Test Report

Company Name shown on Report	JOYIN US CORP
Address	315 W ELLIOT RD #107-168 TEMPE, AZ 85284

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

Sample Name	Creativity Sensory Bin Kit
Item No.	60159
Exported to	CA USA Europe
Quantity Of Sample	4pcs
Client Specified Age Grading	3+
Labeled Age Grading	AGE 3+
Age Group Applied in Testing	3+YEARS
Sample Received Date	Sep. 18, 2024
Sample Resubmitted Date	Nov. 13, 2024
Testing Period	Sep. 18, 2024 to Nov. 13, 2024

Test Conducted:

As requested by the Company Name shown on Report . For details refer to next page(s)

Neil Dong
Authorized Signatory

Chen Kaimin
Authorized Signatory

Date Nov. 14, 2024 No. T277491302

Test Report

Executive Summary:

TEST REQUEST	CONCLUSION
1) ASTM F963-23 Standard Consumer Safety Specification for Toy Safety	
- Mechanical and Physical test	**PASS**
- Clause 4.2 Flammability of toys	**PASS**
- Clause 4.3.5 – Total Lead content in substrate materials	**PASS**
- Clause 4.3.5 Heavy elements – Migration of certain elements	**PASS**
- Clause 4.3.8 Phthalates	**PASS**
2) US Consumer Product Safety Improvement Act of 2008 (CPSIA) with amendment (H.R.2715)	
- Sec.103 Tracking Labels for Children's Products	**PASS**
- Sec.101 Lead in substrate materials of children's products	**PASS**
- Sec.108 Prohibition on sale of certain products containing specified phthalates（16 CFR Part 1307 Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates）	**PASS**
3) Title 16, Code of Federal Regulations, Chapter II – Consumer Products Safety Commission	
- 16 CFR 1500.48 Technical requirements for determining a sharp point in toys and other articles intended for use by children under 8 years of age.	**PASS**
- 16 CFR 1500.49 Technical requirements for determining a sharp metal or glass edge in toys and other articles intended for use by children under 8 years of age.	**N/A**
- 16 CFR 1501 Method for Identifying Toys and Other Articles Intended for Use by Children Under 3 Years of Age Which Present Choking, Aspiration, or Ingestion Hazards Because of Small Parts	**N/A**
- 16 CFR 1500.19 Misbranded toys and other articles intended for use by children.	**PASS**
- 16 CFR 1500.44 Method for determining extremely flammable and flammable solids.	**PASS**

Test Report

4) European Standard on Safety of Toys

-	EN 71-1:2014+A1:2018(E) Mechanical and Physical Properties	**PASS**
-	EN 71-2:2020 Flammability of Toys	**PASS**
-	Labeling requirement (CE mark, Manufacture/Importer mark and product identification)—Directive 2009/48/EC Safety of toys	**REFER TO NEXTPAGES**
-	EN 71-3:2019+A1:2021 Migration of certain elements	**PASS**

5) SOR/2011-17 Toys Regulations of Canada Consumer Product Safety Act (CCPSA) withamendment SOR/2012-71, SOR/2016-195, SOR/2016-302, SOR/2018-138 and SOR/2022-122

-	Physical and mechanical properties	**PASS**
-	Flammability	**PASS**
-	Total Lead content in plastic material	**PASS**
-	Soluble heavy metals contents in plastic material	**PASS**

6) SOR/2016-188Phthalates Regulations of Canada Consumer Product Safety Act(CCPSA)

-	Phthalates in vinyl plastic material	**PASS**

For chemical test, the tested component(s) is/are identified by the applicant.

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

1) ASTM F963-23 Standard Consumer Safety Specification for Toy Safety

▼Mechanical and Physical test

As specified in ASTM F963-23 standard consumer safety specification for toy safety.

