

TEST REPORT

Test Report # 21A-021885(A1) Date of Report Issue: October 27, 2021
Date of Sample Received: October 19, 2021 Pages: Page 1 of 17

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: Sandbag throwing game in bag
Style No.: - Labeled Age Grade: -
Order No.(PO No.): - Client Request Age Grade: 3 years+
Country of Origin: - Recommended Age Grade: -
Country of Distribution: Europe Tested Age Grade: 3 years+
Model No.: MO6397
Composition/Main Material: Polyester/PVC
Buyer Name: Mid Ocean Brands B.V.
Supplier Name: 100396
Testing Period: 10/20/2021-10/27/2021

OVERALL RESULT:

φ PASS

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

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Test(s) marked with 'φ' was subcontracted to external laboratory.

The test result(s) and conclusion(s) in this report relate only to the sample(s) as received and 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.

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TEST RESULTS SUMMARY:

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

CONCLUSION	TEST(S) CONDUCTED
PASS	EN 71-3: 2019+A1:2021 Safety of Toys, Migration of Certain Elements
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	Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 50 Polycyclic Aromatic Hydrocarbon (PAH)
PASS	Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 5 Benzene
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	Colour Fastness to Rubbing
PASS	EN 71-1:2014+A1:2018 Safety of Toys: Mechanical & Physical Properties (Excepted labeling check as per client's request)
PASS	EN 71-2:2020 Safety of Toys: Flammability



DETAILED RESULTS:

EN 71-3: 2019+A1:2021 Safety of Toys, Migration of Certain Elements

Test Method: EN 71-3:2019+A1:2021

Analytical Method: Inductively Coupled Plasma-Mass Spectrometry

Category III: Scraped-off materials

Specimen No.	1	2	3	4	RL (mg/kg)	Soluble Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)		
Aluminum (Al)	ND	ND	ND	ND	50	28 130
Antimony (Sb)	ND	ND	ND	ND	10	560
Arsenic (As)	ND	ND	ND	ND	10	47
Barium (Ba)	ND	ND	ND	ND	50	18 750
Boron (B)	ND	ND	ND	ND	50	15 000
Cadmium (Cd)	ND	ND	ND	ND	5	17
Chromium III (Cr III)^	ND	ND	ND	ND	0.2	460
Chromium VI (Cr VI)^	ND	ND	ND	ND	0.05	0.053
Cobalt (Co)	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	50	7 700
Lead (Pb)	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	50	15 000
Mercury (Hg)	ND	ND	ND	ND	10	94
Nickel (Ni)	ND	ND	ND	ND	50	930
Selenium (Se)	ND	ND	ND	ND	10	460
Strontium (Sr)	ND	ND	ND	ND	50	56 000
Tin (Sn)	3	3	4	ND	1	180 000
Organic Tin^^	ND	ND	ND*	ND	3.3	12
Zinc (Zn)	ND	ND	ND	ND	50	46 000
Conclusion	PASS	PASS	PASS	PASS		

Note:

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected. Result value is less than reporting limit (RL).

^Soluble Chromium is reported when the soluble chromium result below the chromium VI limit.

^^ Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (3.3 mg/kg) or the components were confirmed to be pure metal.

*The soluble tin (corrected as tributyl tin form) result exceeded the adjusted soluble organic tin limit 3.3 mg/kg, further confirmation analysis for the presence of organic tin was conducted.



DETAILED RESULTS:

