Test Report

Company Name shown on Report	H GROSSMAN LIMITED
Address	3-5 CAMBUSLANG WAY, GATEWAY OFFICE PARK, CAMBUSLANG, GLASGOW, G32 8ND

The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client

Sample Name	WOODEN UNICORN AND DRAGON CUP AND BALL
Item No.	38189, 38189FSC
Supplier	601697
Country of Origin	China
Exported to	Europe
Client Specified Age Grading	3+
Labeled Age Grading	Not stated
Age Group Applied in Testing	Over 3 years
Sample Received Date	Jul. 19, 2021
Testing Period	Jul. 19, 2021 to Aug. 16, 2021

Test Conducted:

As requested by the applicant. For details refer to next page(s)

Approved by

Victor Wang
Lab Manager

Hill Zheng
Technical Manager

Date: Jan. 19, 2023 No. T490151235

Centre Testing International Group Co.,Ltd.
CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

Test Report

Executive Summary:

TEST REQUEST	CONCLUSION
1) EN 71-1:2014+A1:2018 European Standard on Safety of Toys	
- Mechanical and Physical Properties(ex labeling)	**PASS**
2) EN 71-2:2020 European Standard on Safety of Toys	
- Flammability	**PASS**
3) EN 71-3:2019+A1:2021 European Standard on Safety of Toys	
- Migration of certain elements	**PASS**
4) Annex XVII of European regulation (EC) No. 1907/2006 (REACH) with Amendment(s)	
- Cadmium and its compounds	**PASS**
- Azo colourants	**PASS**
- Phthalates in plasticized materials	**PASS**

********** For further details, please refer to the following page(s) **********

1) EN 71-1:2014+A1:2018 European Standard on Safety of Toys

▼Mechanical and Physical Properties

As specified in European Standard on Safety of Toys EN 71 part 1:2014+A1:2018.

Clause	Description	Assessment
4	General requirements	
4.1	Material cleanliness.....	Pass
4.7	Edges.....	Pass
4.8	Points and metallic wires.....	Pass
6	Packaging ……	N/A
7	Warnings, markings and instructions for use.....	N/C

N/A = Not Applicable; N/C=Not conducted

Note:

- Only applicable clause(s) was/ were shown.

2) EN 71-2:2020 European Standard on Safety of Toys

▼ Flammability※

As specified in European Standard on Safety of Toys EN 71-2:2020.

Clause	Description	Assessment
4	Requirements	
4.1	General requirements ……..…….…… (The following materials shall not be used in the manufacture of toys except as provided in EN 71-2:2020: Celluloid, highly flammable solids, materials with a piled surface which produce surface flash, flammable gases, extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels.)	Pass

Note:

- Only applicable clause(s) was/ were shown.
- "※" indicates the item(s)/method(s) is (are) not in UKAS accreditation scope.

3) EN 71-3:2019+A1:2021 European Standard on Safety of Toys

▼Migration of certain elements※

Method(s) EN 71-3:2019+A1:2021 was/were used, and the item(s) was/were analyzed by ICP-OES, ICP-MS, IC-UV and/or GC-MS.

