



# **TEST REPORT**

**Reference No.** ..... WTF17F0374998C

Applicant ..... Mid Ocean Brands B.V.

Address ...... Unit 201 2/F., Laford Centre, 838 Lai Chi Kok Road, Cheung Sha Wan,

Kowloon, Hong Kong.

Manufacturer..... 111495

Sample Name...... Shopping bag; Cooler bag; Document bag

Model No. ...... : MO4030, MO4050, MO4060, MO4070, MO4080, MO4120, MO4190,

MO4230, MO4240, 4310, MO4320, MO4330, MO4340; MO4090,

MO4100, MO4210, MO4220; MO4010

1907/2006 and the amendment No. 836/2012 and (EU) 2015/628

 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

3) 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 2003/61/EC)

Directive 2002/61/EC).

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..... 2017-03-29

Date of Test...... 2017-03-29 to 2017-04-01

**Date of Issue** ..... 2017-04-24

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 reporter and reviewer.

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ed by:



#### 1) Lead (Pb)

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

| Test Item  | MDL           | A cit | Limit |      |         |
|------------|---------------|-------|-------|------|---------|
|            | (mg/kg)       | No.1  | No.2  | No.3 | (mg/kg) |
| Lead(Pb)   | 2             | ND    | , ND  | 37#  | 500     |
| Conclusion | LIE MILE MILE | Pass  | Pass  | Pass | 5- Al-  |

| Test Item  | MDL     | White white | Limit |      |         |
|------------|---------|-------------|-------|------|---------|
|            | (mg/kg) | No.5        | No.6  | No.8 | (mg/kg) |
| Lead(Pb)   | 2       | ND          | ND    | ND   | 500     |
| Conclusion |         | Pass        | Pass  | Pass | un in   |

| Test Item  | MDL           | -    | Limit |       |           |
|------------|---------------|------|-------|-------|-----------|
|            | (mg/kg)       | No.9 | No.10 | No.11 | (mg/kg)   |
| Lead(Pb)   | 2             | ND   | ND    | ND.   | 500       |
| Conclusion | antite -water | Pass | Pass  | Pass  | TEX - TEX |

| Ct with sight | MDL             | Tri l | Limit |       |         |
|---------------|-----------------|-------|-------|-------|---------|
| Test Item     | (mg/kg)         | No.12 | No.13 | No.14 | (mg/kg) |
| Lead(Pb)      | 2               | ND    | ND    | 24#   | 500     |
| Conclusion    | , <del>,,</del> | Pass  | Pass  | Pass  | 14 14.  |

| Test Item  | MDL  | Et WIE | Limit |       |         |
|------------|--|--------|-------|-------|---------|
|            | (mg/kg)                                      | No.16  | No.18 | No.19 | (mg/kg) |
| Lead(Pb)   | 2  | ND     | ND    | ND ND | 500     |
| Conclusion | \ \ \ \ <u>\</u> \ \ \ \ \ \ \ \ \ \ \ \ \ \ | Pass   | Pass  | Pass  | EX LEEK |

| Test Item  | MDL       | i me m | Limit |       |  |
|------------|-----------|--------|-------|-------|--|
|            | (mg/kg)   | No.20  | No.21 | No.22 | (mg/kg)                                |
| Lead(Pb)   | and 2 mil | ND     | ND    | ND    | 500                                    |
| Conclusion |           | Pass   | Pass  | Pass  | $n_{\perp} = \overline{n}_{\parallel}$ |

#### 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 applicant's requirement, the testing was conducted based on mixed components, the test result is for reference only



