



TEST REPORT

Report No. 010221110076

Dated NOV 25, 2021

Client : PLAN CREATIONS CO., LTD.
8 MOO 8, TRANG-PALIAN RD.,
YANTAKAO, TRANG 92140
ATTN: MS RATCHADA KONGTHON

Buyer : /

Test Sample Received : RECEIVED ON 19/11/2021

Test Period : FROM 19/11/2021 TO 25/11/2021

Sample Description : MARINE PUZZLE

Product Code : 5688

Age Grade : 12M+

Manufacturer : /

Country of Destination : /

Country of Origin : THAILAND

TEST REQUESTED	CONCLUSION	REMARK
EN 71-1:2014+A1:2018 – PHYSICAL AND MECHANICAL PROPERTIES	PASS	-
ISO 8124-8:2016 AGE DETERMINATION GUIDELINES	DATA	-
EN 71-2:2020 – FLAMMABILITY	PASS	-
EN 71-3:2019+A1:2021 – MIGRATION OF CERTAIN ELEMENTS	PASS	-

For technical enquiries or any other concerns, please contact:

GIC TESTING & INSPECTION SERVICES
Tel: +65 6741 2260
Email: services.sg@gicgrp.com

PREPARED BY:

EDMUND YAP
LABORATORY MANAGER

APPROVED BY:

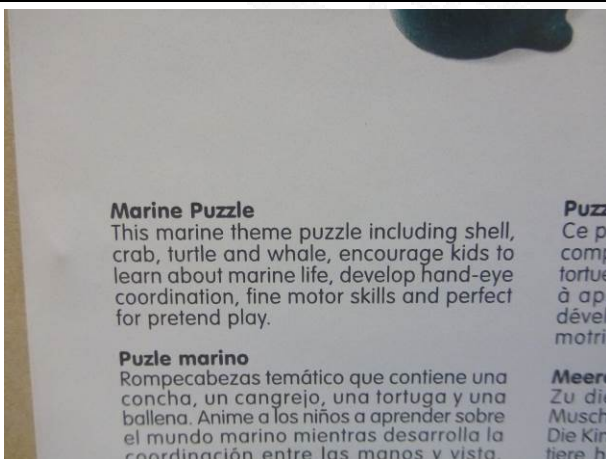
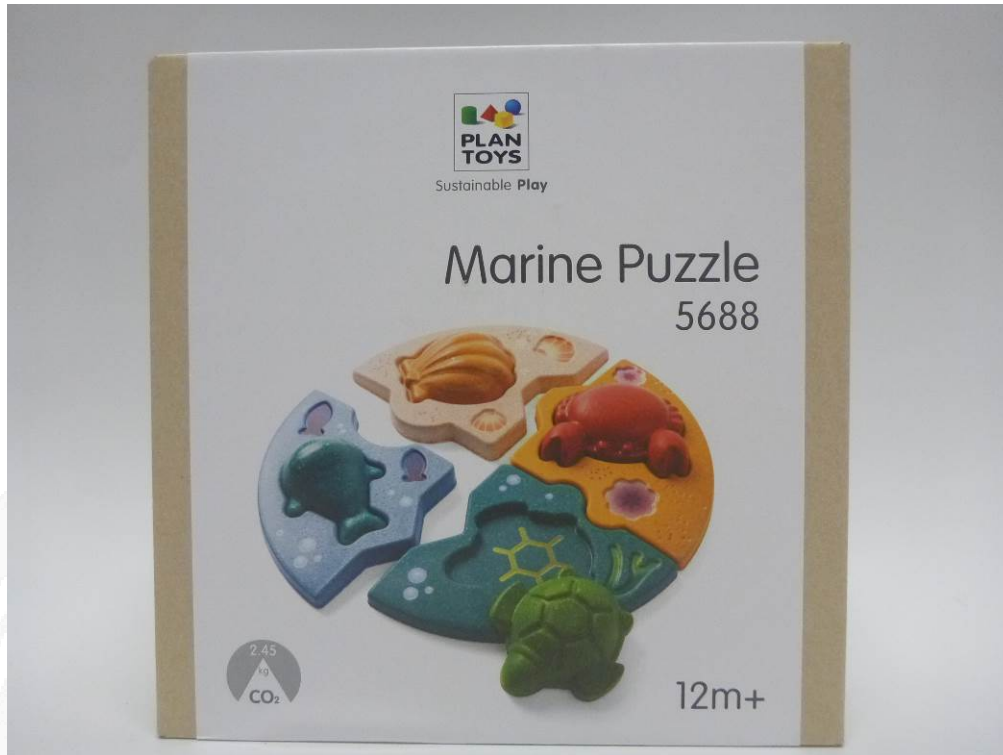
SUZEN CHONG
SENIOR VICE PRESIDENT