Category Ⅲ: scraped-off toy material

Tested Item(s)	Result (mg/kg)					MDL (mg/kg)	Limit (mg/kg)
	001	002	003	004	005		
Aluminium (Al)	150	N.D.	N.D.	128	81	50	28130
Antimony (Sb)	N.D.	N.D.	N.D.	N.D.	N.D.	5	560
Arsenic (As)	N.D.	N.D.	N.D.	N.D.	N.D.	5	47
Barium (Ba)	N.D.	N.D.	N.D.	N.D.	N.D.	50	18750
Boron (B)	N.D.	N.D.	N.D.	N.D.	N.D.	50	15000
Cadmium (Cd)	N.D.	N.D.	N.D.	N.D.	N.D.	1	17
Chromium (III) #1	N.D.	N.D.	0.6	0.3	0.6	0.2	460
Chromium (VI)	N.D.	N.D.	N.D.	N.D.	N.D.	0.002	0.053
Cobalt (Co)	N.D.	N.D.	N.D.	N.D.	N.D.	5	130
Copper (Cu)	N.D.	N.D.	N.D.	N.D.	N.D.	50	7700
Lead (Pb)	2	N.D.	3	N.D.	2	1	23
Manganese (Mn)	N.D.	N.D.	N.D.	N.D.	N.D.	50	15000
Mercury (Hg)	N.D.	N.D.	N.D.	N.D.	N.D.	5	94
Nickel (Ni)	N.D.	N.D.	N.D.	N.D.	N.D.	5	930
Selenium (Se)	N.D.	N.D.	N.D.	N.D.	N.D.	5	460
Strontium (Sr)	N.D.	N.D.	N.D.	N.D.	N.D.	50	56000
Tin (Sn) #2	N.D.	3	N.D.	N.D.	N.D.	2	180000
Organic tin (TBT) #3	N.D.	N.D.	N.D.	N.D.	N.D.	0.05	12
Zinc (Zn)	N.D.	N.D.	N.D.	N.D.	N.D.	50	46000

Test Report

Tested Item(s)	Result (mg/kg)					MDL (mg/kg)	Limit (mg/kg)
	006	007	008	009	010		
Aluminium (Al)	187	N.D.	N/A	N/A	N/A	50	28130
Antimony (Sb)	N.D.	N.D.	N/A	N/A	N/A	5	560
Arsenic (As)	N.D.	N.D.	N/A	N/A	N/A	5	47
Barium (Ba)	N.D.	N.D.	N/A	N/A	N/A	50	18750
Boron (B)	N.D.	N.D.	N/A	N/A	N/A	50	15000
Cadmium (Cd)	N.D.	N.D.	N/A	N/A	N/A	1	17
Chromium (III) #1	N.D.	0.4	N/A	N/A	N/A	0.2	460
Chromium (VI)	N.D.	N.D.	N/A	N/A	N/A	0.002	0.053
Cobalt (Co)	N.D.	N.D.	N/A	N/A	N/A	5	130
Copper (Cu)	N.D.	N.D.	N/A	N/A	N/A	50	7700
Lead (Pb)	N.D.	N.D.	N/A	N/A	N/A	1	23
Manganese (Mn)	N.D.	N.D.	N/A	N/A	N/A	50	15000
Mercury (Hg)	N.D.	N.D.	N/A	N/A	N/A	5	94
Nickel (Ni)	N.D.	N.D.	N/A	N/A	N/A	5	930
Selenium (Se)	N.D.	N.D.	N/A	N/A	N/A	5	460
Strontium (Sr)	N.D.	N.D.	N/A	N/A	N/A	50	56000
Tin (Sn) #2	N.D.	2	N/A	N/A	N/A	2	180000
Organic tin (TBT) #3	N.D.	N.D.	N/A	N/A	N/A	0.05	12
Zinc (Zn)	N.D.	N.D.	N/A	N/A	N/A	50	46000

