

# **TEST REPORT**

## Report No. 010224030062R1

**DATED: 09 JUNE 2025** 

Client : PLAN CREATIONS CO., LTD.

8 MOO 8, TRANG-PALIAN RD.,

YANTAKAO, TRANG 92140 THAILAND

Buyer : /

Sample Description : PINBALL

Item No. : 4641

SKU No. : /

Model / Style : /

Client Specified Age Grade : 3Y+

Manufacturer : /

Country of Origin : THAILAND

Country of Destination : /

Test Sample Received : RECEIVED 11/06/2024

**Test Period** : FROM 11/06/2024 TO 17/06/2024

<sup>\*</sup>Report was revised as per client request and shall supersede Report # 010224030062, dated 17 June 2024\*

TEST REQUESTED	CONCLUSION	REMARK
EN 71-1:2014+A1:2018 – PHYSICAL AND MECHANICAL PROPERTIES	PASS	1
EN 71-2:2020 – FLAMMABILITY	PASS	1
EN 71-3:2019+A2:2024 – MIGRATION OF CERTAIN ELEMENTS	PASS	-

#### Remark:

1. The sample is tested "3Y+" as per client requested.

2. The Labeled Age Grade is 3Y+.

For technical enquiries or any other concerns,

please contact:

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**PREPARED BY:** 

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**TESTING ENGINEER** 

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TECHNICAL DIRECTOR

**APPROVED BY:** 

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**DATED: 09 JUNE 2025** 

### **SAMPLE PHOTO**







**DATED: 09 JUNE 2025** 

### **SAMPLE PHOTO**











**DATED: 09 JUNE 2025** 

#### **REMARK:**

As per customer request, results for chemical tests listed below were referenced from the corresponding reports, issued no more than 12 months prior to this report.

Item Description: 4641 PINBALL

Com	<u>ponents</u>	Report Number	Date of Issue
EN 7	1-3:2019+A2:2024 Migration of Certain Elements		
1	SOLID WOOD	010223060067	20-Jun-23
2	PLYWOOD	010223060068	20-Jun-23
3	BLACK SAWDUST	010224030206	28-Mar-24
4	5033776 LIGHT YELLOW PLASTIC	010224030082	28-Mar-24
5	5222744 CLEAR MARBLE	010224030089	23-Mar-24
6	5262456 MULTICOLOR RUBBER RING	010224030081	28-Mar-24
7	5282292 WHITE ROPE	010223120023	21-Dec-23
8	5293964 TRANSPARENT ADHESIVE BUMPER POT	010224020066	7-Mar-24
9	WHITE ELASTIC	010224020099	5-Mar-24
10	YELLOW COATING ON WOOD	010223120160	22-Jan-24
11	RED COATING ON WOOD	010223120128	22-Jan-24
12	BLUE COATING ON WOOD (320C)	010224010080	30-Jan-24
13	BROWN COATING ON WOOD	010223120130	22-Jan-24



**DATED: 09 JUNE 2025** 

### **TEST RESULT(S):**

### EN 71-1:2014+A1:2018 - Physical and Mechanical Properties

**Test Method** : Reference to EN 71-1:2014+A1:2018.

Clause	Requirement	Result
4.1	Material cleanliness	M
4.2	Assembly	M
4.3	Flexible plastic sheeting	NA
4.4	Toy bags	NA
4.5	Glass	NA
4.6	Expanding materials	NA
4.7	Edges	M
4.8	Points and metallic wires	M
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	Cord of toy kites and other flying toys	NA
4.14	Toys which a child can enter	NA
4.15	Toys propelled by child	NA
4.16	Heavy immobile toys	NA
4.17	Projectiles	NA
4.18	Aquatic toys and inflatable toys	NA
4.19	Percussion caps	NA
4.20	Acoustics	NA
4.21	Toys containing a non-electrical heat source	NA
4.22	Small balls	M
4.23	Magnets	NA
4.24	Yo-yo balls	NA
4.25	Toys attached to food	NA
5	Toys intended for children under 36 months	NA
6	Packaging	NA
7	Warning, instructions for use	M

