

TEST REPORT

Test Report # 22A-006029(A1) Date of Report Issue: June 23, 2022
Date of Sample Received: June 17, 2022 Pages: Page 1 of 10

CLIENT INFORMATION:

Company: Mid Ocean Brands B.V.
Address: 7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong



SAMPLE INFORMATION:

Product Name: Safety waistcoat
Style No.: MO7602/MO8062 Labeled Age Grade: -
Order No.(PO No.): - Client Request Age Grade: -
Country of Origin: - Recommended Age Grade: -
Country of Distribution: Europe Tested Age Grade: -
Composition/Main Material: polyester
Testing Period: 06/17/2022-06/23/2022

OVERALL RESULT:

 **PASS**

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

QIMA (HANGZHOU) TESTING CO., LTD.

Thetis Tang

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Textile Laboratory Supervisor

QIMA (HANGZHOU) TESTING CO., LTD.

Jeremy Xu

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TEST RESULTS SUMMARY:

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

CONCLUSION	TEST(S) CONDUCTED
PASS	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, Item 43 Azocolorants in Textiles
PASS	Colour Fastness to Rubbing



DETAILED RESULTS:

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	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	ND	ND	ND	---	500
Conclusion	PASS	PASS	PASS	PASS	---	

Note:

mg/kg = Milligrams per kilogram

LT = Less than

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



DETAILED RESULTS:

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

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	1	4	---	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Cadmium (Cd)	ND	ND	---	---	---	100
Conclusion	PASS	PASS	---	---	---	

Note:

mg/kg = Milligrams per kilogram

LT = Less than

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



DETAILED RESULTS:

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 No.		3+4	---	---	---	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
4-aminobiphenyl	92-67-1	ND	---	---	---	30
Benzidine	92-87-5	ND	---	---	---	30
4-chloro-o-toluidine	95-69-2	ND	---	---	---	30
2-naphtylamine	91-59-8	ND	---	---	---	30
o-Aminoazotoluene	97-56-3	ND	---	---	---	30
5-nitro-o-toluidine	99-55-8	ND	---	---	---	30
4-chloroaniline	106-47-8	ND	---	---	---	30
2,4-diaminoanisoole	615-05-4	ND	---	---	---	30
4,4'-methylenedianiline	101-77-9	ND	---	---	---	30
3,3'-dichlorobenzidine	91-94-1	ND	---	---	---	30
o-dianisidine	119-90-4	ND	---	---	---	30
3,3'-dimethylbenzidine	119-93-7	ND	---	---	---	30
4,4'-methylenedi-o-toluidine	838-88-0	ND	---	---	---	30
p-cresidine	120-71-8	ND	---	---	---	30
4,4'-methylene-bis-(2-chloro-aniline)	101-14-4	ND	---	---	---	30
4,4'-oxydianiline	101-80-4	ND	---	---	---	30
4,4'-thiodianiline	139-65-1	ND	---	---	---	30
o-toluidine	95-53-4	ND	---	---	---	30
2,4-diaminotoluene	95-80-7	ND	---	---	---	30
2,4,5-trimethylaniline	137-17-7	ND	---	---	---	30
2-methoxyaniline	90-04-0	ND	---	---	---	30
4-aminoazobenzene	60-09-3	ND	---	---	---	30
Conclusion		PASS	---	---	---	



Note:

mg/kg = Milligrams per kilogram

LT = Less than

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

Composite results are based on total mass of the composite test portion.

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.

The analytical result of detected amine is confirmed by LC-DAD / LC-MS.



DETAILED RESULTS:

Colour Fastness to Rubbing

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

Specimen No.	5	---	---	---	---	Client's requirement
Items	Result (Grade)	Result (Grade)	Result (Grade)	Result (Grade)	Result (Grade)	
Dry staining	4	---	---	---	---	Min. 2-3
Wet staining	4	---	---	---	---	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 No.	Specimen Description	Location
1	Fluorescent yellow plastic	Velcro hook
2	Fluorescent yellow textile	Velcro loop
3	Fluorescent yellow textile	Main body
4	Grey coated white textile	Reflective stripe
5	Safety waistcoat	Finished Product(Fluorescent yellow style)



SAMPLE PHOTO:



SAMPLE PHOTO:



-End Report-