Test Report

Tested Item(s)	Result (mg/kg)					MDL (mg/kg)	Limit (mg/kg)
	011	013	014	015	016		
Aluminium (Al)	N/A	N.D.	N.D.	N.D.	N.D.	50	28130
Antimony (Sb)	N/A	N.D.	N.D.	7	8	5	560
Arsenic (As)	N/A	N.D.	N.D.	N.D.	N.D.	5	47
Barium (Ba)	N/A	N.D.	N.D.	N.D.	N.D.	50	18750
Boron (B)	N/A	N.D.	N.D.	N.D.	N.D.	50	15000
Cadmium (Cd)	N/A	N.D.	N.D.	N.D.	N.D.	1	17
Chromium (III) #1	N/A	N.D.	N.D.	N.D.	0.4	0.2	460
Chromium (VI)	N/A	N.D.	N.D.	N.D.	N.D.	0.002	0.053
Cobalt (Co)	N/A	N.D.	N.D.	N.D.	N.D.	5	130
Copper (Cu)	N/A	N.D.	N.D.	N.D.	N.D.	50	7700
Lead (Pb)	N/A	N.D.	N.D.	N.D.	N.D.	1	23
Manganese (Mn)	N/A	N.D.	N.D.	N.D.	N.D.	50	15000
Mercury (Hg)	N/A	N.D.	N.D.	N.D.	N.D.	5	94
Nickel (Ni)	N/A	N.D.	N.D.	N.D.	N.D.	5	930
Selenium (Se)	N/A	N.D.	N.D.	N.D.	N.D.	5	460
Strontium (Sr)	N/A	N.D.	N.D.	N.D.	N.D.	50	56000
Tin (Sn) #2	N/A	N.D.	3	N.D.	N.D.	2	180000
Organic tin (TBT) #3	N/A	N.D.	N.D.	N.D.	N.D.	0.05	12
Zinc (Zn)	N/A	N.D.	N.D.	N.D.	N.D.	50	46000

Test Report

Tested Item(s)	Result (mg/kg)		MDL (mg/kg)	Limit (mg/kg)
	017	018		
Aluminium (Al)	N.D.	N.D.	50	28130
Antimony (Sb)	N.D.	N.D.	5	560
Arsenic (As)	N.D.	N.D.	5	47
Barium (Ba)	N.D.	N.D.	50	18750
Boron (B)	N.D.	N.D.	50	15000
Cadmium (Cd)	N.D.	N.D.	1	17
Chromium (III) #1	N.D.	N.D.	0.2	460
Chromium (VI)	N.D.	N.D.	0.002	0.053
Cobalt (Co)	N.D.	N.D.	5	130
Copper (Cu)	N.D.	N.D.	50	7700
Lead (Pb)	N.D.	N.D.	1	23
Manganese (Mn)	N.D.	92	50	15000
Mercury (Hg)	N.D.	N.D.	5	94
Nickel (Ni)	N.D.	N.D.	5	930
Selenium (Se)	N.D.	N.D.	5	460
Strontium (Sr)	N.D.	N.D.	50	56000
Tin (Sn) #2	N.D.	N.D.	2	180000
Organic tin (TBT) #3	N.D.	N.D.	0.05	12
Zinc (Zn)	N.D.	N.D.	50	46000

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Where the test portion has a mass of between 10mg and 100mg, the quantity of the appropriate elements shall be calculated as if 100mg of the test portion had been used. (tested sample: 002 sample weight: 20.4mg, 003 sample weight: 20.8mg, 007 sample weight: 49.5mg, 014 sample weight: 21.9mg)
- #1 Trivalent chromium (Cr (III)) = Chromium (Cr) - Hexavalent chromium (Cr (VI)).
- #2 Tin (Sn) content can be used for screen test for organic tins analysis to show compliance with the requirement of EN 71-3:2019+A1:2021.
- #3 The migration of organic tin is expressed as tributyltin (TBT). Where the tin content exceeded the limit of organic tin, eleven organic tins listed in the table were determined by GC-MS and the client should note there are other organic tins that may be present in toy materials.

Organic tins tested under EN 71-3:2019+A1:2021
Methyl tin (MeT)
Butyl tin (BuT)
Dibutyl tin (DBT)
Tributyl tin (TBT)
Tetrabutyl tin (TeBT)
n-Octyl tin (MOT)
Di-n-octyl tin (DOT)
Di-n-propyl tin (DProT)
Diphenyl tin (DPhT)
Triphenyl tin (TPhT)
Dimethyl tin (DMT)

- "※" indicates the item(s)/method(s) is (are) not in UKAS accreditation scope.

4) Annex XVII of European regulation (EC) No. 1907/2006 (REACH) with Amendment(s)

▼Cadmium and its compounds

As specified in entry 23, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendments No.552/2009 & No.494/2011 & No.835/2012 & No. 2016/217, method(s) EN 1122:2001(E) Method B was/were used, and the item(s) was/were analyzed by ICP-OES.

