

# **TEST REPORT**

## Report No. 010224010172R1

**DATED: 11 MARCH 2025** 

Client : PLAN CREATIONS CO., LTD.

8 MOO 8, TRANG-PALIAN RD.,

YANTAKAO, TRANG 92140 THAILAND

Buyer : /

Sample Description : CASTLE BLOCKS

Item No. : 5544

SKU No. : /

Model / Style : /

Client Specified Age Grade : 2Y+

Manufacturer : /

Country of Origin : THAILAND

Country of Destination : /

Test Sample Received : RECEIVED 15/03/2024

**Test Period** : FROM 15/03/2024 TO 25/03/2024

\*Report was revised as per client request and shall supersede Report # 010224010172, dated 25 March 2024\*

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

#### Remark:

1. The sample is tested "2Y+" as per client requested.

2. The Labeled Age Grade is 2Y+.

For technical enquiries or any other concerns,

please contact:

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PREPARED BY:

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**DATED: 11 MARCH 2025** 

### **SAMPLE PHOTO**







**DATED: 11 MARCH 2025** 





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#### **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: 5544 CASTLE BLOCKS

Com	ponents	Report Number	Date of Issue
EN 7	1-3:2019+A2:2024 - Migration of Certain Elements		
1	SOLID WOOD	010223060067	20-Jun-23
2	5082923 RED FELT	010223120077	17-Jan-24
3	YELLOW SAWDUST	010223120148	16-Jan-24
4	BLUE SAWDUST (320C)	010223120147	16-Jan-24
5	WHITE SAWDUST	010223120149	16-Jan-24
6	BLUE SAWDUST (Dark)	010223120136	11-Jan-24
7	LIGHT BLUE SAWDUST	010223120139	16-Jan-24
8	CLEAR COATING ON WOOD	010223060081	27-Jun-23
9	LIGHT GRAY COATING ON WOOD	010223120161	22-Jan-24
10	LIGHT GREEN COATING ON WOOD	010224010338	21-Feb-24
11	YELLOW COATING ON WOOD (ORCHARD)	010224010252	5-Feb-24
12	LIGHT GREEN COATING ON SAWDUST	010223120170	22-Jan-24
13	RED COATING ON SAWDUST	010223120164	22-Jan-24
14	BLACK COATING ON SAWDUST	010223120165	22-Jan-24
15	LIGHT BROWN COATING ON SAWDUST	010223120169	22-Jan-24
16	YELLOW COATING ON SAWDUST	010223120167	11-Jan-24
17	BROWN COATING ON SAWDUST	010223120166	22-Jan-24
18	LIGHT BLUE COATING ON SAWDUST	010223120171	22-Jan-24
19	GRAY COATING ON SAWDUST	010223120162	22-Jan-24



**DATED: 11 MARCH 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	NA
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	NA
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	M
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	5544 CASTLE BLOCKS

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



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### 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	5082923 RED FELT
3	YELLOW SAWDUST
4	BLUE SAWDUST (320C)
5	WHITE SAWDUST
6	BLUE SAWDUST (Dark)
7	LIGHT BLUE SAWDUST
8	CLEAR COATING ON WOOD
9	LIGHT GRAY COATING ON WOOD
10	LIGHT GREEN COATING ON WOOD
11	YELLOW COATING ON WOOD (ORCHARD)
12	LIGHT GREEN COATING ON SAWDUST
13	RED COATING ON SAWDUST
14	BLACK COATING ON SAWDUST
15	LIGHT BROWN COATING ON SAWDUST
16	YELLOW COATING ON SAWDUST
17	BROWN COATING ON SAWDUST
18	LIGHT BLUE COATING ON SAWDUST
19	GRAY COATING ON SAWDUST

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	Category II	Liquid paints/inks and other similar materials appearing as such in the toy (e.g. bubble solution), and glue sticks
Limit in Result Table	Category III	Coatings, polymeric materials (e.g. plastics), paper, textiles, glass, ceramic, metallic, wood and other solid materials



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

Toot Itom/o)	l lmi4	Permissible			Result		
Test Item(s)	Unit	Limit	1	2	3	4	5
Category Type	-	III	III	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	ND	ND	ND	ND
Barium (Ba)	mg/kg	18750	ND	ND	ND	ND	ND
Boron (B)	mg/kg	15000	ND	ND	20	44	25
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	0.0200	0.09	ND	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	ND	10	27	13
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	ND	ND
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS

Toot Itom(a)	Unit Permissible Result						
Test Item(s)	Unit	Limit	6	7	8	9	10
Category Type	-	III	III	III	III	III	III
Aluminium (AI)	mg/kg	28130	ND	ND	ND	296	825
Antimony (Sb)	mg/kg	560	ND	ND	ND	ND	ND
Arsenic (As)	mg/kg	47	ND	ND	ND	ND	ND
Barium (Ba)	mg/kg	18750	ND	ND	ND	19.8	ND
Boron (B)	mg/kg	15000	29	10	ND	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	ND	ND	0.48	0.42	0.34
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	20	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	620	ND
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS



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

Toot Itom(a)	Unit Permissible		Result				
Test Item(s)	Unit	Limit	11	12	13	14	15
Category Type	-	III	III	III	III	III	III
Aluminium (AI)	mg/kg	28130	33.8	125	64.2	112	120
Antimony (Sb)	mg/kg	560	ND	ND	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	0.12	0.11	0.09	0.09	0.12
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	170	372	207	340	484
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS

Took Hom/o)	l lmi4	Permissible		Result				
Test Item(s)	Unit	Limit	16	17	18	19		
Category Type	-	III	III	III	III	III		
Aluminium (AI)	mg/kg	28130	138	103	276	152		
Antimony (Sb)	mg/kg	560	ND	ND	ND	ND		
Arsenic (As)	mg/kg	47	ND	ND	ND	ND		
Barium (Ba)	mg/kg	18750	ND	ND	ND	ND		
Boron (B)	mg/kg	15000	ND	ND	ND	ND		
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND		
Chromium III (Cr III)	mg/kg	460	0.05	0.06	0.11	0.07		
Chromium VI (Cr VI)	mg/kg	0.053	ND	ND	ND	ND		
Cobalt (Co)	mg/kg	130	ND	ND	ND	ND		
Copper (Cu)	mg/kg	7700	ND	ND	ND	ND		
Lead (Pb)	mg/kg	23	ND	ND	ND	ND		
Manganese (Mn)	mg/kg	15000	ND	ND	ND	ND		
Mercury (Hg)	mg/kg	94	ND	ND	ND	ND		
Nickel (Ni)	mg/kg	930	ND	ND	ND	ND		
Selenium (Se)	mg/kg	460	ND	ND	ND	ND		
Strontium (Sr)	mg/kg	56000	ND	ND	ND	ND		
Tin (Sn)	mg/kg	180000	ND	ND	ND	ND		
Organic tin	mg/kg	12	ND	ND	ND	ND		
Zinc (Zn)	mg/kg	46000	554	585	752	185		
Conclusion	-	-	PASS	PASS	PASS	PASS		



**DATED: 11 MARCH 2025** 

#### 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.