

Test report

T-24165837-11-R1



Overall result Pass

Please refer to the following pages for test result summary and notes.

Client information

Client: Mid Ocean Brands B.V.

Address: 7/F, Kings Tower, 111 King Lam Street,

Cheung Sha Wan, Kowloon, Hong Kong



Sample information

Description: 26pcs tool sets

SKU/style #: MO8241

Country of origin: Country of distribution: Europe
Quantity submitted: 2 sets

Labeled age grade: Tested age grade: Materials: steel

General information

Sample receipt date: 29-Aug-2024

Testing period: 29-Aug-2024 to 04-Sep-2024

Report date: 05-Sep-2024

QIMA (Hangzhou) Testing Co., Ltd.

Jeremy Xu

Chemical Laboratory Manager

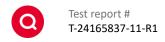
QIMA (Hangzhou) Testing Co., Ltd.

Parina Zhou

Carina Zhou

Textile Laboratory Manager



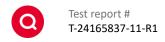


Result summary

At the request of the client, the following test were conducted:

Test(s) conducted	Conclusion
Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 63 Lead in Substrate Materials	Pass
Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 23 Cadmium in Substrate Materials	Pass
Regulation (EC) No. 1907/2006 REACH Annex XVII as amended, Item 51 and 52 Phthalates – Mouthable (DBP, BBP, DEHP, DIBP, DnOP, DINP, DIDP)	Pass
Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 43 Azocolorants in Textiles	Pass
Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 50 Polycyclic Aromatic Hydrocarbon (PAH)	Pass
Colour Fastness to Rubbing	Pass





Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 63 Lead in Substrate Materials

Test Method: CPSC-CH-E1001-08.3 (Metal) and/or CPSC-CH-E1002-08.3 (Non-Metal)

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4	5+6+7	8	9+10	Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Total Lead (Pb)	ND	ND	ND	ND	ND	500
Conclusion	Pass	Pass	Pass	Pass	Pass	

Specimen No.	11	12	13	14	15	Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Total Lead (Pb)	ND	443	ND	ND	ND	500
Conclusion	Pass	Pass	Pass	Pass	Pass	

Specimen No.	16	17	18	19	20	Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Total Lead (Pb)	ND	ND	ND	ND	ND	500
Conclusion	Pass	Pass	Pass	Pass	Pass	

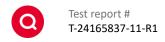
Note:

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 15 mg/kg)





Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 23 Cadmium in Substrate Materials

Test Method: ASTM F963-23 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1+2+3	4	5+6+7	8	9+10	Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	100
Conclusion	Pass	Pass	Pass	Pass	Pass	

Specimen No.	11	12	13	14	15	Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	100
Conclusion	Pass	Pass	Pass	Pass	Pass	

Specimen No.	16	17	18	19	20	Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Total Cadmium (Cd)	ND	ND	ND	ND	ND	100
Conclusion	Pass	Pass	Pass	Pass	Pass	

Note:

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 15mg/kg)





Regulation (EC) No. 1907/2006 REACH Annex XVII as amended, Item 51 and 52 Phthalates – Mouthable (DBP, BBP, DEHP, DIBP, DnOP, DINP, DIDP)

Test Method: CPSC-CH-C1001-09.4

Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		5+6+7	8	9+10	Limit
Test Item	CAS No.	Result (% w/w)	Result (% w/w)	Result (% w/w)	(% w/w)
Dibutyl Phthalate (DBP)	84-74-2	ND	ND	ND	0.1
Benzyl Butyl Phthalate (BBP)	85-68-7	ND	ND	ND	0.1
Di-(2-Ethylhexyl) Phthalate (DEHP)	117-81-7	ND	ND	ND	0.1
Diisobutyl Phthalate (DIBP)	84-69-5	ND	ND	ND	0.1
Sum of DBP,	BBP, DEHP, DIBP	ND	ND	ND	0.1
Di-n-Octyl Phthalate (DnOP)	117-84-0	ND	ND	ND	
Diisononyl Phthalate (DINP)	28553-12-0 68515-48-0	ND	ND	ND	
Diisodecyl Phthalate (DIDP)	26761-40-0 68515-49-1	ND	ND	ND	
Sum of D	nOP, DINP, DIDP	ND	ND	ND	0.1
	Conclusion	Pass	Pass	Pass	

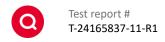
Note:

% w/w = Percent by weight

LT = Less than

ND = Not detected (Reporting Limit = 0.015 % w/w)





Regulation (EC) No. 1907/2006 REACH Annex XVII as amended, Item 51 and 52 Phthalates – Mouthable (DBP, BBP, DEHP, DIBP, DnOP, DINP, DIDP)

Test Method: CPSC-CH-C1001-09.4

Analytical Method: Gas Chromatography with Mass Spectrometry

Specimen No.		11			Limit
Test Item	CAS No.	Result (% w/w)	Result (% w/w)	Result (% w/w)	(% w/w)
Dibutyl Phthalate (DBP)	84-74-2	ND			0.1
Benzyl Butyl Phthalate (BBP)	85-68-7	ND			0.1
Di-(2-Ethylhexyl) Phthalate (DEHP)	117-81-7	ND			0.1
Diisobutyl Phthalate (DIBP)	84-69-5	ND			0.1
Sum of DBP,	BBP, DEHP, DIBP	ND			0.1
Di-n-Octyl Phthalate (DnOP)	117-84-0	ND			
Diisononyl Phthalate (DINP)	28553-12-0 68515-48-0	ND			
Diisodecyl Phthalate (DIDP)	26761-40-0 68515-49-1	ND			
Sum of D	ND			0.1	
	Conclusion	Pass			

