

Report No.: G180926B18EN Date

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The following information was submitted and identified by/on behalf of the client:

Applicant : Mid Ocean Brands B.V.

Address : 7/F, Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong

Sample Name : Soccer ball in PVC, Soccer ball

Sample Model : MO7933, MO9007

Supplier : 111577

Exported to : Europe

Country of origin : China

Receive Date : Sep. 27, 2018

Testing period : Sep. 27, 2018 - Oct. 09, 2018 & Oct. 10 2018 - Oct. 11, 2018

Test Requested : Please refer to the next page(s).

Test Method : Please refer to the next page(s).

Test Result(s) : Please refer to the next page(s).

Conclusion(s) : Please refer to the next page(s).

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Authorized signature:

Lab Manager: Gavin Zhou

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Test Requested:

- 1. As specified by client, determination of the mechanical and physical Properties in the submitted sample(s) assigned by applicant according to EN71-1: 2014+A1:2018 "Safety of toys- Part 1: Mechanical and Physical Properties".
- 2. As specified by client, determination of the flammability in the submitted sample(s) assigned by applicant according to EN71-2: 2011 + A1: 2014 "Safety of toys- Part 2: Flammability".
- 3. As requested by client, determination of the migration of certain elements in the submitted sample(s) according to EN71-3: 2013 + A3: 2018 "Safety of toys- Part 3: Migration of certain elements".
- 4. As specified by client, determination of Cadmium(Cd) content in the submitted sample(s) according to Annex XVII items 23 of the REACH Regulation (EC) No. 1907/2006 & amended (EU) No. 835/2012.
- 5. As specified by client, determination of Phthalates content in the submitted sample(s) according to Annex XVII items 51 & 52 of the REACH Regulation (EC) No. 1907/2006 & its amendment (EC) No. 552/2009 (Namely former Directive 2005/84/EC).
- 6. As specified by client, determination of Di-iso-butyl phthalate (DIBP) content in the submitted sample(s).
- 7. As specified by client, determination of Benzene content in the submitted sample(s) according to Annex XVII items 5 of the REACH Regulation (EC) No 1907/2006 & amended (EC) No. 552/2009.
- 8. As specified by client, determination of Polycyclic Aromatic Hydrocarbon (PAHs) content in the submitted sample(s) according to Annex XVII items 50 of the REACH Regulation (EC) No. 1907/2006 & it's amended (EU) No. 1272/2013 (Namely former Directive 2005/69/EC).





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Conclusion(s)

- : 1. The test result(s) in the submitted sample(s) assigned by applicant **Complies with** the requirements on EN71-1: 2014+A1:2018 "Safety of toys- Part 1: Mechanical and Physical Properties".
  - 2. The test result(s) in the submitted sample(s) assigned by applicant **Complies with** the requirements on EN71-2: 2011 + A1: 2014 "Safety of toys- Part 2: Flammability".
  - 3. The test result(s) in the submitted sample(s) assigned by applicant **Complies with** the requirements on EN71-3: 2013 + A3: 2018 "Safety of toys- Part 3: Migration of certain elements".
  - 4. The test result(s) in the submitted sample(s) **Complies with** requirements on Cadmium(Cd) content in Annex XVII items 23 of the REACH Regulation (EC) No. 1907/2006 & amended (EU) No. 835/2012.
  - 5. The test result(s) in the submitted sample(s) **Complies with** requirements on Phthalates in Annex XVII items 51 & 52 of the REACH Regulation (EC) No. 1907/2006 & its amendment (EC) No. 552/2009 (Namely former Directive 2005/84/EC).
  - 6. The test result(s) in the submitted sample(s) **Complies with** requirements on Benzene in Annex XVII items 5 of the REACH Regulation (EC) No 1907/2006 & amended (EC) No. 552/2009.
  - 7. The test result(s) in the submitted sample(s) **Complies with** requirements on Polycyclic Aromatic Hydrocarbon (PAHs) in Annex XVII items 50 of the REACH Regulation (EC) No. 1907/2006 & it's amended (EU) No. 1272/2013 (Namely former Directive 2005/69/EC).

