Test report

T-25725888-11-R1

Verify Report

Overall result — Pass

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

Client information

Client: Mid Ocean Brands B.V.
Address: Unit 711-716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong

Sample information

Description: 5 panels baseball cap in RPET polyester
Supplier: 118518
Country of origin: -
Country of distribution: Europe
Model#: MO6831
Quantity submitted: 5 pcs + a lot parts
Labeled age grade: -
Tested age grade: -
Buyer: Mid Ocean Brands B.V.

General information

Sample receipt date: 24-Nov-2025
Testing period: 25-Nov-2025 to 05-Dec-2025, 12-Dec-2025 to 25-Dec-2025, 12-Jan-2026 to 14-Jan-2026, 21-Jan-2026 to 23-Jan-2026
Report date: 30-Jan-2026

QIMA (Hangzhou) Testing Co., Ltd.

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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, Item 27 Nickel Release	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

Note:
By client's request, selected components were conducted for all chemical testing.

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.	C1+C2+C6	C3	C4	C5	---	**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	53	---	**500**
Conclusion	Pass	Pass	Pass	Pass	---	

Note:
mg/kg = Milligrams per kilogram
LT = Less than
ND = Not detected (Reporting Limit = 15 mg/kg)
Composite results are based on specimen of least mass resulting in highest potential concentration.

Detailed results

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.	C1+C2+C6	C7	C8	C9	---	**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	ND	ND	---	**100**
Conclusion	Pass	Pass	Pass	Pass	---	

Note:
mg/kg = Milligrams per kilogram
LT = Less than
ND = Not detected (Reporting Limit = 15mg/kg)
Composite results are based on specimen of least mass resulting in highest potential concentration.

Detailed results

Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 27 Nickel Release

Test Method: EN 12472:2020&EN 1811:2023 [1]/ EN 1811:2023[2]
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Direct and Prolonged Contact with Skin

Specimen No.	C3			
	Trial 1	Trial 2	Trial 3	
Test Item	Result	Result	Result	**Limit**
Size of Tested Sample Area (cm^2)	2	2	2	
Volume of Test solution Used (mL)	2	2	2	
Nickel result ($\mu g \cdot cm^{-2} \cdot week^{-1}$)[1]	ND	ND	ND	**0.5***
Nickel result ($\mu g \cdot cm^{-2} \cdot week^{-1}$)[2]	ND	ND	ND	
Conclusion	Pass			

Specimen No.	C4			
	Trial 1	Trial 2	Trial 3	
Test Item	Result	Result	Result	**Limit**
Size of Tested Sample Area (cm^2)	9	9	9	
Volume of Test solution Used (mL)	9	9	9	
Nickel result ($\mu g \cdot cm^{-2} \cdot week^{-1}$)[1]	ND	ND	ND	**0.5***
Nickel result ($\mu g \cdot cm^{-2} \cdot week^{-1}$)[2]	ND	ND	ND	
Conclusion	Pass			

Note:
cm^2 = Square centimeters
$\mu g \cdot cm^{-2} \cdot week^{-1}$ is equivalent to $\mu g/cm^2/week$ = Micrograms per square centimeter per week
mL = Millilitres
ND = Not detected (Reporting Limit = 0.1 $\mu g \cdot cm^{-2} \cdot week^{-1}$)
*According to EN 1811:2023 Section 9.2.2, the compliance shall be evaluated with the combined measurement uncertainty, an article is:
Pass and permitted to be placed on the market when the nickel release value is less than or equal to 0.88 $\mu g \cdot cm^{-2} \cdot week^{-1}$;
Fail when the nickel release value is greater than 0.88 $\mu g \cdot cm^{-2} \cdot week^{-1}$.

Detailed results

Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 27 Nickel Release

Test Method: EN 12472:2020&EN 1811:2023 [1]/ EN 1811:2023[2]
Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Direct and Prolonged Contact with Skin

Specimen No.	C5			
	Trial 1	Trial 2	Trial 3	
Test Item	Result	Result	Result	**Limit**
Size of Tested Sample Area (cm^2)	4.5	4.5	4.5	
Volume of Test solution Used (mL)	4.5	4.5	4.5	
Nickel result ($\mu g \cdot cm^{-2} \cdot week^{-1}$)[1]	ND	ND	ND	**0.5***
Nickel result ($\mu g \cdot cm^{-2} \cdot week^{-1}$)[2]	ND	ND	ND	
Conclusion	Pass			

Note:
cm^2 = Square centimeters
$\mu g \cdot cm^{-2} \cdot week^{-1}$ is equivalent to $\mu g/cm^2/week$ = Micrograms per square centimeter per week
mL = Millilitres
ND = Not detected (Reporting Limit = 0.1 $\mu g \cdot cm^{-2} \cdot week^{-1}$)
*According to EN 1811:2023 Section 9.2.2, the compliance shall be evaluated with the combined measurement uncertainty, an article is:
Pass and permitted to be placed on the market when the nickel release value is less than or equal to 0.88 $\mu g \cdot cm^{-2} \cdot week^{-1}$;
Fail when the nickel release value is greater than 0.88 $\mu g \cdot cm^{-2} \cdot week^{-1}$.

