

TEST REPORT

| Reference No | WTF21F05052075C |
|------------------------|--|
| Applicant | Mid Ocean Brands B.V. |
| Address | 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong |
| Manufacturer | 111587 |
| Sample Name | Reflective poly shopping bag |
| Model No | MO6302 |
| Test Requested : | 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). 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 | 2021-05-28 |
| Date of Test | 2021-05-28 to 2021-06-03 |
| Date of Issue | 2021-06-03 |
| Test Result | Please refer to next page (s) |
| Note : | As specified by client, only test the designated sample. |
| | |

Remarks:

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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 | LOQ | Results (mg/kg) | 👉 🖉 Limit |
|------------|----------|-----------------|-----------|
| | (mg/kg) | No.1+No.2 | (mg/kg) |
| Lead(Pb) | 2 | ND* | 500 |
| Conclusion | 1 - t dt | Pass | m. m m |

Note:

- (1) mg/kg = milligram per kilogram
- (2) ND = Not Detected or lower than limit of quantitation
- (3) LOQ = Limit of quantitation
- (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) "*" = Results are calculated by the minimum weight of mixed components.





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. | Amines Substances | | | No.1 | No.2 |
| 10 | 4-Aminobiphenyl | 92-67-1 | 30 | ND | ND |
| 2 | Benzidine | 92-87-5 | 30 | JUND JUN | ND |
| 3 | 4-chloro-o-Toluidine | 95-69-2 | 30 | ND | ND |
| 4 | 2-Naphthylamine | 91-59-8 | 30 | ND ND | ND ND |
| 5 | o-Aminoazotoluene | 97-56-3 | 30 | ND A | ND |
| 6 | 2-Amino-4-nitrotoluene | 99-55-8 | 30 | ND | ND |
| 7, | p-Chloroaniline | 106-47-8 | 30 | ND ND | See NDS |
| 8 | 2,4-diaminoanisol | 615-05-4 | 30 0 | <10 √ ⁰ | ND |
| 9 | 4,4'-Diaminodiphenylmethane | 101-77-9 | 30 | ND | ND |
| 10 | 3,3'-Dichlorobenzidine | 91-94-1 | 30 | ND 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 OF | ST ND S |
| 14 | p-cresinin | 120-71-8 | 30 - 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 | <u>30</u> | ND | ND |
| 24 | 2,6-Xylidin | 87-62-7 | 30 | ND | ND |
| | Conclusion | ÷- | * - St | Pass | Pass |

Note:

- ND = Not Detected or lower than limit of quantitation
- mg/kg=Milligram per kilogram
- Limit of Quantitation (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



Nou KY RY

3) Colour Fastness to Rubbing

| Colour Fastne | ess to Rubbing | et out with white | m. m. m. | |
|---------------|-------------------------|-------------------------|-----------|----------------|
| (ISO 105-X12: | 2016; Size of rubbing f | finger: 16mm diameter.) | the state | 56 .56 s |
| The In | | No.1 | No.2 | Client's Limit |
| Length | Dry staining | 4 | 4-5 | 2-3 |
| | Wet staining | 4-5 | 4-5 | 2-3 |
| Width | Dry staining | JE NIT MIN | 4-5 | 2-3 |
| | Wet staining | 1. 2 S. | 4-5 | 2-3 |
| Conclusion | i i i it | Pass | Pass | |

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: Black webbing

No.2: Silvery main fabric

Sample photo:



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Photograph of parts tested:



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

