

# Test report

23A-011561(A1)



Overall result PASS

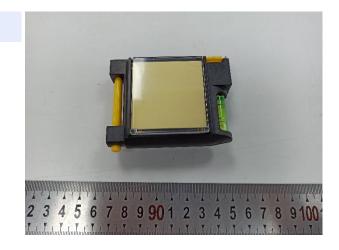
Please refer to the following pages for test result summary and notes.

### Client information

Client: Mid Ocean Brands B.V.

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

Cheung Sha Wan, Kowloon, Hong Kong



Report date: 18-Oct-2023

# Sample information

Description: FLEXIBLE STEEL RULE WITH LEVELLER, BALL PEN AND MEMOPAD

Supplier: 118518 Labeled age grade: Country of origin: - Tested age grade: -

Country of distribution: Europe Materials: Steel, ABS

Model #: KC2182 Buyer: Mid Ocean Brands B.V.

Quantity submitted: 4 pcs

#### General information

Sample receipt date: 15-Sep-2023

Testing period: 15-Sep-2023 to 27-Sep-2023, 08-Oct-2023 to 18-Oct-2023

Sen-2023 to 27-Sen-2023

QIMA (Hangzhou) Testing Co., Ltd.

oremy. Xu

Jeremy Xu

Chemical Laboratory Supervisor





# **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 Paints and Surface Coatings	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 Paints and Surface Coatings	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, Item 50 Polycyclic Aromatic Hydrocarbon (PAH)	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 63 Lead in Paints and Surface Coatings

Test Method: CPSC-CH-E1003-09.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	5					Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Total Lead (Pb)	19					500
Conclusion	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 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	6+8	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	19	500
Conclusion	PASS	PASS	PASS	PASS	PASS	

Specimen No.	7	9+10+12	11	13		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	64	ND		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.

#### Remark:

By client's request, selected component was conducted for this section.





#### Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 23 Cadmium in Paints and Surface Coatings

Test Method: ASTM F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	5					Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Total Cadmium (Cd)	ND					1000
Conclusion	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 F963-17 Clause 8.3.1

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

Specimen No.	6+8	9+10+12	13			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			100
Conclusion	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.





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

Test Method: EN 12472:2020&EN 1811:2011+A1:2015 <sup>1</sup>/ EN 1811:2011+A1:2015<sup>2</sup>

Analytical Method: Inductively Coupled Plasma-Optical Emission Spectrometry

#### **Direct and Prolonged Contact with Skin**

Spacimon No.		1-1		
Specimen No.	Trial 1	Trial 2	Trial 3	
Test Item	Result	Result	Result	Limit
Size of Tested Sample Area (cm²)	10	10	10	
Volume of Test solution Used (mL)	10	10	10	
Nickel result (μg/cm²/week)¹	ND	ND	ND	0.5*
Nickel result (μg/cm²/week)²	ND	ND	ND	0.5
Conclusion		PASS		

Specimen No.		2		
Specimen No.	Trial 1	Trial 2	Trial 3	
Test Item	Result	Result	Result	Limit
Size of Tested Sample Area (cm²)	2	2	2	
Volume of Test solution Used (mL)	2	2	2	
Nickel result (µg/cm²/week)¹	ND	ND	ND	0.5*
Nickel result (µg/cm²/week)²	ND	ND	ND	0.5*
Conclusion		PASS		

#### Note:

cm<sup>2</sup> = Square centimeters

μg/cm²/week = Micrograms per square centimeter per week

mL = Millilitres

LT = Less than

ND = Not detected (Reporting Limit =  $0.1 \mu g/cm^2/week$ )

\*According to EN 1811:2011+A1:2015 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 0.88  $\mu$ g/cm<sup>2</sup>/week; Fail when the nickel release value is greater than or equal to 0.88  $\mu$ g/cm<sup>2</sup>/week.

#### Remark:

By client's request, selected component was conducted for this section.





#### 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 N	0.	6+8	9+10+12			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			1
Benzo [e] pyrene (BeP)	192-97-2	ND	ND			1
Benzo [a] anthracene (BaA)	56-55-3	ND	ND			1
Chrysene (CHR)	218-01-9	ND	ND			1
Benzo [b] fluroranthene (BbFA)	205-99-2	ND	ND			1
Benzo [j] fluroranthene (BjFA)	205-82-3	ND	ND			1
Benzo [k] fluroranthene (BkFA)	207-08-9	ND	ND			1
Dibenzo [a,h] anthracene (DBAhA)	53-70-3	ND	ND			1
Conclusion	1	PASS	PASS			

Note:

mg/kg = Milligrams per kilogram

LT = Less than

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

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





# 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.	Specimen No.		6+8	9+10+12	Limit
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)
Dibutyl phthalate (DBP)	84-74-2	ND	ND	ND	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	ND	ND	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	ND	ND	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	ND	ND	1000
Sum of DBP, BBP, DEHP, [	DIBP	ND	ND	ND	1000
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	1000
Conclusion		PASS	PASS	PASS	

#### Note:

mg/kg (Milligrams per kilogram) = ppm (Parts per million) = 0.0001 % w/w (Percent by weight) LT = Less than

ND = Not detected (Reporting Limit = 150 mg/kg)

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





# Specimen description

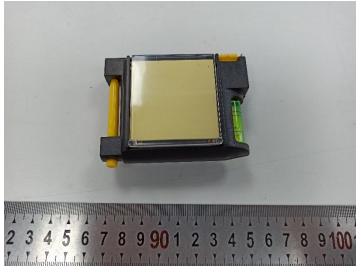
Specimen #	Specimen description	Location
1	Silvery metal	Clip
1-1	Silvery metal	Clip
2	Silvery metal	Head of tape measure
3	Silvery metal	Head rivet of tape measure
4	Dull silvery metal	Tape measure
5	Multi-color coating	Tape measure
6	Transparent plastic	Cover of sticky note
7	Silvery metal	Base screw of sticky note
8	Black plastic	Main body
9	Yellow plastic	Fixed buckle of tape measure
10	Yellow plastic	Barrel
11	Silvery metal	Nib
12	Transparent plastic	Gradienter
13	Lime liquid	Gradienter inner





#### **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. (<a href="https://www.qima.com/conditions-of-service#decisionRule">https://www.qima.com/conditions-of-service#decisionRule</a>). This test report may not be reproduced in whole or in part, without the written approval of QIMA (Hangzhou) Testing Co., Ltd.