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Test Result(s):

1. Mechanical and Physical Properties

Test method: EN71-1: 2014+A1:2018

Safety of toys-Part 1: Mechanical and physical properties

Labelled age grading : Not stated Applicant's specified : 3+ years

age group for testing

Age grading for test : 3+ years

Clause	Test Item	Assessment
4.	General Requirements	
4.1	Material cleanliness (by visual assessment)	PASS
4.2	Assembly	NA
4.3	Flexible plastic sheeting	NA
4.4	Toy bags	NA
4.5	Glass	NA
4.6	Expanding materials	NA
4.7	Edges	PASS
4.8	Points and metallic wires	PASS
4.9	Protruding parts	NA
4.10	Parts moving against each other	NA
4.10.1	Folding and sliding mechanisms	NA
4.10.2	Driving mechanisms	NA
4.10.3	Hinges	NA
4.10.4	Springs	NA
4.11	Mouth-actuated toys and other toys intended to be put in the mouth	NA
4.12	Balloons	NA
4.13	Cords of toy kites and other flying toys	NA
4.14	Enclosures	NA
4.14.1	Toys which a child can enter	NA
4.14.2	Masks and helmets	NA
4.15	Toys intended to bear the mass of a child	NA
4.15.1	Toys propelled by a child or by other means	NA
4.15.2	Toy bicycles	NA
4.15.3	Rocking horses and similar toys	NA
4.15.4	Toys not propelled by a child	NA
4.15.5	Toy scooters	NA



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Clause	Test Item	Assessment
4.16	Heavy immobile toys	NA
4.17	Projectile toys	NA
4.17.2	All projectiles	NA
4.17.3	Projectile toys with stored energy	NA
4.17.4	Certain projectile toys without stored energy	NA
4.18	Aquatic toys and inflatable toys	NA
4.19	Percussion caps specifically designed for use in toys and toys using	NA
	percussion caps	
4.20	Acoustics	NA
4.20.2.2	Close-to-the-ear toys	NA
4.20.2.3	Table-top or floor toys	NA
4.20.2.4	Hand-held toys	NA
4.20.2.5	Toys using headphones or earphones	NA
4.20.2.6	Rattles	NA
4.20.2.7	Squeeze toys	NA
4.20.2.8	Pull-along or push toys	NA
4.20.2.9	Percussion toys	NA
4.20.2.10	Wind toys	NA
4.20.2.11	Cap-firing toys	NA
4.20.2.12	Voice toys	NA
4.21	Toys containing a non-electrical heat source	NA
4.22	Small balls	NA
4.23	Magnets	NA
4.23.2	Toys other than magnetic/electrical experimental sets intended for children over 8 years	NA
4.23.3	Magnetic/electrical experimental sets intended for children over 8 years	NA
4.24	Yo-yo balls	NA
4.25	Toys attached to food	NA
4.26	Toy Disguise Costumes	NA
4.27	Flying toys	NA
4.27.2	Rotors and propellers on flying toys	NA NA
4.27.3 <b>5.</b>	Rotors and propellers on remote controlled flying toys	NA
5.1	Toys intended for children under 36 months  General requirements	NA
5.1	Soft-filled toys and soft-filled parts of a toy	NA NA
5.3	Plastic sheeting	NA
5.4	Cords, chains and electrical cables in toys	NA
5.4.2	Cords and chains in toys intended for children under 18 months	NA



