





**NOT PROVIDE** 

**NOT PROVIDE** 

#### ZHONG JIE EDUCATIONAL TOYS INDUSTRIAL CO., LTD

(8822)096-0008(H-R1) Jun 9, 2022 **Technical Report:** Apr 6, 2022 Date Received: Page 1 of 25

ZHONG JIE EDUCATIONAL TOYS INDUSTRIAL CO., LTD BEILONG AREA, HUADONG ROAD, GUANGYI STREET, CHENGHAI DISTRICT, SHANTOU CITY, GUANGDONG, CHINA.

Sample Description: DINOSAUR SERIES, ANIMAL SERIES AND SCENE SERIES

Vendor: N/A Sample Size: N/A

Manufacturer: Style No(s): SEE ATTACHMENT Labeled Age Grade: **NOT PRESENT** SKN/SKU No.: **NOT PROVIDE** Appropriate Age Grade: NOT REQUESTED PO No.: **NOT PROVIDE** Client Specified Age Ref#: **NOT PROVIDE** 

Grade:

Tested Age Grade: **OVER 3 YEARS OF AGE** 

Country of Origin: UPC Code: Assortment No.:

Resubmitted Sample Date: APR 27, 2022 Test Starting Date: APR 6, 2022 Test Finished Date: JUN 9, 2022

#### **EXECUTIVE SUMMARY:**

| Test Requested   | Conclusion |
|--|------------|
| Mechanical and physical properties requirements of the tested subclauses of the European Standard, "Safety of toys", EN71: Part 1:2014+A1:2018 clauses 1-7 | PASS       |
| Labeling requirements of "CE marking, manufacturer/ Importer name and address, and product identification" under "Directive 2009/48/EC Safety of Toy".     | PASS       |
| Flammability requirements of the European Standard "Safety of Toys", EN 71: Part 2: 2020   | PASS       |
| Migration of Certain Elements in Category III - Scraped off toy material requirements of the European Standard, "Safety of toys", EN 71-3:2019+A1:2021.    | PASS       |

To be continued

BUREAU VERITAS SHENZHEN CO.,LTD DONGGUAN BRANCH

Harvey Xue

Manager, Analytical Lab

BUREAU VERITAS SHENZHEN CO.,LTD DONGGUAN BRANCH

Rose Ge

Supervisor, Toys Lab

RT/Lucy Chen

**REMARK** 

If there are questions or concerns on this report, please contact the following persons:

(86) 0769 89952999 Ext. 8175 Report Enquiry: CPSAnalytical.DG@bureauveritas.com

**Business Contact:** (86) 0769 85893595

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Bureau Veritas Shenzhen Co., Ltd., Dongquan

No.96, Houjie, Guantai Road., Houjie, Dongguan, Guangdong, China Tel: +86-769-89982098 Fax: +86-769-85991080 www.cps.bureauveritas.com

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Approved by: Harvey Xue Report Template- Version A



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#### **EXECUTIVE SUMMARY:**

Note: At the request of the client, the sample(s) was evaluated for use by children 3+.

Note: At the request of the client, EN71: Part 2:2011+A1:2014 Clause 4.1 about liquids flammability requirement(s)

was waived for this submission.

Note: The manufacturer / importer information was present on the packaging only. It has to be noted that, or according to TSD 2009/48/EC, the manufacturers/ importer shall indicate their name, registered trade name

registered trade mark and the address at which they can be contacted on the toy, or, where that is not

possible, on its packaging or in a document accompanying the toy."

Note: The product identification is present on the packaging only. It has to be noted that, According to TSD

2009/48/EC, manufacturers shall 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.

Note: At the request of client, test(s) was conducted on the certain component(s) of the submitted

samples(s) / submitted component(s).