Note:

M = Meet NM = Not Meet NA = Not Applicable R = Refer to Comment Section

NR = Not Requested NT = Not Tested NP = Not Present

#### EN 71-2:2020 - Flammability

**Test Method**: Reference to EN 71-2:2020.

Test Item(s)	Item / Component Description(s)
1	4641 PINBALL

Subclause	Requirement	Result
4.1	General requirement	PASS
4.2	Toys to be worn on the head	NA
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:

M = Meet NM = Not Meet NA = Not Applicable R = Refer to Comment Section

NR = Not Requested NT = Not Tested NP = Not Present DNI = Did Not Ignite



**DATED: 09 JUNE 2025** 

### TEST RESULT(S): (Continued)

### EN 71-3:2019+A2:2024 - Migration of Certain Elements

**Test Method**: Reference to BS EN 71-3:2019+A2:2024 Analysis by ICP-MS.

Test Item(s)	Item / Component Description(s)
1	SOLID WOOD
2	PLYWOOD
3	BLACK SAWDUST
4	5033776 LIGHT YELLOW PLASTIC
5	5222744 CLEAR MARBLE
6	5262456 MULTICOLOR RUBBER RING
7	5282292 WHITE ROPE
8	5293964 TRANSPARENT ADHESIVE BUMPER POT
9	WHITE ELASTIC
10	YELLOW COATING ON WOOD
11	RED COATING ON WOOD
12	BLUE COATING ON WOOD (320C)
13	BROWN COATING ON WOOD

See Soluble Element	Category I	Pliable modelling materials or other solid materials intended to leave a trace appearing in the toy
and its corresponding Maximum Allowable Limit in Result Table  Category II  Category III		Liquid paints/inks and other similar materials appearing as such in the toy (e.g. bubble solution), and glue sticks
		Coatings, polymeric materials (e.g. plastics), paper, textiles, glass, ceramic, metallic, wood and other solid materials

Test Item(s)	Unit	Permissible	Result				
rest item(s)	Oilit	Limit	1	2	3	4	5
Category Type	ı	III	II	III	III	III	III
Aluminium (AI)	mg/kg	28130	ND	ND	ND	ND	ND
Antimony (Sb)	mg/kg	560	ND	ND	ND	ND	ND
Arsenic (As)	mg/kg	47	ND	1.37	ND	ND	ND
Barium (Ba)	mg/kg	18750	ND	ND	ND	ND	ND
Boron (B)	mg/kg	15000	ND	ND	18.9	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	0.0200	0.0200	0.05	ND	ND
Chromium VI (Cr VI)	mg/kg	0.053	ND	ND	ND	ND	ND
Cobalt (Co)	mg/kg	130	ND	ND	ND	ND	ND
Copper (Cu)	mg/kg	7700	ND	ND	ND	ND	ND
Lead (Pb)	mg/kg	23	ND	ND	ND	ND	ND
Manganese (Mn)	mg/kg	15000	40.0	18.0	19.0	ND	ND
Mercury (Hg)	mg/kg	94	ND	ND	ND	ND	ND
Nickel (Ni)	mg/kg	930	ND	ND	ND	ND	ND
Selenium (Se)	mg/kg	460	ND	ND	ND	ND	ND
Strontium (Sr)	mg/kg	56000	ND	ND	ND	ND	ND
Tin (Sn)	mg/kg	180000	ND	ND	1.1	ND	ND
Organic tin	mg/kg	12	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	46000	ND	ND	ND	ND	ND
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS



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## TEST RESULT(S): (Continued)