#### 2) Cadmium (Cd)

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

| Test Item   | MDL     | Results (mg/kg) |      |                 |  |
|-------------|---------|-----------------|------|-----------------|--|
|             | (mg/kg) | No.1            | No.2 | No.3            |  |
| Cadmium(Cd) | 2       | ND              | ND W | ND <sup>#</sup> |  |
| Conclusion  | " " "   | Pass            | Pass | Pass            |  |

| Test Item   | MDL       | Results (mg/kg) |       |       |  |  |
|-------------|-----------|-----------------|-------|-------|--|--|
|             | (mg/kg)   | No.5            | No.6  | No.8  |  |  |
| Cadmium(Cd) | 2112      | ND              | ND ND | ND ND |  |  |
| Conclusion  | TEX - TEX | Pass            | Pass  | Pass  |  |  |

| Test Item   | MDL     | Results (mg/kg) |       |       |  |
|-------------|---------|-----------------|-------|-------|--|
|             | (mg/kg) | No.9            | No.10 | No.11 |  |
| Cadmium(Cd) | - 2     | ND              | ND ND | ND    |  |
| Conclusion  | Mr M    | Pass            | Pass  | Pass  |  |

| LIE WALL WALL | MDL       |       | Results (mg/kg) | IEK NITER WITE |
|---------------|-----------|-------|-----------------|----------------|
| Test Item     | (mg/kg)   | No.12 | No.13           | No.14          |
| Cadmium(Cd)   | 2         | ND    | ND ND           | 11#            |
| Conclusion    | LET JET B | Pass  | Pass            | Pass           |

| Took Home   | MDL           |      | Results (mg/kg) |       |  |
|-------------|---------------|------|-----------------|-------|--|
| Test Item   | (mg/kg) No.16 |      | No.18           | No.19 |  |
| Cadmium(Cd) | 2 /           | ND W | ND              | ND    |  |
| Conclusion  | 2 2 70        | Pass | Pass            | Pass  |  |

| Test Item   | MDL           | Results (mg/kg) |       |       |
|-------------|---------------|-----------------|-------|-------|
|             | (mg/kg)       | No.20           | No.21 | No.22 |
| Cadmium(Cd) | 2             | ND              | of ND | ND ND |
| Conclusion  | aliek - aliek | 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           |  |  |

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(5) "#" = As per applicant's requirement, the testing was conducted based on mixed components, the test result is for reference only

**3) 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) |
|-----|---|----------|---------|--------|---------|
|     |   | CAS NO.  | (mg/kg) | No.4   | No.7    |
| 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      |
| 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      | 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 | 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      | ND     | 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  | ND ND   |
| 24  | 2,6-Xylidin                               | 87-62-7  | 30      | ND     | ND      |
|     | Conclusion                                | * - Et   | (A)     | Pass   | Pass    |



| No. | Amines Substances                         | CAS No.  | Limit     | Result (mg/kg) |                  |
|-----|---|----------|-----------|----------------|------------------|
|     |   |          | (mg/kg)   | No.15          | No.17            |
| 1   | 4-Aminobiphenyl                           | 92-67-1  | 30        | ND -           | ND ND            |
| 2   | Benzidine                                 | 92-87-5  | 30        | ND             | ND               |
| 3   | 4-chloro-o-Toluidine                      | 95-69-2  | 30        | ND             | ND               |
| 450 | 2-Naphthylamine                           | 91-59-8  | 30        | W ND           | 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        | UND UN         | ND               |
| 11  | 3,3'-Dimethoxybenzidine                   | 119-90-4 | 30        | ND             | ND               |
| 12  | 3,3'-Dimethylbenzidine                    | 119-93-7 | 30        | ND ND          | √ND <sup>3</sup> |
| 13  | 3,3'-Dimethyl-4,4'-diaminodiphenylmethane | 838-88-0 | 30        | ND +           | ND               |
| 14  | p-cresinin                                | 120-71-8 | 30        | ND             | MD ND            |
| 15  | 4,4'-Methylen-bis-(2-chloroaniline)       | 101-14-4 | 30        | ND.+           | ND (             |
| 16  | 4,4'-Oxydianiline                         | 101-80-4 | <b>30</b> | ND             | ND               |
| 17  | 4,4'-Thiodianiline                        | 139-65-1 | 30        | ND             | ND ND            |
| 18  | o-Toluidine                               | 95-53-4  | 30        | ND ND          | ND               |
| 19  | 2,4-Toluylendiamine                       | 95-80-7  | 30        | ND             | ND               |
| 20  | 2,4,5 – Trimethylaniline                  | 137-17-7 | 30        | ND             | ND N             |
| 21  | o-anisidine                               | 90-04-0  | 30        | ND A           | 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 Ju          | ND               |
|     | Conclusion                                | 10,      | (         | 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