#### **ATTACHMENT:**

Style No(s):

Q9899-526A、Q9899-527、Q9899-527A、Q9899-528、Q9899-528A、Q9899-529、Q9899-529A、Q9899-530、

Q9899-530A、Q9899-531、Q9899-531A、Q9899-532、Q9899-532A、Q9899-533、Q9899-534、Q9899-535、

Q9899-536、Q9899-537、Q9899-538、Q9899-539、Q9899-540A、Q9899-541A、Q9899-542、Q9899-543、

Q9899-544、Q9899-545、Q9899-546A、Q9899-547A、Q9899-548、Q9899-549、Q9899-550、Q9899-550A、

Q9899-551、Q9899-551A、Q9899-552、Q9899-552A、Q9899-553、Q9899-553A、Q9899-554、Q9899-554A、

Q9899-556、Q9899-556A、Q9899-557、Q9899-557A、Q9899-558、Q9899-558A、Q9899-559、Q9899-559A、

Q9899-560A、Q9899-561A、Q9899-562A、Q9899-563A、Q9899-564A、Q9899-565A、Q9899-566A、

Q9899-567A、Q9899-570、Q9899-571、Q9899-572、Q9899-573、Q9899-574、Q9899-575、Q9899-576、

Q9899-577、Q9899-578、Q9899-579、Q9899-580、Q9899-581、Q9899-582、Q9899-583、Q9899-584、

Q9899-585、Q9899-586、Q9899-587、Q9899-588、Q9899-589、Q9899-600、Q9899-601、Q9899-602、

Q9899-603



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## Tested Component(s) Description List:

| Test Item(s) | Item / Component Description(s) | Location(s) | Style(s) |
|--------------|---------------------------------|-------------|----------|
| 1001         | Green coating                   | Surface     | -        |
| 1002         | Deep blue coating               | Surface     | -        |
| 1003         | Orange coating                  | Surface     | -        |
| 1004         | Blue coating                    | Surface     | -        |
| 1005         | Yellow coating                  | Surface     | -        |
| 1006         | White coating                   | Surface     | -        |
| 1007         | Brownness coating               | Surface     | -        |
| 1008         | Brown coating                   | Surface     | -        |
| 1009         | Purple coating                  | Surface     | -        |
| I010         | Black coating                   | Surface     | -        |
| I011         | Red coating                     | Surface     | -        |
| 1012         | Blue green coating              | Surface     | -        |
| 1013         | Yellow plastic                  | Body        | -        |
| 1014         | White plastic                   | Body        | -        |
| l015         | Grey plastic                    | Body        | -        |



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#### **RESULTS:**

#### APPROPRIATE AGE GRADE DETERMINATION

The Appropriate Age Grade is determined with reference to the EN71: Part 1: 2014+A1:2018,

CEN ISO/TR 8124-8:2016 Safety of toys - Part 8: Age determination guidelines prepared by Technical Committee CEN/TC 52 and

Age Grade Determination Guidelines of the Consumer Product Safety Commission (CPSC).

Note: The most stringent age grade from the Labeled Age Grade and the Appropriate Age Grade will be

used for testing.

Note: If the client does not specify an age grade for testing or request Bureau Veritas Consumer

Products Services, Inc. to determine an appropriate age grade, the labeled age grade will be used

for testing.

#### EXPLANATION OF THE ABBREVIATIONS FOR PART 1, 2 & 6

| Symbol | Explanation          |   |                        |        |                     |  |  |  |  |
|--------|----------------------|---|------------------------|--------|---------------------|--|--|--|--|
| NM     | The sample(s) DOES I | The sample(s) DOES NOT MEET the requirement of this Subclause |                        |        |                     |  |  |  |  |
| М      | The sample(s) MEET t | he requiren   | nent of this Subclause |        |                     |  |  |  |  |
| N/A    | Not Applicable       |   |                        |        |                     |  |  |  |  |
| NR     | Not Requested        |   |                        |        |                     |  |  |  |  |
| NE     | Not Evaluated        |   |                        |        |                     |  |  |  |  |
| NP     | None Present         |   |                        |        |                     |  |  |  |  |
| NT     | Not Tested           | Not Tested  |                        |        |                     |  |  |  |  |
| Р      | Present              |   |                        |        |                     |  |  |  |  |
| R      | Refer to Comment Sec | ction of this   | report                 |        |                     |  |  |  |  |
| Symbol | Language Present     | Symbol  | Language Present       | Symbol | Language Present    |  |  |  |  |
| В      | Belgian language     | G   | German language        | PR     | Portuguese language |  |  |  |  |
| D      | Danish language      | GR  | Greek language         | S      | Spanish language    |  |  |  |  |
| E      | English language     | Н   | Dutch language         | SD     | Swedish language    |  |  |  |  |
| F      | Finnish language     | I   | Italian language       | SZ     | Swiss language      |  |  |  |  |
| FR     | French language      | N   | Norwegian language     |        |                     |  |  |  |  |