TEST REPORT

Report No. 010221110076

Dated NOV 25, 2021

SAMPLE PHOTO



SAMPLE PHOTO





TEST REPORT

Report No. 010221110076

Dated NOV 25, 2021

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: 5688 MARINE PUZZLE

<u>Components</u>	<u>Report Number</u>	<u>Date of Issue</u>
<u>EN 71-3:2019+A1:2021 Migration of Certain Elements</u>		
GREEN SAWDUST	120120079	18 Dec 2020
YELLOW SAWDUST	120120075	18 Dec 2020
RED SAWDUST	010221080054	20 Aug 2021
SAWDUST WOOD	010221060153	01 Jul 2021
BLUE SAWDUST (320)	120120080	18 Dec 2020
BLUE SAWDUST (299)	120120121	30 Dec 2020
WHITE COATING ON SAWDUST	010121040082	20 Apr 2021
LIGHT GREEN COATING ON SAWDUST	010221060118	24 Jun 2021
DARK GREEN COATING ON SAWDUST	010121010097	29 Jan 2021
BLUE COATING ON SAWDUST	010121010097	29 Jan 2021
RED COATING ON SAWDUST	010121010095	29 Jan 2021
YELLOW COATING ON SAWDUST (134)	010121010096	29 Jan 2021
PURPLE COATING ON SAWDUST	010121010099	29 Jan 2021
BROWN COATING ON SAWDUST	010221060119	24 Jun 2021
YELLOW COATING ON SAWDUST (138)	010221080053	20 Aug 2021
DARK BLUE COATING ON SAWDUST	010221080091	31 Aug 2021



TEST REPORT

Report No. 010221110076

Dated NOV 25, 2021

TEST RESULT(S):

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

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

Test Item(s)	Item / Component Description(s)
1	5688 MARINE PUZZLE

Clause	Requirement	Result
		1
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	NA
4.8	Points and metallic wires	M
4.8 e)	Splinters	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 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	NA
4.20	Acoustics	NA
4.20.2.2	Close-to-the-ear toys	NA
4.20.2.3	Table-top or floor toys	NA
4.20.2.4	Hand-held toys	NA
4.20.2.5	Toys using headphones or earphones	NA
4.20.2.6	Rattles	NA
4.20.2.7	Squeeze toys	NA
4.20.2.8	Pull-along or push toys	NA
4.20.2.9	Percussion toys	NA
4.20.2.10	Wind toys	NA
4.20.2.11	Cap-firing toys	NA
4.20.2.12	Voice toys	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

NR = Not Requested

NM = Not Meet

NT = Not Tested

NA = Not Applicable

NP = Not Present

R = Refer to Comment Section



TEST REPORT

Report No. 010221110076

Dated NOV 25, 2021

TEST RESULT(S): (Continued)

ISO 8124-8:2016 Age Determination Guidelines

Test Method : Reference to ISO 8124-8:2016.