#### 4) Colour Fastness to Rubbing

| Colour Fastness to Rubbing*  |      |      |       |       |                |  |
|--|------|------|-------|-------|----------------|--|
| (ISO 105 X12: 2001/Cor 2002; Size of rubbing finger: 16mm diameter.) |      |      |       |       |                |  |
| TEX TEX TEX  | No.4 | No.7 | No.15 | No.17 | Client's Limit |  |
| Dry staining   | 4-5  | 4-5  | 4-5   | 4-5   | 2-3            |  |
| Wet staining   | 4-5  | 4-5  | 4-5   | 4-5   | 2-3            |  |
| Conclusion   | Pass | Pass | Pass  | Pass  | TEN NATE WIT   |  |

#### 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: Purple-red plastic bag

No.2: White plastic zipper tooth

No.3: Silvery metal zipper head with white coating

No.4: Green nylon tape

No.5: White plastic bag

No.6: Green plastic strip

No.7: Yellow fabric bag

No.8: Red plastic bag

No.9: White plastic button

No.10: White plastic bag

No.11: Black plastic tape

No.12: Silvery lining

No.13: Blue plastic zipper tooth

No.14: Silvery metal zipper head with blue coating

No.15: Blue nylon tape

No.16: Blue plastic bag

No.17: Dark blue nylon tape

No.18: Black plastic buckle

No.19: Blue plastic bag

No.20: Black plastic hook of VELCRO

No.21: Light blue plastic tape

No.22: Light blue plastic bag

## Sample photo:







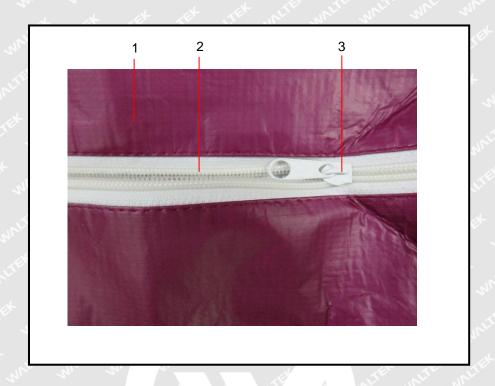


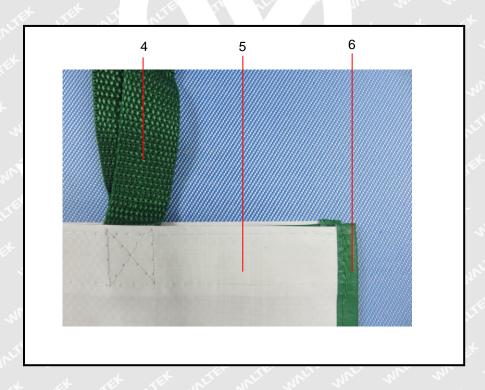




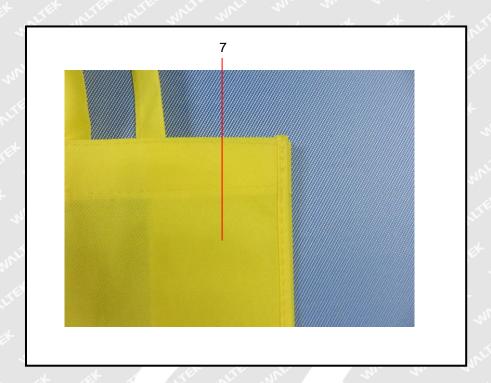
# W

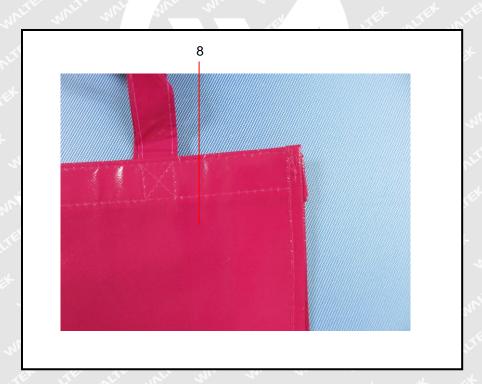
## Photographs of parts tested:



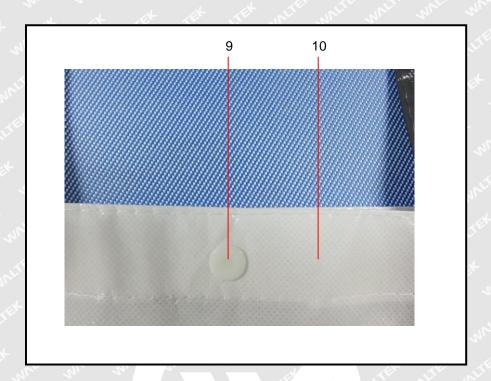


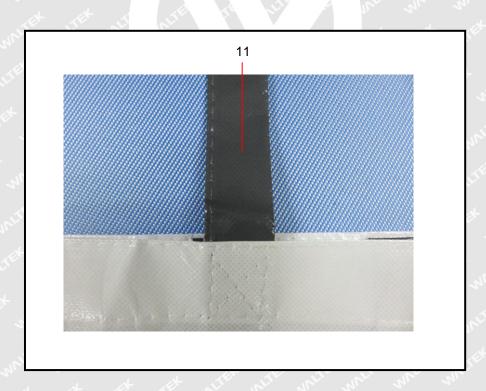




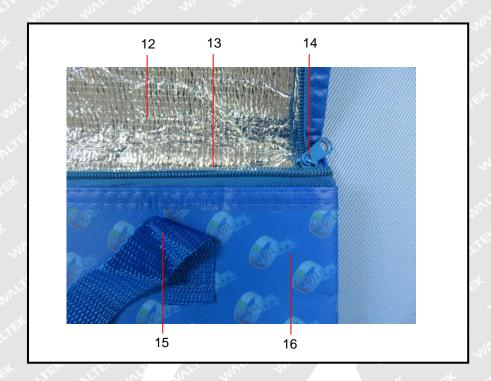


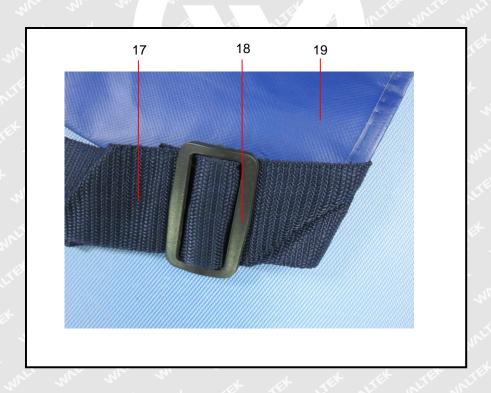




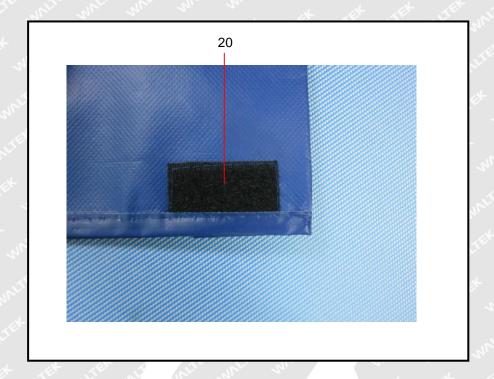


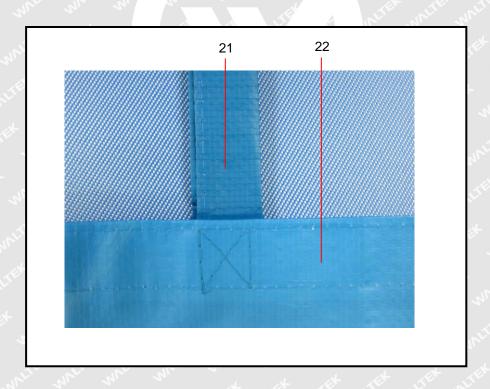












===== End of Report =====