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#### **RESULTS:**

#### MECHANICAL & PHYSICAL PROPERTIES (EN 71: PART 1 – 2014+A1 – 2018)

| Subclause   | Requirement  | Result |
|---|--|--------|
| 4.1   | Material cleanliness   | М      |
| 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 & 7.6   | Edges  | M      |
| 4.8 & 7.6   | Points and metallic wires  | M      |
| 4.8e  | Splinters  | M      |
| 4.9   | Protruding parts   | M      |
| 4.10.1  | Folding and sliding mechanisms                                     | NA     |
| 4.10.2  | Driving mechanisms   | M      |
| 4.10.3  | Hinges   | NA     |
| 4.10.4  | Springs  | NA     |
| 4.11  | Mouth actuated toys and other toys intended to be put in the mouth | NA     |
| 4.12 & 7.3  | Balloons   | NA     |
| 4.13 & 7.9  | Cord of toy kites and other flying toys                            | NA     |
| 4.14.1  | Toys which a child can enter                                       | NA     |
| 4.14.2 & 7.8  | Masks and helmets  | M      |
| 4.15.1  | Toys propelled by child  |        |
| 4.15.1.2 & 7.10.1 & 7.10.2 & 7.10.3 & 7.10.4 & 7.16 | Toys propelled by child – Instructions for use                     | NA     |
| 4.15.1.3  | Toys propelled by child – Strength                                 | NA     |
| 4.15.1.4  | Toys propelled by child – Stability                                | NA     |
| 4.15.1.5  | Toys propelled by child – Braking                                  | NA     |
| 4.15.1.6  | Toys propelled by child - Transmission                             | NA     |
| 4.15.1.7  | Toys propelled by child – insertion mark                           | NA     |
| 4.15.1.8  | Electrically-driven ride-on toys                                   | NA     |
| 4.15.2  | Toy bicycles   |        |
| 4.15.2.2 & 7.15                                     | Toy bicycles – Warnings and instructions for use                   | NA     |
| 4.15.2.3  | Toy bicycles – Braking   | NA     |
| 4.15.3 & 7.16 & 7.19                                | Rocking horses and similar toys                                    | NA     |
| 4.15.4 & 7.16                                       | Toys not propelled by child  | NA     |
| 4.15.5 & 7.18                                       | Toy scooters   | NA     |