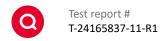
Note:

% w/w = Percent by weight

LT = Less than

ND = Not detected (Reporting Limit = 0.015 % w/w)





Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 43 Azocolorants in Textiles

Test Method: EN ISO 14362-1:2017, EN ISO 14362-3:2017

Analytical Method: Gas Chromatography with Mass Spectrometry, Liquid Chromatography with Diode Array

Detection / Liquid Chromatography with Mass Spectrometry

Specimen N	lo.	1+2+3	4			
T	CACAL	Result	Result	Result	Result	Limit
Test Item	CAS No.	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
4-aminobiphenyl	92-67-1	ND	ND			30
Benzidine	92-87-5	ND	ND			30
4-chloro-o-toluidine	95-69-2	ND	ND			30
2-naphtylamine	91-59-8	ND	ND			30
o-Aminoazotoluene	97-56-3	ND	ND			30
5-nitro-o-toluidine	99-55-8	ND	ND			30
4-chloroaniline	106-47-8	ND	ND			30
2,4-diaminoanisole	615-05-4	ND	ND			30
4,4'-methylenedianiline	101-77-9	ND	ND			30
3,3'-dichlorobenzidine	91-94-1	ND	ND			30
o-dianisidine	119-90-4	ND	ND			30
3,3'-dimethylbenzidine	119-93-7	ND	ND			30
4,4'-methylenedi-o- toluidine	838-88-0	ND	ND			30
p-cresidine	120-71-8	ND	ND			30
4,4'-methylene-bis-(2- chloro-aniline)	101-14-4	ND	ND			30
4,4'-oxydianiline	101-80-4	ND	ND			30
4,4'-thiodianiline	139-65-1	ND	ND			30
o-toluidine	95-53-4	ND	ND			30
2,4-diaminotoluene	95-80-7	ND	ND			30
2,4,5-trimethylaniline	137-17-7	ND	ND			30
2-methoxyaniline	90-04-0	ND	ND			30
4-aminoazobenzene	60-09-3	ND	ND			30
Conclusio	n	Pass	Pass			

Note:

mg/kg = Milligrams per kilogram

LT = Less than

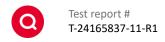
ND = Not detected (Reporting Limit = 5 mg/kg)

Composite results are based on specimen of least mass resulting in highest potential concentration.

Remark:

In the case of levels per amine component less than or equal to 30 mg/kg, according to the analysis as carried out, azo colorants which can release one or more of certain listed amines by cleavage of their azo group/s were not detected in the commodity submitted.





Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 50 Polycyclic Aromatic Hydrocarbon (PAH)

Test Method: AfPS GS 2019:01

Analytical Method: Gas Chromatography with Mass Spectrometry

Others (except Toys and childcare articles)

Specimen N	0.	5+6+7	8	9+10	11	Limit
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Benzo [a] pyrene (BaP)	50-32-8	ND	ND	ND	ND	1
Benzo [e] pyrene (BeP)	192-97-2	ND	ND	ND	ND	1
Benzo [a] anthracene (BaA)	56-55-3	ND	ND	ND	ND	1
Chrysene (CHR)	218-01-9	ND	ND	ND	ND	1
Benzo [b] fluroranthene (BbFA)	205-99-2	ND	ND	ND	ND	1
Benzo [j] fluroranthene (BjFA)	205-82-3	ND	ND	ND	ND	1
Benzo [k] fluroranthene (BkFA)	207-08-9	ND	ND	ND	ND	1
Dibenzo [a,h] anthracene (DBAhA)	53-70-3	ND	ND	ND	ND	1
Conclusion	1	Pass	Pass	Pass	Pass	

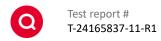
Note:

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 0.2 mg/kg)





Colour Fastness to Rubbing

Test Method: ISO 105-X12: 2016, Size of rubbing finger: 16mm dia.

Specimen No.	4					Client's
Items	Result (Grade)	Result (Grade)	Result (Grade)	Result (Grade)	Result (Grade)	requirement
Dry staining	4-5					Min. 2-3
Wet staining	4-5					Min. 2-3
Conclusion	Pass					-

Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good.





Specimen description

Specimen #	Specimen description	Location
1	Black textile	Zipper cloth
2	Black textile	Zipper teeth tail
3	Black textile	Elastic
4	Black textile	Lining
5	Black soft plastic	Zipper teeth
6	Black soft plastic	Circle cylindrical part sleeve
7	Black/red soft plastic	Entering pliers handle
8	Grey soft plastic	Elastic
9	Black plastic	Big handle
10	White coated black plastic	Tool holder
11	Black sponge	Spacer
12	Silvery metal	Zipper puller
13	Silvery metal	Rivet
14	Silvery metal	Main body
15	Dull silvery metal	Entering pliers head
16	Black plated silvery metal	Big phillips screwdriver head (thin style)
17	Silvery metal	Big phillips screwdriver middle (thin style)
18	Dull silvery metal	Long flathead screwdriver head (thick style)
19	Silvery metal	Tweezers
	Cilvonumetal	Circle cylindrical part (big style)
20	Silvery metal	Circle cylinarical part (big style)





Pictures

Sample photo:





End of the report

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and the method /regulation section(s) tested as described herein. If it is not further specified in the report, the decision rule for stating conformity is based on the QIMA decision rule. (https://www.qima.com/conditions-of-service#decisionRule). This test report may not be reproduced in whole or in part, without the written approval of QIMA (Hangzhou) Testing Co., Ltd.