Tested Item(s)	Result (mg/kg)			MDL (mg/kg)	Limit (mg/kg)
	001+002+003	004+005+006	007+008+011		
Cadmium (Cd)	N.D.	N.D.	N.D.	2	1000

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
	010		
Cadmium (Cd)	N.D.	2	1000

Tested Item(s)	Result (mg/kg)		MDL (mg/kg)	Limit (mg/kg)
	013	014		
Cadmium (Cd)	N.D.	N.D.	2	100

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- The limit for composite test should be divided by the mixed number.

▼**Azo colourants**※

As specified in entry 43, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendment No.552/2009, method(s) ISO 14362-1:2017 was/were used, and the item(s) was/were analyzed by GC-MS and/or HPLC.

Tested Item(s)	CAS No.	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
		015+016		
4-Aminodiphenyl	92-67-1	N.D.	5	30
Benzidine	92-87-5	N.D.	5	30
4-Chloro-O-Toluidine	95-69-2	N.D.	5	30
2-Naphthylamine	91-59-8	N.D.	5	30
O-Aminoazotoluene	97-56-3	N.D.	5	30
2-Amino-4-Nitrotoluene	99-55-8	N.D.	5	30
P-Chloroaniline	106-47-8	N.D.	5	30
2,4-Diaminoanisole	615-05-4	N.D.	5	30
4,4’-Diaminodiphenylmethane	101-77-9	N.D.	5	30
3,3’-Dichlorobenzidine	91-94-1	N.D.	5	30
3,3’-Dimethoxybenzidine	119-90-4	N.D.	5	30
3,3’-Dimethylbenzidine	119-93-7	N.D.	5	30
3,3’-Dimethyl-4,4’Diaminodiphenylmethane	838-88-0	N.D.	5	30
P-Cresidine	120-71-8	N.D.	5	30
4,4’-Methylene-Bis(2-Chloroaniline)	101-14-4	N.D.	5	30
4,4’-Oxydianiline	101-80-4	N.D.	5	30
4,4’-Thiodianiline	139-65-1	N.D.	5	30
O-Toluidine	95-53-4	N.D.	5	30
2,4-Toluylenediamine	95-80-7	N.D.	5	30
2,4,5-Trimethylaniline	137-17-7	N.D.	5	30
O-Anisidine	90-04-0	N.D.	5	30
P-Aminoazobenzene	60-09-3	N.D.	5	30
2,4-Xylidine※	95-68-1	N.D.	5	30
2,6-Xylidine ※	87-62-7	N.D.	5	30

Test Report

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Results shown of additional Amines 2,4-Xylidine and 2,6-Xylidine are reported for reference only.
- The limit for composite test should be divided by the mixed number.
- "※" indicates the item(s)/method(s) is (are) not in UKAS accreditation scope.

▼Phthalates in plasticized materials

As specified in entry 51 & entry 52, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendment No.552/2009 & No. 2015/326 & (EU) 2018/2005, method(s) EN 14372:2004 was/were used, and the item(s) was/were analyzed by GC-MS.

Tested Item(s)	Result (mg/kg)			MDL (mg/kg)	Limit (mg/kg)
	001+002+003	004+005+006	007+008+011		
Di-2-ethylhexyl Phthalate (DEHP)	N.D.	N.D.	N.D.	30	1000
Dibutyl Phthalate (DBP)	N.D.	N.D.	N.D.	30	1000
Benzylbutyl Phthalate (BBP)	N.D.	N.D.	N.D.	30	1000
Di-isobutyl Phthalate (DIBP)	N.D.	N.D.	N.D.	30	1000
SUM(DEHP+DBP+BBP+ DIBP)	N.D.	N.D.	N.D.	--	1000
Diisononyl Phthalate (DINP)	N.D.	N.D.	N.D.	50	--
Di-n-octyl Phthalate (DNOP)	N.D.	N.D.	N.D.	30	--
Diisodecyl Phthalate (DIDP)	N.D.	N.D.	N.D.	50	--
SUM(DINP+DNOP+DIDP)	N.D.	N.D.	N.D.	--	1000