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Clause	Test Item	Assessment
5.4.3	Cords and chains in toys intended for children of 18 months or over but under	NA
<b>5</b> 4 4	36 months	NΙΔ
5.4.4	Fixed loops, tangled loops and nooses	NA
5.4.5 5.4.6	Cords and chains on pull along toys Electrical cables	NA NA
5.4.6 5.4.7	Cross-sectional dimension of certain cords	NA NA
5.4.7 5.4.8		NA NA
5.4.6 5.4.9	Self-retracting cords  Toys attached to or intended to be strung across a cradle, cot or perambulator	NA NA
5.4.9 5.5	Liquid-filled toys	NA NA
5.6	Speed limitation of electrically-driven ride-on toys	NA NA
5.7	Glass and porcelain	NA NA
5. <i>1</i> 5.8	Shape and size of certain toys	NA NA
5.8 5.9	Toys comprising monofilament fibres	NA NA
5.10	Small balls	NA NA
5.10	Play figures	NA NA
5.12	Hemispheric-shaped toys	NA
5.12	Suction cups	NA
5.14	Straps intended to be worn fully or partially around the neck	NA
5.15	Sledges with cords for pulling	NA
<b>6</b>	Packaging	NA
7	Warnings, markings and instructions for use	14/ (
7.1	General	PASS
7.2	Toys not intended for children under 36 months	PASS
7.3	Latex balloons	NA
7.4	Aquatic toys	NA
7.5	Functional toys	NA
7.6	Hazardous sharp functional edges and points	NA
7.7	Projectile toys	NA
7.8	Imitation protective masks and helmets	NA
7.9	Toy kites	NA
7.10	Roller skates, inline skates, skateboards and certain other ride-on toys	NA
7.11	Toys intended to be strung across a cradle, cot, or perambulator	NA
7.12	Liquid-filled teethers	NA
7.13	Percussion caps specifically designed for use in toys	NA
7.14	Acoustics	NA
7.15	Toy bicycles	NA
7.16	Toys intended to bear the mass of a child	NA
7.17	Toys comprising monofilament fibres	NA
7.18	Toy scooters	NA
7.19	Rocking horses and similar toys	NA
7.20	Magnetic/electrical experimental sets	NA



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Clause	Test Item	Assessment
7.21	Toys with electrical cables exceeding 300 mm in length	NA
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	NA
7.23	Toys intended to be attached to a cradle, cot or perambulator	NA
7.24	Sledges with cords for pulling	NA
7.25	Flying toys	NA
7.26	Improvised projectiles	NA

Labeling requirement (Washing/Cleaning instruction, CE mark, importer / manufacturer name and address, product identification) according to the Directive 2009/48/EC – Safety of toys Summary table:

Items	Observation Result	Location
Washing/Cleaning instruction	NA	/
CE mark	Present	Labeling
Importer's Name & Address	Absent	/
Manufacturer's Name & Address	Present	Labeling
Product ID	Present	Labeling

**Note:** 1. NA = Not Applicable.

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#### 2. Flammability

Test method: EN71-2: 2011 + A1: 2014

Safety of toys-Part 2: Flammability

Clause	Test Item	Assessment
4	Requirements	
4.1	General requirements	PASS
4.2	Toys to be worn on the head	NA
4.2.2	Beards, moustaches, wigs, etc., made from hair, pile or material with similar	
	features(e.g. free-hanging ribbons, paper, cloth strands or other flowing	NA
	elements), which protrude 50mm or more from the surface of the toy	
4.2.3	Beards, moustaches, wigs, etc., made from hair, pile or material with similar	
	features(e.g. free-hanging ribbons, paper, cloth strands or other flowing	NA
	elements), which protrude less than 50mm from the surface of the toy	
4.2.4	Full or partial moulded head masks	NA
4.2.5	Flowing elements of toys to be worn on the head (except those covered by 4.2.2	
	and 4.2.3), hoods, head-dresses, etc. and masks not covered by 4.2.4 which	NΙΔ
	partially or fully cover the head(e.g. fabric and cardboard masks, eye masks,	NA
	face masks), but excluding those covered by 4.3	
4.3	Toy disguise costumes and toys intended to be worn by a child in play	NA
4.4	Toys intended to be entered by a child	NA
4.5	Soft-filled toys	NA

**Note:** 1. NA = Not Applicable.

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#### **Test Sample Description**

100100	
Material No.	Sample Description
<u>01</u>	White plastic sheath
<u>02</u>	Black plastic sheath
<u>03</u>	Black plastic liner
<u>04</u>	Silvery metal needle tube
<u>05</u>	White plastic sheath + Black plastic sheath
<u>06</u>	Silvery metal cylindrical needle + Silvery metal needle tube
<u>07</u>	Black plastic inlet

