conclusion		Pass	Pass	Pass	Pass	1/11 - 1/11

Took Hom	MDL	et et	Results (mg/kg)			
Test Item	(mg/kg)	No.5	No.6	No.7	No.8	(mg/kg)
Lead(Pb)	2	ND	ND	ND ND	ND	500
Conclusion	unlik wali	Pass	Pass	Pass	Pass	TEX TEX

Took Home Stiffet	MDL	in we w	at at a	Limit	
Test Item	(mg/kg)	No.12	No.13	No.14	(mg/kg)
Lead(Pb)	2 0	ND	ND	ND -	500
Conclusion	at at	Pass	Pass	Pass	111 711

#### Note:

- (1) mg/kg = milligram per kilogram
- (2) ND = Not Detected (lower than MDL)
- (3) MDL = Method Detection Limit
- (4) Limit of Lead was quoted from REACH regulation Annex XVII Item 63 (EC) No. 1907/2006 and the amendment No. 836/2012 and (EU) 2015/628.
- (5) As per client's requirement, the results of specimen from No.1 to No.8 were quoted from Report No. WTF18F01101769C.



Reference No.: WTF18F09124397X1C



#### 3) Cadmium (Cd)

Test Method: With reference to IEC 62321-5:2013, the analysis was performed by ICP-OES.

Table Hamilton	MDL	White White When	Results (mg/kg)	at let let
Test Item	(mg/kg)	No.4	No.8	No.12
Cadmium(Cd)	2	ND ND	ND	ND OF
Conclusion		Pass	Pass	Pass

#### Note:

- (1) mg/kg = milligram per kilogram
- (2) ND = Not Detected (lower than MDL)
- (3) MDL = Method Detection Limit
- (4) Limit of Cadmium according to REACH regulation Annex XVII Item 23 (EC) No. 1907/2006 and the amendment No. 552/2009, No. 494/2011 and No. 835/2012 and (EU) 2016/217.

Category	Limit (mg/kg)
Wet paint	100
Surface coating	1000
Plastic	100
Metal parts of jewellery and hair accessories	100

(5) As per client's requirement, the result of specimen No.4 and No.8 were quoted from Report No. WTF18F01101769C

#### 4) Colour Fastness to Rubbing

Colour Fastness to Ru	ubbing*		<del></del>	at at let
(ISO 105 X12: 2001/Co	r 2002; Size of rubbin	g finger: 16mm diame	ter.)	in with
1 the ext	No.13	No.14	No.15	Client's Limit
Dry staining	4-5	4-5	4-5	2-3
Wet staining	4-5	4-5	4-5	2-3
Conclusion	Pass	Pass	Pass	at at

#### Note:

- (1) Grey Scale Rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good.
- (2) The testing item marked with "" does not been accredited by CNAS

#### **Test Specimen Description:**

No.1: Silvery metal lobster clip

No.2: Silvery metal D-ring

No.3: Green webbing

No.4: Black plastic buckle

No.5: Silvery metal buckle with red plating

No.6: Silvery metal rivet

No.7: Red webbing

No.8: White rubber sheet

No.9: Yellow webbing

No.10: Orange webbing

No.11: Multicolour webbing

No.12: White plastic sleeve

No.13: Golden-white fabric

No.14: Light coffee fabric

No.15: Purple-white fabric

#### Sample photo:





Reference No.: WTF18F09124397X1C







Reference No.: WTF18F09124397X1C







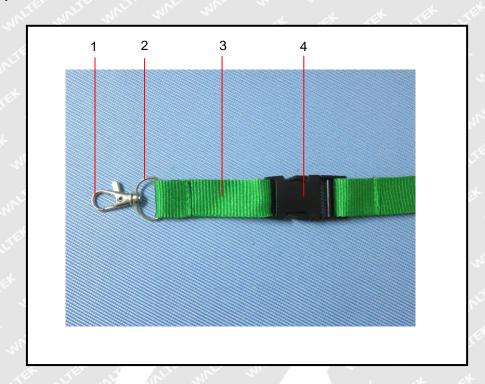


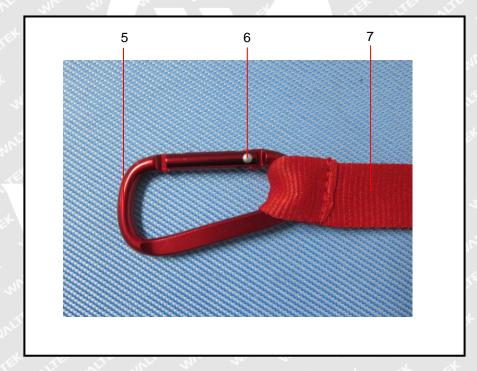




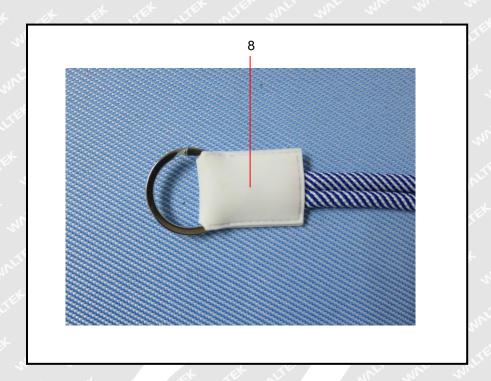
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#### Photographs of parts tested:



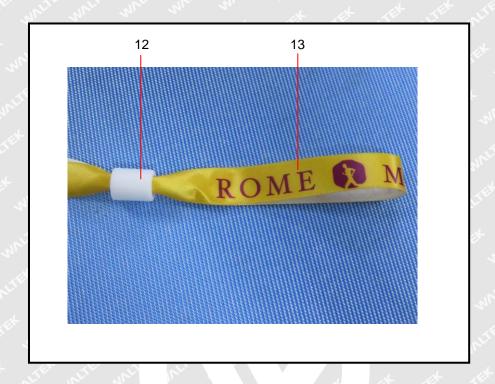


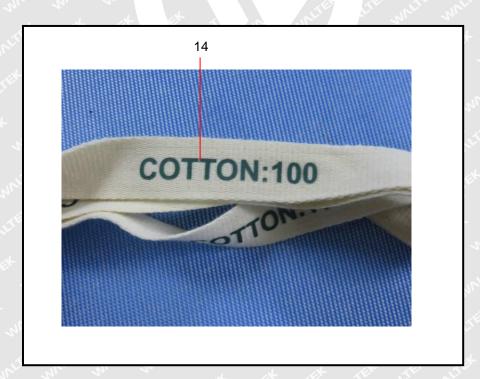




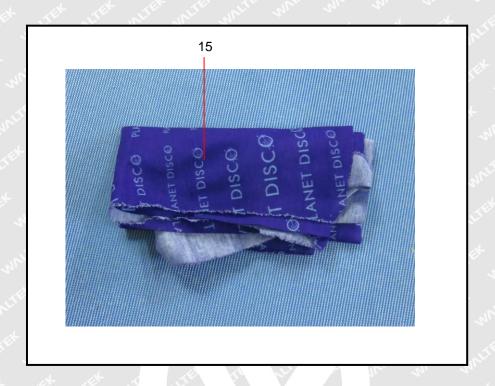












===== End of Report =====

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