Tested Item(s)	Result (mg/kg)			MDL (mg/kg)	Limit (mg/kg)
	010	013	014		
Di-2-ethylhexyl Phthalate (DEHP)	N.D.	N.D.	N.D.	30	1000
Dibutyl Phthalate (DBP)	N.D.	N.D.	99	30	1000
Benzylbutyl Phthalate (BBP)	N.D.	N.D.	N.D.	30	1000
Di-isobutyl Phthalate (DIBP)	N.D.	N.D.	N.D.	30	1000
SUM(DEHP+DBP+BBP+ DIBP)	N.D.	N.D.	99	--	1000
Diisononyl Phthalate (DINP)	N.D.	N.D.	N.D.	50	--
Di-n-octyl Phthalate (DNOP)	N.D.	N.D.	N.D.	30	--
Diisodecyl Phthalate (DIDP)	N.D.	N.D.	N.D.	50	--
SUM(DINP+DNOP+DIDP)	N.D.	N.D.	N.D.	--	1000

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- 1000 mg/kg = 0.1%
- The limit for composite test should be divided by the mixed number.
- Method EN 14372:2004 was accredited by UKAS on six phthalates (DEHP, DBP, BBP, DINP, DIDP, DNOP) test in this report.

Tested Sample/Part Description

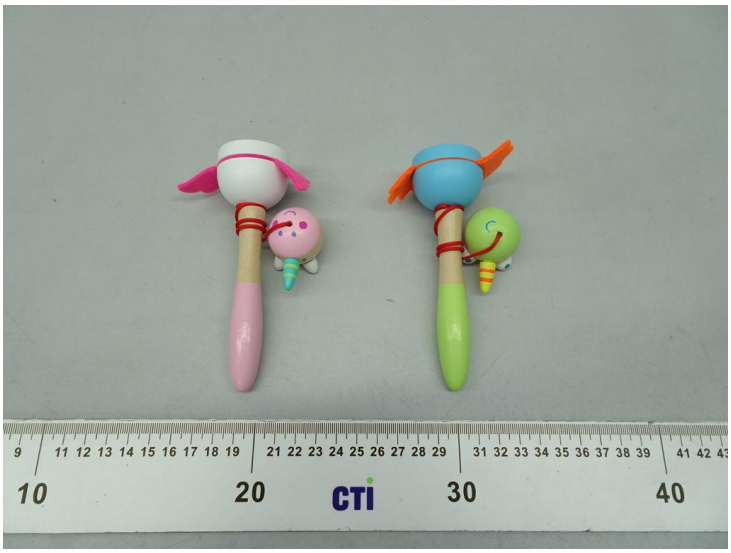
001	White coating(cup,pink handle type)
002	Yellow coating(angle)
003	Cyan coating(angle,pink handle type)
004	Pink coating(handle/ball,pink handle type&blusher,pink handle type)
005	Light green coating(handle/ball,light green handle type)
006	Light blue coating(cup,light green handle type)
007	Transparent lacquer(on wood)
008	Purple coating(ball,pink handle type&blusher,pink handle type)
009	Dark pink coating(blusher,pink handle type)
010	Orange coating(angle,light green handle type)
011	Dull blue coating(eyes/mouth,light green handle type)
013	White plastic(ball)
014	Transparent dry glue(joint)
015	Dark pink felt
016	Orange felt
017	Red cord
018	Natural wood

Note:

- This testing report revised “Item No.” based on the original report of No. A2210263538106R1. This testing report displaces the original one which was invalid since the date of this testing report released.

Test Report

Photo(s) of the sample(s)



Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. Company Name and Address shown on Report, the sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***