#### 3. Migration of certain elements

Test Method: EN71-3: 2013 + A3: 2018

Safety of toys-Part 3: Migration of certain elements

Test item(s)	<u>Limit</u>	<u>Unit</u>	MDL	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>
Soluble Aluminum (Al)	70000	mg/kg	50	N.D.	N.D.	N.D.	N.D.
Soluble Antimony (Sb)	560	mg/kg	10	N.D.	N.D.	N.D.	N.D.
Soluble Arsenic (As)	47	mg/kg	10	N.D.	N.D.	N.D.	N.D.
Soluble Barium (Ba)	18750	mg/kg	50	N.D.	N.D.	N.D.	N.D.
Soluble Boron (B)	15000	mg/kg	50	N.D.	N.D.	N.D.	N.D.
Soluble Cadmium (Cd)	17	mg/kg	10	N.D.	N.D.	N.D.	N.D.
Soluble Chromium (III)	460	mg/kg	5	N.D.	N.D.	N.D.	N.D.
Soluble Chromium (VI)	0.2	mg/kg	0.2	N.D.	N.D.	N.D.	N.D.
Soluble Cobalt (Co)	130	mg/kg	10	N.D.	N.D.	N.D.	N.D.
Soluble Copper (Cu)	7700	mg/kg	50	N.D.	N.D.	N.D.	N.D.
Soluble Lead (Pb)	23	mg/kg	10	N.D.	N.D.	N.D.	N.D.
Soluble Manganese (Mn)	15000	mg/kg	50	N.D.	N.D.	N.D.	N.D.
Soluble Mercury (Hg)	94	mg/kg	10	N.D.	N.D.	N.D.	N.D.
Soluble Nickel (Ni)	930	mg/kg	10	N.D.	N.D.	N.D.	N.D.
Soluble Selenium (Se)	460	mg/kg	10	N.D.	N.D.	N.D.	N.D.
Soluble Strontium (Sr)	56000	mg/kg	50	N.D.	N.D.	N.D.	N.D.
Soluble Tin (Sn)	180000	mg/kg	50	N.D.	N.D.	N.D.	N.D.
Soluble Organic Tin	12	mg/kg	5	N.D.	N.D.	N.D.	N.D.
Soluble Zinc (Zn)	46000	mg/kg	50	N.D.	N.D.	157	N.D.
Conc	lusion(s)			PASS	PASS	PASS	PASS

**Note:** 1. MDL = Method Detection Limit;

2. N.D. = Not Detected (<MDL).



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#### 4. Cadmium(Cd) content

Test Method: US EPA 3050B: 1996 Acid Digestion of Sediments, Sludges, and Soils

& US EPA 6010C: 2007 Inductively Coupled Plasma-Atomic Emission Spectrometry US EPA 3052: 1996 Microwave assisted acid digestion of siliceous and organically based matrices & US EPA 6010C: 2007 Inductively Coupled Plasma-Atomic Emission Spectrometry

Motorial No		Conclusion(s)			
Material No.	<u>Unit</u>	MDL	<u>Limit</u>	Result(s)	Conclusion(s)
<u>03</u>	mg/kg	2	100	N.D.	PASS
<u>05</u>	mg/kg	2	100	N.D.	PASS
<u>06</u>	mg/kg	2	100	N.D.	PASS

**Note:** 1. 1000 mg/kg = 0.1%;

2. MDL = Method Detection Limit;

N.D. = Not Detected (<MDL);</li>

4. For sample(s) 05 and 06, composite test has been performed as per client's request and the test result is the overall result.

#### 5. Phthalates content

Test Method: EN 14372: 2004

Child use and care articles - Cutlery and feeding utensils - Safety requirements and Tests

- Chapter 6.3.2, Determination of Phthalate content

Following three phthalates intended for all the materials of toys and childcare articles

Test Items	CAS No.	<u>Unit</u>	MDL	<u>Limit</u>	<u>01</u>	<u>02</u>	<u>03</u>
Dibutyl phthalate (DBP)	84-74-2	%	0.003	Δ \	N.D.	N.D.	N.D.
Butyl benzyl phthalate (BBP)	85-68-7	%	0.003	-	N.D.	N.D.	N.D.
Di-2-ethylhexyl phthalate (DEHP)	117-81-7	%	0.003		N.D.	N.D.	N.D.
Sum of DBP, BBP and DEHP		%		0.1	N.D.	N.D.	N.D.
Conclusion(s)						PASS	PASS

Following three phthalates intended for materials of toys and childcare articles that can be placed in the mouth

