



TEST REPORT

Report No. 010224010381R1

DATED: 07 JULY 2025

Client : PLAN CREATIONS CO., LTD.
8 MOO 8, TRANG-PALIAN RD.,
YANTAKAO, TRANG 92140 THAILAND

Buyer : /

Sample Description : MOTOR MECHANIC

Item No. : 3494

SKU No. : /

Model / Style : /

Client Specified Age Grade : 3Y+

Manufacturer : /

Country of Origin : THAILAND

Country of Destination : /

Test Sample Received : RECEIVED 19/09/2024

Test Period : FROM 19/09/2024 TO 27/09/2024

Report was revised as per client request and shall supersede Report # 010224010381, dated 27 September 2024

TEST REQUESTED	CONCLUSION	REMARK
EN 71-1:2014+A1:2018 – PHYSICAL AND MECHANICAL PROPERTIES	PASS	-
EN 71-2:2020 – FLAMMABILITY	PASS	-
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,
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SAMPLE PHOTO



Motor Mechanic
 Constructed from high-quality, sustainably sourced wood, the Motor Mechanic is a unique toy car that combines the fun of a car with the educational value of a mechanical toy. It features a realistic engine, a steering wheel, and a gear shift, all of which are designed to be assembled by the child. The car is also equipped with a sound effect that mimics the sound of a real engine, adding to the realism of the play experience.

Assembly
 The Motor Mechanic is designed to be assembled by the child, with all the necessary tools and instructions provided. The assembly process is simple and straightforward, allowing the child to learn about the mechanics of a car while having fun. The car is also designed to be disassembled easily, so it can be taken apart and put back together again.

Who is it for?
 The Motor Mechanic is a perfect toy for children who are interested in cars and mechanics. It is suitable for children aged 3 years and older, and it is a great way to introduce them to the world of engineering and design.

Material de madeira
 O Motor Mechanic é construído a partir de madeira sustentável de alta qualidade, garantindo a durabilidade e a segurança do brinquedo. A madeira utilizada é proveniente de florestas certificadas, o que contribui para a preservação do meio ambiente. Além disso, o brinquedo é pintado com tintas não tóxicas e livres de metais pesados, garantindo a segurança da criança.

Montagem
 O Motor Mechanic é projetado para ser montado pela criança, com todas as ferramentas e instruções necessárias fornecidas. O processo de montagem é simples e intuitivo, permitindo que a criança aprenda sobre mecânica enquanto se diverte. O brinquedo também é projetado para ser desmontado facilmente, permitindo que ele seja usado repetidamente.

Para quem é?
 O Motor Mechanic é ideal para crianças interessadas em carros e mecânica. É adequado para crianças a partir de 3 anos de idade e é uma excelente maneira de introduzi-las ao mundo da engenharia e do design.

Warning:
 The toy is to be assembled by an adult.
 Some parts of this product are small.
 Keep out of baby's reach.



3494
Motor Mechanic
 3y+





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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: 3494 MOTOR MECHANIC

<u>Components</u>	<u>Report Number</u>	<u>Date of Issue</u>
<u>EN 71-3:2019+A2:2024 Migration of Certain Elements</u>		
1 42001 SOLID WOOD	010224060099	28-Jun-24
2 47173 PLYWOOD	010224060098	28-Jun-24
3 47173 MDF WOOD (COVERED WITH 2 SIDES)	010223120125	22-Jan-24
4 PLASTIC MIRROR (PETG)	010224060102	27-Jun-24
5 5260082 WHITE PLASTIC	010224020062	7-Mar-24
6 5260119 RED PLASTIC	010224020064	7-Mar-24
7 5260169 BROWN PLASTIC	010224060173	2-Jul-24
8 5269212 CREAM PLASTIC	010223120090	4-Jan-24
9 WHITE ELASTIC	010224020099	5-Mar-24
10 BLACK SAWDUST	010224030206	28-Mar-24
11 GRAY COATING ON WOOD	010223120129	22-Jan-24
12 ORANGE COATING ON WOOD	010223120127	22-Jan-24
13 YELLOW COATING ON WOOD	010223120160	22-Jan-24
14 CLEAR COATING ON WOOD	010224060179	16-Jul-24
15 WHITE COATING ON SAWDUST	010223120163	22-Jan-24
16 BLACK COATING ON SAWDUST	010223120165	22-Jan-24
17 RED COATING ON WOOD	010223120128	22-Jan-24
18 DARK BLUE COATING ON WOOD	010224010337R1	4-Mar-24



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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	M
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	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

Test Item(s)	3494 MOTOR MECHANIC		
	Permissible Limit	Unit	Result
-			
A-weighted time-averaged emission sound pressure level (L_{pA})	85	dB	80
C-weighted peak emission sound pressure level (L_{pCpeak})	110	dB	79
Conclusion	-	-	PASS



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TEST RESULT(S): (Continued)

EN 71-2:2020 - Flammability

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

Test Item(s)	Item / Component Description(s)
1	3494 Motor Mechanic

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

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	42001 SOLID WOOD
2	47173 PLYWOOD
3	47173 MDF WOOD (COVERED WITH 2 SIDES)
4	PLASTIC MIRROR (PETG)
5	5260082 WHITE PLASTIC
6	5260119 RED PLASTIC
7	5260169 BROWN PLASTIC
8	5269212 CREAM PLASTIC
9	WHITE ELASTIC
10	BLACK SAWDUST
11	GRAY COATING ON WOOD
12	ORANGE COATING ON WOOD
13	YELLOW COATING ON WOOD
14	CLEAR COATING ON WOOD
15	WHITE COATING ON SAWDUST
16	BLACK COATING ON SAWDUST
17	RED COATING ON WOOD
18	DARK BLUE COATING ON WOOD

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



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TEST RESULT(S): (Continued)

Test Item(s)	Unit	Permissible Limit	Result					
			1	2	3	4	5	6
Category Type	-	III	III	III	III	III	III	III
Aluminum (Al)	mg/kg	28130	ND	ND	ND	42.9	ND	ND
Antimony (Sb)	mg/kg	560	ND	ND	ND	ND	ND	ND
Arsenic (As)	mg/kg	47	ND	ND	0.53	ND	ND	ND
Barium (Ba)	mg/kg	18750	ND	ND	ND	ND	ND	ND
Boron (B)	mg/kg	15000	ND	36.7	13	ND	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	ND	ND	0.08	ND	0.1	0.06
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	18.6	21.6	61	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	10.5	11.0	ND	ND	9.6	9.6
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS

Test Item(s)	Unit	Permissible Limit	Result					
			7	8	9	10	11	12
Category Type	-	III	III	III	III	III	III	III
Aluminum (Al)	mg/kg	28130	ND	ND	67.3	ND	156	114
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	18.9	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	ND	ND	0.08	0.05	0.32	0.18
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	19.0	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	8.1
Tin (Sn)	mg/kg	180000	ND	ND	ND	1.1	ND	ND
Organic tin	mg/kg	12	ND	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	46000	ND	914	904	ND	ND	ND
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS



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TEST RESULT(S): (Continued)

Test Item(s)	Unit	Permissible Limit	Result					
			13	14	15	16	17	18
Category Type	-	III	III	III	III	III	III	III
Aluminum (Al)	mg/kg	28130	38.6	ND	225	112	119	2210
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	8.6	5.5
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	0.30	0.32	0.15	0.09	0.71	0.42
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	14.6	ND	ND	5.8	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	1.4
Organic tin	mg/kg	12	ND	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	46000	28.7	1890	848	340	6.6	ND
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 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

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.