Detailed results

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.		C6	C7	C8	Limit (% w/w)
Test Item	CAS No.	Result (% w/w)	Result (% w/w)	Result (% 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 DnOP, DINP, DIDP		ND	ND	ND	**0.1**
Conclusion		Pass	Pass	Pass	

Specimen No.		C9	---	---	Limit (% w/w)
Test Item	CAS No.	Result (% w/w)	Result (% w/w)	Result (% 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 DnOP, DINP, DIDP		ND	---	---	**0.1**
Conclusion		Pass	---	---	

Note:
% w/w = Percent by weight
LT = Less than
ND = Not detected (Reporting Limit = 0.015 % w/w)

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.		C1+C2	---	---	---	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	**Limit (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-diaminoanisole	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 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.

Detailed results

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

Specimen No.		C6	---	---	---	**Limit (mg/kg)**
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Benzo [a] pyrene (BaP)	50-32-8	ND	---	---	---	**1**
Benzo [e] pyrene (BeP)	192-97-2	ND	---	---	---	**1**
Benzo [a] anthracene (BaA)	56-55-3	ND	---	---	---	**1**
Chrysene (CHR)	218-01-9	ND	---	---	---	**1**
Benzo [b] fluroranthene (BbFA)	205-99-2	ND	---	---	---	**1**
Benzo [j] fluroranthene (BjFA)	205-82-3	ND	---	---	---	**1**
Benzo [k] fluroranthene (BkFA)	207-08-9	ND	---	---	---	**1**
Dibenzo [a,h] anthracene (DBAhA)	53-70-3	ND	---	---	---	**1**
Conclusion		Pass	---	---	---	

Note:
mg/kg = Milligrams per kilogram
LT = Less than
ND = Not detected (Reporting Limit = 0.2 mg/kg)

Detailed results

Colour Fastness to Rubbing

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

Specimen No.	T1-Body	T1-Sweat-band	---	---	---	Client's re-quirement
Items	Result (Grade)	Result (Grade)	Result (Grade)	Result (Grade)	Result (Grade)	
Dry staining	4	3-4	---	---	---	Min. 2-3
Wet staining	4	2-3	---	---	---	Min. 2-3
Conclusion	Pass	Pass	---	---	---	-

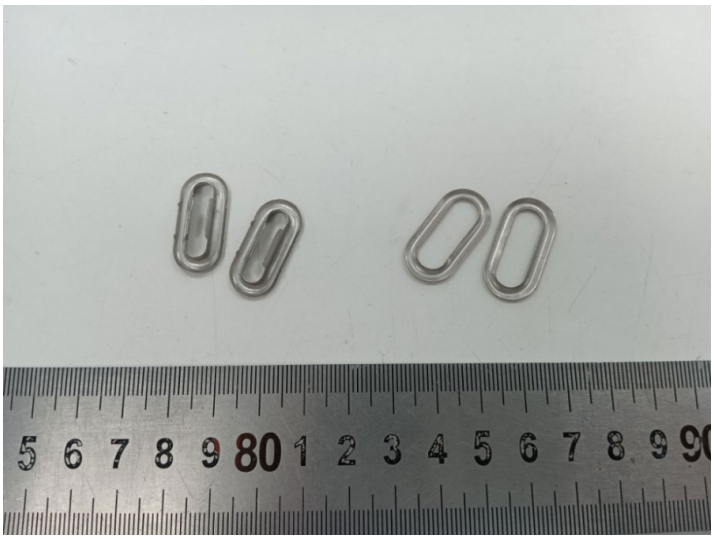
Remark: Grey Scale rating is based on the 5-step scale of 1 to 5, where 1 is bad and 5 is good.

Specimen description

Specimen #	Specimen description	Location
C1	Black textile	Main body
C2	Black textile	Sweatband
C3	Silvery metal	Top button base
C4	Silvery metal	Main body of buckle
C5	Silvery metal	Oval eyelet
C6	White mesh textile with glue	Front surround lining
C7	Translucent white plastic	Top button filler
C8	Black plastic	Brim filler
C9	Black sponge	Sweatband filler
T1	Black panels baseball cap	Finished product

Pictures

Sample photo:



Pictures

Product reference photo:

The photo was provided by the client.

End of the report