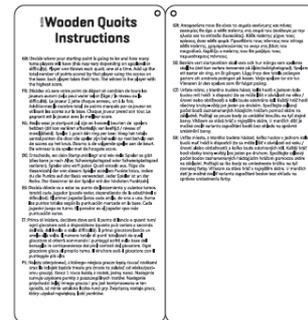


TEST REPORT

LAB LOCATION:	HONG KONG	ISSUE DATE:	DEC 29, 2017
REPORT NUMBER:	65317-127300	PAGE:	1 of 8
Applicant	: Bigjigs Toys Ltd Unit B West Park Farm Industrial Estate, Folkestone, Kent, CT195EU		
Contact Person	: Tom IReland		
Sample Description	: Wooden Quoits		
Style Number	: BJ556		
Purchase Order Number	: --		
Buyer	: --		
Country of Origin	: --		
Country of Destination	: --		
Date of Submission	: DEC 14, 2017		
Test Performance Dates	: DEC 14, 2017 – DEC 29, 2017		

Photo of Submitted Sample



TEST RESULT SUMMARY	
Test Requested	Results
EN71 Part 1: 2014, "Safety of toys – Part 1: Mechanical and physical properties"	PASS
General Labeling Requirement in Toys Safety Directive, 2009/48/EC	PASS
EN71 Part 2: 2011 + A1: 2014, "Safety of toys – Part 2: Flammability"	PASS
Migration of Certain Elements – EN 71-3:2013+A1:2014	PASS

For and on behalf of
Modern Testing Services (Global) Ltd.



SIU, Chung Hong
 Toys Testing Manager
 Toys, Arts and Crafts Division



TEST REPORT

LAB LOCATION: HONG KONG
REPORT NUMBER: 65317-127300

ISSUE DATE: DEC 29, 2017
PAGE: 2 of 8

TEST DATA:

EN71 Part 1: 2014, "Safety of toys – Part 1: Mechanical and physical properties"

AGE GRADE EVALUATION:

Client requested age grade: Not Requested
Labeled age grade: Over 3 years of age
Appropriate age grade: Over 3 years of age
Age grade for testing: Over 3 years of age

RESULTS:

<u>SUBCLAUSE</u>	<u>REQUIREMENT</u>	<u>RESULT</u>
4	<u>GENERAL REQUIREMENTS</u>	<u>P</u>
4.1	Material cleanliness	P
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	P
4.8	Points and metallic wires	P
4.9	Protruding parts	NA
4.10	Parts moving against each other	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
4.15	Toys intended to bear the mass of a child	NA
4.16	Heavy immobile toys	NA
4.17	Projectiles	NA
4.18	Aquatic toys and inflatable toys	NA
4.19	Percussion caps specifically designed for use in toys and toys using percussion caps	NA
4.20	Acoustics	NA
4.21	Toys containing a non-electrical heat source	NA
4.22	Small balls	NA
4.23	Magnets	NA
4.24	Yo-yo balls	NA
4.25	Toys attached to food	NA
5	<u>TOYS INTENDED FOR CHILDREN UNDER 36 MONTHS</u>	<u>NA</u>
5.1	General requirements	NA

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TEST REPORT

LAB LOCATION: HONG KONG **ISSUE DATE:** DEC 29, 2017
REPORT NUMBER: 65317-127300 **PAGE:** 4 of 8

7.21	Toys with electrical cables exceeding 300mm in length	NA
7.22	Toys with cords or chains intended for children of 18 months and over but under 36 months	NA

Note: P = Pass F = Fail NA = Not applicable NR = Not Requested

General Labeling Requirement in Toy Safety Directive, 2009/48/EC

<u>REQUIREMENT</u>	<u>RESULT</u>
CE Marking	P
Product Identification	P
Name and address of the European Manufacturer / Importer	P

Note: P = Pass F = Fail NA = Not applicable NR = Not Requested

EN71 Part 2: 2011 + A1: 2014, "Safety of toys – Part 2: Flammability"

RESULTS:

<u>SUBCLAUSE</u>	<u>REQUIREMENT</u>	<u>RESULT</u>
4	<u>REQUIREMENTS</u>	<u>P</u>
4.1	General	P
4.2	Toys to be worn on the head	NA
4.3	Toy disguise costumes and toys intended to be worn by child in play	NA
4.4	Toys intended to be entered by a child	NA
4.5	Soft-filled toys	NA

Note: P = Pass F = Fail NA = Not applicable NR = Not Requested



TEST REPORT

LAB LOCATION: HONG KONG
REPORT NUMBER: 65317-127300

ISSUE DATE: DEC 29, 2017
PAGE: 5 of 8

COMPONENT BREAKDOWN LIST:

Test Item	Component Description
A1	Red coating (on wood)
A2	Green coating (on wood)
A3	Blue coating (on wood)
A4	Yellow coating (on wood)
A5	Black coating (on wood)
A6	Translucent plastic (glue)
A7	Beige wood (excluding coating)(wood)
A8	Beige wood (ring)

TEST RESULT:

Migration of Certain Elements – EN 71-3:2013+A1:2014

Category III: Scraped-off materials

Extractable Elements	Result (mg/kg)				Migration Limit (mg/kg)
	Test Item	A1	A2	A3	
Mass of Trace Amount (mg)	NA	NA	NA	NA	-
Aluminum (Al)	53	105	258	21	70000
Antimony (Sb)	<10	<10	<10	<10	560
Arsenic (As)	<10	<10	<10	<10	47
Barium (Ba)	<10	<10	<10	<10	18750
Boron (B)	<100	<100	<100	<100	15000
Cadmium (Cd)	<5	<5	<5	<5	17
Chromium (III) (Cr III)	<10	<10	<10	<10	460
Chromium (VI) (Cr VI)	<0.15*	<0.15*	<0.15*	<0.15*	0.2
Cobalt (Co)	<10	<10	<10	<10	130
Copper (Cu)	<10	<10	<10	<10	7700
Lead (Pb)	<10	<10	<10	<10	160
Manganese (Mn)	21	<10	<10	<10	15000
Mercury (Hg)	<10	<10	<10	<10	94
Nickel (Ni)	<10	<10	<10	<10	930
Selenium (Se)	<10	<10	<10	<10	460
Strontium (Sr)	114	<10	<10	<10	56000
Tin (Sn)	<0.8	<0.8	<0.8	<0.8	180000
Organic Tin	<3	<3	<3	<3	12
Zinc (Zn)	640	844	1220	111	46000
Conclusion	PASS	PASS	PASS	PASS	-

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TEST REPORT

LAB LOCATION: HONG KONG
REPORT NUMBER: 65317-127300

ISSUE DATE: DEC 29, 2017
PAGE: 6 of 8

Extractable Elements	Result (mg/kg)				Migration Limit (mg/kg)
	A5	A6	A7	A8	
Test Item	A5	A6	A7	A8	-
Mass of Trace Amount (mg)	NA	NA	NA	NA	-
Aluminum (Al)	14	<10	<10	<10	70000
Antimony (Sb)	<10	<10	<10	<10	560
Arsenic (As)	<10	<10	<10	<10	47
Barium (Ba)	<10	<10	<10	<10	18750
Boron (B)	<100	<100	<100	<100	15000
Cadmium (Cd)	<5	<5	<5	<5	17
Chromium (III) (Cr III)	<10	<10	<10	<10	460
Chromium (VI) (Cr VI)	<0.15*	<0.15	<0.15	<0.15	0.2
Cobalt (Co)	<10	<10	<10	<10	130
Copper (Cu)	<10	<10	<10	<10	7700
Lead (Pb)	<10	<10	<10	<10	160
Manganese (Mn)	11	<10	17	23	15000
Mercury (Hg)	<10	<10	<10	<10	94
Nickel (Ni)	<10	<10	<10	<10	930
Selenium (Se)	<10	<10	<10	<10	460
Strontium (Sr)	<10	<10	<10	<10	56000
Tin (Sn)	<0.8	<0.8	<0.8	<0.8	180000
Organic Tin	<3	<3	<3	<3	12
Zinc (Zn)	520	<10	<10	<10	46000
Conclusion	PASS	PASS	PASS	PASS	-

Method: EN 71-3:2013+A1:2014. The heavy metals content was determined by Inductively Coupled Plasma Mass Spectrophotometer (ICP-MS).

For samples of migrated chromium content lower than migration limit of Chromium (VI), no speciation test for Chromium (III) and chromium (VI) were conducted. The results were derived from that of total chromium.

For samples of migrated tin content calculated as tributyl tin lower than migration limit of organic tin, no organic tin test was conducted. The results were derived from that of Tin.

* denotes the migrated chromium content higher than migration limit, the content of Chromium (VI) was determined by Ion Chromatography Ultraviolet - Visible Spectrometer. The content of Chromium (III) was determined by calculation.



TEST REPORT

LAB LOCATION: HONG KONG **ISSUE DATE:** DEC 29, 2017
REPORT NUMBER: 65317-127300 **PAGE:** 7 of 8

Remark: 1. The material categories of tested item(s) are classified as below per clause 4.1 of this standard.

Category I: Dry, brittle, power like or pliable materials
Compressed paint tablets, materials intended to leave a trace or similar materials in solid form appearing as such in the toy (e.g. the cores of colouring pencils, chalk, crayons)
Pliable modelling materials, including modelling clays and plaster
Category II: Liquid or sticky materials
Liquid paints, including finger paints, varnishes, lacquers, liquid ink in pens and similar materials in liquid form appearing as such in the toy (e.g. slimes, bubble solution)
Glue sticks
Category III: Scraped-off materials
Coatings of paints, varnishes, lacquers, printing inks, polymers, foams and similar coatings
Polymeric and similar materials, including laminates, whether textile reinforced or not, but excluding other textiles
Paper and paper board
Textiles, whether natural or synthetic
Glass, ceramic, metallic materials
Other materials whether mass coloured or not (e.g. wood, fibre board, hard board, bone and leather)

2. Result(s) of organic tin reported was / were the sum of Methyltin (MeT), Butyltin (BuT), Dibutyltin (DBT), Tributyltin (TBT), Tetrabutyltin (TeBT), Monoctyltin (MOT), Di-n-octyltin (DOT), Di-n-propyltin (DProT), Diphenyltin (DPhT) and Triphenyltin (TPhT) expressed as TBT.
3. The accessibility of the submitted sample is verified according to EN71-1 before and after abuse.

Note: mg/kg = milligram per kilogram
mg = milligram
“<” = less than
NA = Not applicable



TEST REPORT

LAB LOCATION: HONG KONG
REPORT NUMBER: 65317-127300

ISSUE DATE: DEC 29, 2017
PAGE: 8 of 8

NOTE:

If there is question or concern regarding the above results, please contact the appropriate lab person below:

Technical question & concern:

Gary Siu
Toys Testing Manager,
Toys, Arts and Crafts Division
Tel: (852) 3604 1325
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Email: garysiu@mts-global.com

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