<u>Test Items</u>	CAS No.	<u>Unit</u>	MDL	<u>Limit</u>	<u>01</u>	<u>02</u>	<u>03</u>
Di-n-octyl phthalate (DNOP)	117-84-0	%	0.003		N.D.	N.D.	N.D.
Di-iso-nonyl phthalate (DINP)	28553-12-0	%	0.010		N.D.	N.D.	N.D.
Di-iso-decyl phthalate (DIDP)	26761-40-0	%	0.010		N.D.	N.D.	N.D.
Sum of DNOP, DINP and DIDP		%		0.1	N.D.	N.D.	N.D.
Conclusion(s)						PASS	PASS



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Test Items	CAS No.	<u>Unit</u>	MDL	<u>01</u>	<u>02</u>	<u>03</u>
Di-iso-butyl phthalate (DIBP)	84-69-5	%	0.003	N.D.	N.D.	N.D.

**Note:** 1. % = Percentage by weight;

2.0.1% = 1000 mg/kg;

3. MDL = Method Detection Limit;

4. N.D. = Not Detected (<MDL).

#### 6. Benzene content

Test Method: US EPA 8260B: 1996

Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS)

Sample No.		Canalinaian(a)			
	<u>Unit</u>	MDL	<u>Limit*</u>	Result(s)	Conclusion(s)
<u>01</u>	mg/kg	1	5	N.D.	PASS
<u>02</u>	mg/kg	1	5	N.D.	PASS
<u>03</u>	mg/kg	1	5	N.D.	PASS

**Note:** 1.0.1% = 1000 mg/kg;

2. MDL = Method Detection Limit;

3. N.D. = Not Detected (<MDL);

4. "\*" = According to Annex XVII items 5 of the REACH Regulation (EC) No 1907/2006 & amended (EC) No. 552/2009. "Shall not be used in toys or parts of toys where the concentration of benzene in the free state is greater than 5 mg/kg(0.0005%) of the weight of the toy or part of toy. Toys and parts of toys not complying with this limit shall not be placed on the market."



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#### 7. Polycyclic Aromatic Hydrocarbon (PAHs) content

Test Method: AfPS GS 2014: 01 PAH

Testing and Assessment of Polycyclic Aromatic Hydrocarbons (PAHs) in the Recognition of the GS Mark

<u>Item</u>	Took Itom	CAS No.	<u>Unit</u>	MDL	<u>Limit</u>			02	0.7
No.	<u>Test Item</u>				I	II	III	<u>02</u>	<u>07</u>
1	Benzo(a)pyrene(BaP)	50-32-8	mg/kg	0.2	1	1	0.5	N.D.	N.D.
2	Benzo(e)pyrene(BeP)	192-97-2	mg/kg	0.2	1	1	0.5	N.D.	N.D.
3	Benz(a)anthracene(BaA)	56-55-3	mg/kg	0.2	-	1	0.5	N.D.	N.D.
4	Chrysene(CHR)	218-01-9	mg/kg	0.2	1	1	0.5	N.D.	N.D.
5	Benzo(b)fluoranthene(BbF)	205-99-2	mg/kg	0.2	-	1	0.5	N.D.	N.D.
6	Benzo(j)fluoranthene(BjF)	205-82-3	mg/kg	0.2	-	1	0.5	N.D.	N.D.
7	Benzo(k)fluoranthene(BkF)	207-08-9	mg/kg	0.2	4	1	0.5	N.D.	N.D.
8	Dibenz(a,h)anthracene(DBA)	53-70-3	mg/kg	0.2	1	1	0.5	N.D.	N.D.
Total PAHs					10			N.D.	N.D.
Conclusion(s)									PASS <sup>#</sup>

**Note:** 1. 0.1% = 1000 mg/kg;

- 2. MDL = Method Detection Limit;
- 3. N.D. = Not Detected (<MDL);
- 4. Product category:
  - I = For extender oils.
  - II = For rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity.
  - III = For Toys, including activity toys, and childcare articles, shall not be placed on the market, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity.
- 5. "#" = According to category III.



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#### Sample Photo(s):





GIG authenticate the photo(s) on original report only

#### \*\*\*End of Report\*\*\*