Toot Itom(s)	Unit	Permissible			Result		
Test Item(s)	Offic	Limit	6	7	8	9	10
Category Type	-	III	III	III	III	III	III
Aluminium (AI)	mg/kg	28130	ND	ND	ND	67.3	38.6
Antimony (Sb)	mg/kg	560	ND	36.1	ND	ND	ND
Arsenic (As)	mg/kg	47	ND	ND	ND	ND	ND
Barium (Ba)	mg/kg	18750	ND	ND	ND	ND	ND
Boron (B)	mg/kg	15000	ND	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	ND	ND	0.02	0.08	0.30
Chromium VI (Cr VI)	mg/kg	0.053	ND	ND	ND	ND	ND
Cobalt (Co)	mg/kg	130	ND	ND	ND	ND	ND
Copper (Cu)	mg/kg	7700	ND	ND	ND	ND	ND
Lead (Pb)	mg/kg	23	ND	ND	ND	ND	ND
Manganese (Mn)	mg/kg	15000	ND	ND	ND	ND	ND
Mercury (Hg)	mg/kg	94	ND	ND	ND	ND	ND
Nickel (Ni)	mg/kg	930	ND	ND	ND	ND	ND
Selenium (Se)	mg/kg	460	ND	ND	ND	ND	ND
Strontium (Sr)	mg/kg	56000	ND	ND	ND	ND	ND
Tin (Sn)	mg/kg	180000	ND	ND	ND	ND	ND
Organic tin	mg/kg	12	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	46000	ND	ND	ND	904	28.7
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS

Test Item(s)	Unit	Permissible		Result	
rest item(s)	Offic	Limit	11	12	13
Category Type	-	III	III	III	III
Aluminium (Al)	mg/kg	28130	119	196	135
Antimony (Sb)	mg/kg	560	ND	ND	ND
Arsenic (As)	mg/kg	47	ND	ND	ND
Barium (Ba)	mg/kg	18750	8.6	ND	ND
Boron (B)	mg/kg	15000	ND	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	0.71	0.31	0.73
Chromium VI (Cr VI)	mg/kg	0.053	ND	ND	ND
Cobalt (Co)	mg/kg	130	ND	ND	ND
Copper (Cu)	mg/kg	7700	ND	ND	ND
Lead (Pb)	mg/kg	23	ND	ND	1.2
Manganese (Mn)	mg/kg	15000	5.8	ND	ND
Mercury (Hg)	mg/kg	94	ND	ND	ND
Nickel (Ni)	mg/kg	930	ND	ND	ND
Selenium (Se)	mg/kg	460	ND	ND	ND
Strontium (Sr)	mg/kg	56000	ND	ND	ND
Tin (Sn)	mg/kg	180000	ND	ND	ND
Organic tin	mg/kg	12	ND	ND	ND
Zinc (Zn)	mg/kg	46000	6.6	ND	ND
Conclusion	-	-	PASS	PASS	PASS



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### TEST RESULT(S): (Continued)

#### Note:

- mg/kg = milligram per kilogram ND = Not Detected
- Reporting limit for Cr (III), Cr (VI) = 0.02 mg/kg, and for Organic Tin = 0.9 mg/kg
- Reporting limit for Pb = 1.0 mg/kg, for As, Cd = 0.5 mg/kg
- Reporting limit for Al, Sb, Ba B, Co, Hg, Cu, Mn, Ni, Se, Sr, Zn, Sn = 5.0 mg/kg
- Confirmation test of chromium (III) is not required in case of chromium does not exceed their requirements as specified in EN 71-3:2019+ A2: 2024.

#### Remark:

- Test Item(s) was (were) tested according to European Standard EN 71-3:2019+ A2: 2024, Section 8.
- Results of Cr III and Cr VI were reported as sum of soluble chromium content unless further verified.
- Result(s) of organic tin was (were) calculated by assuming the soluble tin content was wholly contributed from tributyltin (TBT) cation unless further specified.
- The pH measured shall be reported after migration if it was outside the range of 1.1 to 1.3.

 END OF REPORT	
 END OF REPORT	

This report sets forth our findings solely with respect to the test samples identified herein. The results in this report are not representative of the quality or characteristics of the lot/batch from which a test sample was taken or any similar or identical product unless specifically and expressly noted. The sample/s mentioned in this report is/are submitted/supplied/manufactured by the Client, GIC Testing & Inspection Services Pte. Ltd. therefore assumes no responsibility for the accuracy of information on the brand name, model/ style number, consignment or any information supplied. Unless otherwise stated in this report, no tests were conducted to determine long term effects of using the specific product. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.