

TEST REPORT

Reference No. : WTF20F02005397C

Applicant: Mid Ocean Brands B.V.

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

Hong Kong

Manufacturer.....: 111725

Sample Name : Bandana

Model No. : MH3101

Test Requested.....:: 1) 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

 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).

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

roved by:

g.Liang /Lab Manager

the submitted sample.

Test Method : Please refer to next page (s)

Test Conclusion: Please refer to next page (s)

Date of Receipt sample..... : 2020-02-25

Date of Test...... : 2020-02-25 to 2020-03-03

Date of Issue : 2020-03-03

Test Result: Please refer to next page (s)

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 compiler and approver.

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Prepared By:

Waltek Services (Foshan) Co., Ltd.

Address: No.13-19, 2/F., 2nd Building, Sunlink International Machinery City, Chencun, Shunde District, Foshan, Guangdong, China

Tel:+86-757-23811398 Fax:+86-757-23811381 E-mail:info@waltek.com.cn

Compiled by:

Rena.Chen /Project Engineer

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Test Result:



1) Lead (Pb)

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

| Test Item | MDL (mg/kg) | Results (mg/kg) | Limit (mg/kg) |
|------------|----------------|-----------------|---------------|
| Lead(Pb) | 2 | No.1 | 500 |
| Conclusion | - 18 - 18 - 1 | Pass W | in in the |

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.



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2) AZO

Test Method: With reference to BS EN ISO 14362-1: 2017 and BS EN ISO 14362-3: 2017, analysis was performed by Gas Chromatographic Mass Spectrometry (GC-MS)

| No. | Amines Substances | CAS No. | Limit (mg/kg) | Result (mg/kg) No.1 |
|-----|---|----------|---------------|------------------------|
| NO. | Allilles Substances | CAS NO. | | |
| 1 | 4-Aminobiphenyl | 92-67-1 | 30 | ND |
| 2 | Benzidine | 92-87-5 | 30 | ND NITE |
| 3 | 4-chloro-o-Toluidine | 95-69-2 | 30 | ND |
| 4 | 2-Naphthylamine | 91-59-8 | 30 | TEX STEND STEE WY |
| 5 | o-Aminoazotoluene | 97-56-3 | 30 | ND |
| 6 | 2-Amino-4-nitrotoluene | 99-55-8 | 30 | ND I'M |
| 7 | p-Chloroaniline | 106-47-8 | 30 | ND |
| 8 | 2,4-diaminoanisol | 615-05-4 | 30 | ND |
| 9 | 4,4'-Diaminodiphenylmethane | 101-77-9 | 30 | ND |
| 10 | 3,3'-Dichlorobenzidine | 91-94-1 | 30 | LITER MIND WITE M |
| 11 | 3,3'-Dimethoxybenzidine | 119-90-4 | 30 | ND |
| 12 | 3,3'-Dimethylbenzidine | 119-93-7 | 30 | TEL WORLD WITH |
| 13 | 3,3'-Dimethyl-4,4'-diaminodiphenylmethane | 838-88-0 | 30 | ND |
| 14 | p-cresinin | 120-71-8 | 30 | ND ND |
| 15 | 4,4'-Methylen-bis-(2-chloroaniline) | 101-14-4 | 30 | ND |
| 16 | 4,4'-Oxydianiline | 101-80-4 | 30 | ND WILL A |
| 17 | 4,4'-Thiodianiline | 139-65-1 | 30 | ND |
| 18 | o-Toluidine | 95-53-4 | 30 | THE ND NET WA |
| 19 | 2,4-Toluylendiamine | 95-80-7 | 30 | ND |
| 20 | 2,4,5 – Trimethylaniline | 137-17-7 | 30 | ND |
| 21 | o-anisidine | 90-04-0 | 30 | ND |
| 22 | 4-aminoazobenzene | 60-09-3 | 30 | ND |
| 23 | 2,4-Xylidin | 95-68-1 | 30 | ND |
| 24 | 2,6-Xylidin | 87-62-7 | 30 | ND WELL W |
| • | Conclusion | Wr Mr. | 70. 2 | 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



3) Colour Fastness to Rubbing

| Colour Fastness to Rubbing | | | | | |
|--|------|----------------------------|--|--|--|
| (ISO 105 X12: 2001/Cor 2002; Size of rubbing finger: 16mm diameter.) | | | | | |
| at let let let | No.1 | Client's Limit | | | |
| Dry staining | 4-5 | 2-3 | | | |
| Wet staining | 4-5 | 2-3 | | | |
| Conclusion | Pass | At the 18th of the officer | | | |

Note:

(1) Grey Scale Rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good.

Test Specimen Description:

No.1: Multicolor fibrous cloth

Sample photo:



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