Clause	Description	Assessment
4.	Safety Requirements	
4.1	Material Quality.....	Pass
4.6	Small Objects.....	PassA
4.7	Accessible Edges.....	Pass
4.8	Projections.....	PassA
4.9	Accessible Points.....	Pass
4.12	Plastic Film.....	Pass
4.13	Folding Mechanisms and Hinges	
4.13.2	Hinge-line Clearance.....	
	N/A#01= Not Applicable (as the weight of hinge arrangement was less than 1/2 lb.)	N/A#01
4.17	Wheels, Tires, and Axles.....	Pass
4.18	Holes, Clearance, and Accessibility of Mechanisms.....	Pass
5.	Labeling Requirements	
5.1	Federal Government Requirements.....	Pass
5.2	Age Grading Labeling.....	Pass
5.3	Safety Labeling Requirements.....	PassA
5.11	Small Objects, Small Balls, Marbles, and Balloons.....	PassA
5.15	Promotional Materials.....	Pass
6.	Instructional Literature	
6.1	Definition and description	Pass
7.	Producer's Markings	
7.1	Producer'sMarkings.....	Pass
8.	Test Methods	
8.5	Normal Use Testing.....	Pass
8.7	Impact Test	Pass
8.8	Torque Tests for Removal of Components.....	Pass
8.9	Tension Test for Removal of Components.....	Pass
8.22	Plastic Film Thickness.....	Pass

Remark:

The result with mark A means that the final testing result of the clause was based on the re-submitted sample

▼**Clause 4.2 Flammability of toys**

As specified in ASTM F963-23 standard consumer safety specification for toy safety.

Flammability Test on Solid

Burning Rate (inch/sec)	Limit (inch/sec)
0.03	0.1

▼**Clause 4.3.5 – Total Lead content in substrate materials**

Test Method: ASTM F963-23 Clause 8.3; Test Equipment: ICP-OES

Tested Item(s)	Result(mg/kg)	MDL (mg/kg)	Limit (mg/kg)
	001+002+003		
Total Lead(Pb)	N.D.	5	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.

Test Report

▼**Clause 4.3.5 Heavy elements – Migration of certain elements**

Test Method: ASTM F963-23 Clause 8.3; Test Equipment: ICP-OES

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
	001		
Soluble Antimony (Sb)	N.D.	5	60
Soluble Arsenic (As)	N.D.	2.5	25
Soluble Barium (Ba)	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	5	75
Soluble Chromium (Cr)	N.D.	2.5	60
Soluble Lead (Pb)	N.D.	5	90
Soluble Mercury (Hg)	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	5	500

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Results shown of soluble elements are of adjusted analytical results by subtracting analytical Correction factor

Note:

- Only applicable clause(s) was/were shown

Test Report

▼**Clause 4.3.8 Phthalates**

Test Method: CPSC-CH-C1001-09.4; Test Equipment: GC-MS

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
	001+002+003		
Di-2-ethylhexyl Phthalate (DEHP)	N.D.	30	1000
Dibutyl Phthalate (DBP)	N.D.	30	1000
Benzylbutyl Phthalate (BBP)	N.D.	30	1000
Diisononyl Phthalate (DINP)	N.D.	50	1000
Di-n-Pentyl Phthalate (DPP/DPENP)	N.D.	30	1000
Dicyclohexyl Phthalate (DCHP)	N.D.	30	1000
Di-isobutyl Phthalate (DIBP)	N.D.	30	1000
Di-n-hexyl Phthalate (DnHP/DHEXP)	N.D.	30	1000

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- 1000mg/kg = 0.1%
- The limit for composite test should be divided by the mixed number.

Test Report

2) US Consumer Product Safety Improvement Act of 2008 (CPSIA) with amendment (H.R.2715)

▼**SEC.103 Tracking labels for children's products**……..…….…....**Pass**

As specified in section 103 of Consumer Product Safety Improvement Act 2008(CPSIA).

▼**Sec.101Lead in substrate materials of children's products**

Method(s)CPSC-CH-E1001-08.3/CPSC-CH-E1002-08.3was/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		
Total Lead(Pb)	N.D.	5	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.

Test Report

▼**Sec.108 Prohibition on sale of certain products containing specified phthalates**

Method(s)CPSC-CH-C1001-09.4was/were used,and the item(s) was/were analyzed by GC-MS.