EN 71-3: 2019+A1:2021 Safety of Toys, Migration of Certain Elements

Test Method: EN 71-3:2019+A1:2021

Analytical Method: Inductively Coupled Plasma-Mass Spectrometry

Category III: Scraped-off materials

Specimen No.	5	6	7	---	RL	Soluble Limit
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	(mg/kg)	(mg/kg)
Aluminum (Al)	ND	468	ND	---	50	28 130
Antimony (Sb)	ND	ND	ND	---	10	560
Arsenic (As)	ND	ND	ND	---	10	47
Barium (Ba)	ND	ND	ND	---	50	18 750
Boron (B)	ND	ND	ND	---	50	15 000
Cadmium (Cd)	ND	ND	ND	---	5	17
Chromium III (Cr III)^	ND	ND	ND	---	0.2	460
Chromium VI (Cr VI)^	ND	ND	ND	---	0.05	0.053
Cobalt (Co)	ND	ND	ND	---	10	130
Copper (Cu)	ND	ND	ND	---	50	7 700
Lead (Pb)	ND	ND	ND	---	10	23
Manganese (Mn)	ND	ND	ND	---	50	15 000
Mercury (Hg)	ND	ND	ND	---	10	94
Nickel (Ni)	ND	ND	ND	---	50	930
Selenium (Se)	ND	ND	ND	---	10	460
Strontium (Sr)	ND	ND	ND	---	50	56 000
Tin (Sn)	2	4	2	---	1	180 000
Organic Tin^^	ND	ND*	ND	---	3.3	12
Zinc (Zn)	ND	7752	ND	---	50	46 000
Conclusion	PASS	PASS	PASS	---		

Note:

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected. Result value is less than reporting limit (RL).

^Soluble Chromium is reported when the soluble chromium result below the chromium VI limit.

^^ Organic tin are not necessary to be determined when the Tin concentration is less than calculated limit (3.3 mg/kg) or the components were confirmed to be pure metal.

*The soluble tin (corrected as tributyl tin form) result exceeded the adjusted soluble organic tin limit 3.3 mg/kg, further confirmation analysis for the presence of organic tin was conducted.



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	6	7	---	---	Limit (mg/kg)
Test Item	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Total Lead (Pb)	ND	23	ND	---	---	500
Conclusion	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	7	---	---	---	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.	2+4+5	---	---	---		
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-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.



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.		1	---	---	---	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] fluroanthene (BbFA)	205-99-2	ND	---	---	---	1
Benzo [j] fluroanthene (BjFA)	205-82-3	ND	---	---	---	1
Benzo [k] fluroanthene (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:

Regulation (EC) No. 1907/2006 REACH Annex XVII, Item 5 Benzene

Test Method: In-House Method

Analytical Method: Headspace Gas Chromatography with Mass Spectrometry

Specimen No.	1	---	---	---	Limit (mg/kg)	
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Benzene	71-43-2	ND	---	---	---	5
Conclusion	PASS	---	---	---	---	

Note:

mg/kg = Milligrams per kilogram

LT = Less than

ND = Not detected (Reporting Limit = 1 mg/kg)



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.		1	---	---	Limit (mg/kg)
Test Item	CAS No.	Result (mg/kg)	Result (mg/kg)	Result (mg/kg)	
Dibutyl phthalate (DBP)	84-74-2	ND	---	---	1000
Benzyl butyl phthalate (BBP)	85-68-7	ND	---	---	1000
Di-(2-ethylhexyl) phthalate (DEHP)	117-81-7	ND	---	---	1000
Diisobutyl phthalate (DIBP)	84-69-5	ND	---	---	1000
Sum of DBP, BBP, DEHP, DIBP		ND	---	---	1000
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	---	---	1000
Conclusion		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)



DETAILED RESULTS:

Colour Fastness to Rubbing

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

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



DETAILED RESULTS:

EN 71-1:2014+A1:2018 Safety of Toys: Mechanical & Physical Properties

Mechanical hazards evaluated as described in EN71-1, as applicable.

Clause	Test	Conclusion
4.1	Material cleanliness	PASS
4.7	Edges	PASS
4.8	Points and metallic wires	PASS
4.17	Projectile toys	PASS

EN 71-2:2020 Safety of Toys: Flammability

Flammability test evaluated as described in EN71-2, as applicable.

Test	Observation	Conclusion
4.1 General	No visual signs of Cellulose Nitrate or with similar behaviour in fire as celluloid.	PASS



SPECIMEN DESCRIPTION:

Specimen No.	Specimen Description	Location
1	Black plastic	Long pipe
2	Transparent coated blue textile	Main body of cover
3	Black textile	Cover edge
4	Black textile	Handle of bag
5	Black coated black textile	Main body of bag
6	Silvery metal	Zipper puller
7	Black plastic	Zipper teeth



SAMPLE PHOTO:



SAMPLE PHOTO:



SAMPLE PHOTO:



-End Report-