Claimed Age Grade	Recommended Age Grade
12M+	12M+

EN 71-2:2020 - Flammability

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

Test Item(s)	Item / Component Description(s)
1	5688 MARINE PUZZLE

Subclause	Requirement	Result
4.1	General requirement	PASS
	Celluloid (cellulose nitrate)	NP

Note:

M = Meet

NR = Not Requested

NM = Not Meet

NT = Not Tested

NA = Not Applicable

NP = Not Present

R = Refer to Comment Section

DNI = Did Not Ignite

EN 71-3:2019+A1:2021 – Migration of Certain Elements

Test Method : Reference to BS EN 71-3:2019+A1:2021 Analysis by ICP-MS.

Test Item(s)	Item / Component Description(s)
1	GREEN SAWDUST
2	YELLOW SAWDUST
3	RED SAWDUST
4	SAWDUST WOOD
5	BLUE SAWDUST (320)
6	BLUE SAWDUST (299)
7	WHITE COATING ON SAWDUST
8	LIGHT GREEN COATING ON SAWDUST
9	DARK GREEN COATING ON SAWDUST
10	BLUE COATING ON SAWDUST
11	RED COATING ON SAWDUST
12	YELLOW COATING ON SAWDUST (134)
13	PURPLE COATING ON SAWDUST
14	BROWN COATING ON SAWDUST
15	YELLOW COATING ON SAWDUST (138)
16	DARK BLUE COATING ON SAWDUST

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



TEST REPORT

Report No. 010221110076

Dated NOV 25, 2021

TEST RESULT(S): (Continued)

-	Unit	Req.	Result				
Test Item(s)	-	-	1	2	3	4	5
Category Type	-	III	III	III	III	III	III
Aluminium (Al)	mg/kg	28130	419	70	ND	17	934
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	11	38	23	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	0.75	0.47	ND	ND	1.93
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	1.14	ND	ND	ND	ND
Manganese (Mn)	mg/kg	15000	ND	ND	21	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	1.39	ND	ND	ND
Organic tin	mg/kg	12	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	46000	12	ND	ND	ND	15
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS

-	Unit	Req.	Result				
Test Item(s)	-	-	6	7	8	9	10
Category Type	-	III	III	III	III	III	III
Aluminium (Al)	mg/kg	28130	ND	290	119	127	323
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	22	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	ND	0.41	0.79	0.04	0.19
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	237	129	73	112
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS



TEST REPORT

Report No. 010221110076

Dated NOV 25, 2021

TEST RESULT(S): (Continued)

-	Unit	Req.	Result					
Test Item(s)	-	-	11	12	13	14	15	16
Category Type	-	III	III	III	III	III	III	III
Aluminium (Al)	mg/kg	28130	140	180	214	76	75	85
Antimony (Sb)	mg/kg	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	mg/kg	47	ND	ND	ND	ND	ND	ND
Barium (Ba)	mg/kg	18750	ND	ND	ND	ND	ND	ND
Boron (B)	mg/kg	15000	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	0.14	0.1	0.09	0.81	0.27	0.07
Chromium VI (Cr VI)	mg/kg	0.053	ND	ND	ND	ND	ND	ND
Cobalt (Co)	mg/kg	130	ND	ND	ND	ND	ND	ND
Copper (Cu)	mg/kg	7700	ND	ND	ND	ND	ND	ND
Lead (Pb)	mg/kg	23	ND	ND	ND	ND	ND	ND
Manganese (Mn)	mg/kg	15000	ND	ND	ND	ND	ND	ND
Mercury (Hg)	mg/kg	94	ND	ND	ND	ND	ND	ND
Nickel (Ni)	mg/kg	930	ND	ND	ND	ND	ND	ND
Selenium (Se)	mg/kg	460	ND	ND	ND	ND	ND	ND
Strontium (Sr)	mg/kg	56000	ND	ND	ND	ND	ND	ND
Tin (Sn)	mg/kg	180000	ND	ND	ND	ND	ND	ND
Organic tin	mg/kg	12	ND	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	46000	119	145	142	80	19	92
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS

Note:

- mg/kg = milligram per kilogram
- ND = Not Detected
- Reporting limit for Cr (III), Cr (VI) = 0.02 mg/kg, and for Tin and 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 = 10.0 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+A1:2021.

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.