Tested Item(s)	Result (mg/kg)	MDL	Limit
	001+002+003	(mg/kg)	(mg/kg)
Di-2-ethylhexyl Phthalate (DEHP)	N.D.	30	1000
Dibutyl Phthalate (DBP)	N.D.	30	1000
Benzylbutyl Phthalate (BBP)	N.D.	30	1000
Diisononyl Phthalate (DINP)	N.D.	50	1000
Di-n-Pentyl Phthalate (DPP/DPENP)	N.D.	30	1000
Dicyclohexyl Phthalate (DCHP)	N.D.	30	1000
Di-isobutyl Phthalate (DIBP)	N.D.	30	1000
Di-n-hexyl Phthalate (DnHP/DHEXP)	N.D.	30	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.

3) Title 16, Code of Federal Regulations, Chapter II – Consumer Products Safety Commission

▼Mechanical & Physical（16 CR 1500.48,16 CFR 1500.49 & 16 CFR 1501）

Tested Item(s)	Sharp point (1500.48)	Sharp edge (1500.49)	Small part (1501)
As Received	Pass	N/A	N/A
Impact Test (Sec. 1500. 53b)	Pass	N/A	N/A
Bite Test (Sec. 1500. 53c)	N/A	N/A	N/A
Flexure Test (Sec. 1500. 53d)	N/A	N/A	N/A
Torque Test (Sec. 1500. 53e)	Pass	N/A	N/A
Tension Test (Sec. 1500. 53f)	Pass	N/A	N/A
Compression Test (Sec. 1500. 53g)	N/A	N/A	N/A
Seam tension (Sec. 1500. 53f)	N/A	N/A	N/A

N/A = Not Applicable

▼16 CFR 1500.44 Method for determining extremely flammable and flammable solids.

As Specified In Title 16 Part 1500.44 Code of Federal Regulations U.S.A

Sample	Burning Rate (inch/sec)	Limit (inch/sec)
Creativity Sensory	0.03	0.1

4) European Standard on Safety of Toys

▼ Mechanical and physical properties

As specified in European Standard on Safety of Toys EN 71-1:2014+A1:2018 (E)

Clause	Description	Assessment
4	General requirements	
4.1	Material cleanliness.....	Pass
4.7	Edges .....……...……..	Pass
4.8	Points and metallic wires .....……..	Pass
4.9	Protruding parts ……..…….	PassA
4.10	Parts moving against each other:	
	4.10.2 Driving mechanisms ……..……	Pass
	4.10.3 Hinges …… (N/A#02=Not apply to any part joined by one or more hinges has a mass of less than 250g.)	N/A#02
6	Packaging ……	Pass
7	Warnings markings and instructions for use	
7.1	General …. ……..	Pass
7.2	Toys not intended for children under 36 months ……..……	Pass

Remark:

The result with mark A means that the final testing result of the clause was based on the re-submitted sample

▼ Flammability of Toys

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

Clause	Description	Assessment
4	Requirements	
4.1	General …….....….....…….. ……..... ..... (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

▼**Labeling requirement (CE mark, importer / manufacturer name and address, product identification) according to the Directive 2009/48/EC – Safety of toys**

Summary table:

	Observation Result	Location
CE mark	Found	Packaging
Importer's Name & Address	Found	Packaging
Manufacturer's Name & Address	Found	Packaging
Product ID	Found	Toy/Packaging

Note:

①: ②: Toys made available on the market must bear the CE marking. The CE marking must be subject to the general principle set out in Article 30 of Regulation (EC) NO 765/2008. The CE marking must be affixed visibly, legibly and indelibly to the toy, to an affixed label or to the packaging. In the case of small toys and toys consisting of small parts, the CE marking may alternatively be affixed to a label or an accompanying leaflet. Where, in the case of toys sold in counter displays, that is not technically possible, and on condition that the counter display was originally used as packaging for the toy, the CE marking may be affixed to the counter display. Where the CE marking is not visible from outside the packaging, if any, it shall as a minimum be affixed to the packaging. Where specific legislation does not impose specific dimensions, the CE marking must be at least 5 mm high.

②: The manufacturer's name registered trade name or registered trade mark and the address at which the manufacture can be contacted must be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy. This requirement applies also to the name and address etc. of any importer.

③: Manufacturer must ensure that their toys bear a type, batch, serial or model number or other element allowing their identification, or where the size or nature of the toy does not allow it, that the required information is provided on the packaging or in a document accompanying the toy.

Test Report

▼**Migration of certain elements**

Method(s) EN 71-3:2019+A1:2021 was/were used, and the item(s) was/were determined 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		
Aluminium (Al)	N.D.	50	28130
Antimony (Sb)	N.D.	5	560
Arsenic (As)	N.D.	5	47
Barium (Ba)	N.D.	50	18750
Boron (B)	N.D.	50	15000
Cadmium (Cd)	N.D.	1	17
Chromium (Cr)	N.D.	1	--
Chromium (III)#1	N.D.	1	460
Chromium (VI)	N.D.	0.005	0.053
Cobalt (Co)	N.D.	5	130
Copper (Cu)	N.D.	50	7700
Lead (Pb)	N.D.	5	23
Manganese (Mn)	N.D.	50	15000
Mercury (Hg)	N.D.	5	94
Nickel (Ni)	N.D.	5	930
Selenium (Se)	N.D.	5	460
Strontium (Sr)	N.D.	50	56000
Tin (Sn)#2	N.D.	2	180000
Organic tin (TBT)#3	--	1	12
Zinc (Zn)	N.D.	50	46000

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- [#1]Trivalent chromium (Cr (III)) = Chromium (Cr) - Hexavalent chromium (Cr (VI)).
- [#2]Tin (Sn) content can be used for screen test for organic tins analysisto 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)
Dimethyltin (DMT)

Note:

- Only applicable clause(s) was/were shown

Test Report

5)SOR/2011-17 Toys Regulations of Canada Consumer Product Safety Act (CCPSA) with amendment SOR/2012-71, SOR/2016-195, SOR/2016-302, SOR/2018-138 and SOR/2022-122

▼Physical and Mechanical properties

Section	Description	Assessment
3	General ……	Pass
4	Flexible Film Bags…..….	Pass
10	Plastic Edges…….…..……	Pass
15	Spring-wound Driving Mechanisms …..……..	Pass
36	Plant Seeds –Stuffing Material ……..……..	Pass

Test Methods

M00.2	Sharp Edges……..……	Pass
M00.3	Sharp Points…….	Pass
M01.1	Reasonable Foreseeable Use……..…….	Pass
M03	Test for Flexible Film Bags……..	Pass

▼Flammability test

Section	Description	Assessment
21	Celluloid or Cellulose Nitrate.....	Pass

Note:

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

Test Report

▼**Total Lead content in plastic material**

Method(s) Health Canada Product Safety Reference Manual Book 5 - Laboratory Policies and Procedures Part B: Test Methods Section, Method C-02.3 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		
Total Lead (Pb)	N.D.	5	90

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.

▼**Soluble heavy metals contents in plastic material**

Method(s) ASTM F963-17 Clause 8.3 was/were used, and the item(s) was/were determined by ICP-OES.

Tested Item(s)	Result (mg/kg)	MDL (mg/kg)	Limit (mg/kg)
	001		
Soluble Antimony (Sb)	N.D.	5	60
Soluble Arsenic (As)	N.D.	2.5	25
Soluble Barium (Ba)	N.D.	5	1000
Soluble Cadmium (Cd)	N.D.	5	75
Soluble Chromium (Cr)	N.D.	2.5	60
Soluble Mercury(Hg)	N.D.	2.5	60
Soluble Selenium (Se)	N.D.	5	500

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Result(s) shown are of adjusted analytical results by subtracting analytical correction factor.

6) SOR/2016-188Phthalates Regulations of Canada Consumer Product Safety Act (CCPSA)

▼Phthalatesin vinyl plastic material

Method(s) Health Canada Product Safety Reference Manual Book 5 - Laboratory Policies and Procedures Part B: Test Methods Section, Method C-34 was/were used, and the item(s) was/were analyzed by GC-MS.

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

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.

Sample/Part Description

No.	CTI Sample ID	Description
1	001	Blue plastic(tool)
2	002	Mint green plastic(tool)
3	003	Yellow plastic(tool)

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. The Company Name shown on Report and Address, the sample(s) and sample information was/were provided by the applicant 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. Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019 / CNAS-GL015:2022;
5. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***