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#### **RESULTS:**

| Subclause   | Requirement   | Result |
|---|---|--------|
| 4.16  | Heavy immobile toys   | NA     |
| 4.17.2  | All projectiles   | М      |
| 4.17.3 & 7.7  | Projectile toys with stored energy  | М      |
| 4.17.4 & 7.26                                       | Certain projectiles toys without stored energy  | NA     |
| 4.18 & 7.4  | Aquatic toys and inflatable toys  | NA     |
| 4.19 & 7.13 & 7.14                                  | Percussion caps   | NA     |
| 4.20.2.1- 4.20.2.4,<br>4.20.2.6-4.20.2.12 &<br>7.14 | Acoustics   | М      |
| *4.20.2.5   | Acoustics- Toys using headphones or earphones   | NA     |
| 4.21  | Toys containing a non-electrical heat source  | NA     |
| 4.22 & 7.2  | Small balls   | NA     |
| 4.23  | Magnet  |        |
| 4.23.2 a, b & c                                     | Toy other than magnetic / electrical experimental sets intended for children over 8 years | NA     |
| 4.23.3 & 7.20                                       | Magnetic / electrical experimental sets intended for children over 8 years                | NA     |
| 4.24  | Yo-yo ball  | NA     |
| 4.25  | Toys attached to food   | NA     |
| 4.26  | Toy Disguise Costumes   | NA     |
| 4.27.1  | Flying toys – General   | NA     |
| 4.27.2 & 7.25.1                                     | Rotors and propellers on flying toys  | NA     |
| 4.27.3 & 7.25.2                                     | Rotors and propellers on remote controlled flying toys                                    | NA     |
|   | FOR TOYS INTENDED FOR CHILDREN UNDER 36 MONTHS  |        |
| 5.1   | General   | NA     |
| 5.1a  | Small parts – as received   | NA     |
| 5.1b  | Small parts, sharp points, sharp edges – after tests                                      | NA     |
| 5.1c  | Cross section <2mm metal points & wires   | NA     |
| 5.1e  | Toys contain glue   | NA     |
| 5.1f  | Casing of toys  | NA     |
| 5.2   | Fillings, coverings and seams   | NA     |
| 5.3   | Adhesion of plastic sheeting  | NA     |
| 5.4.2   | Cords and chains in toys intended for children under 18 months                            | NA     |



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#### **RESULTS:**

| Subclause           | Requirement   | Result |
|---------------------|---|--------|
| 5.4.3 & 7.22        | Cords and chains in toys intended for children of 18 months or over but under 36 months | NA     |
| 5.4.4               | Fixed loops, tangled loops and nooses   | NA     |
| 5.4.5               | Cords and chains on pull along toys   | NA     |
| 5.4.6 & 7.21        | Electrical cables   | NA     |
| 5.4.7               | Cross-sectional dimension of certain cords  | NA     |
| 5.4.8               | Self-retracting cords   | NA     |
| 5.4.9 & 7.11 & 7.23 | Toys attached to or intended to be strung across a cradle, cot or perambulator          | NA     |
| 5.5 & 7.12          | Liquid filled toys  | NA     |
| 5.6                 | Electrically driven toys  | NA     |
| 5.7                 | Glass and porcelain   | NA     |
| 5.8                 | Shape and size  | NA     |
| 5.9 & 7.17          | Monofilament fibres   | NA     |
| 5.10                | Small balls   | NA     |
| 5.11                | Play figures  | NA     |
| 5.12                | Hemispheric shaped toys   | NA     |
| 5.13                | Suction cups  | NA     |
| 5.14                | Straps intended to be worn fully or partially around the neck                           | NA     |
| 5.15 & 7.24         | Sledges with cords for pulling  | NA     |
| 6                   | Packaging   | NA     |
|                     | WARNINGS, INSTRUCTIONS FOR USE  |        |
| 7.1                 | General   | M      |
| 7.2                 | Toys not intended for children under 36 months  | М      |
| 7.5                 | Functional toys   | NA     |

2009/48/EC General Labeling Requirement

| Requirement                             | Result |
|---|--------|
| CE Mark                                 | M      |
| Manufacturer/ Importer name and address | M      |
| Product Identification                  | M      |

M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section NT=Not Test



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#### **RESULTS:**

#### REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 1

| Sub-clause | Test Method                                   | Sub-<br>clause | Test Method  | Sub-<br>clause | Test Method  | Sub-<br>clause | Test Method                                       |
|------------|---|----------------|--|----------------|--|----------------|---|
| 4.3        | 8.25.1  | 4.15.1.5       | 8.26.1   | 4.22           | 8.3, 8.4.2.1,<br>8.5, 8.6, 8.7,<br>8.8, 8.32                           | 5.4.5          | 8.40  |
| 4.5        | 8.5, 8.7,<br>8.11, 8.12                       | 4.15.1.8       | 8.29   | 4.23           | 8.2, 8.3,<br>8.4.2.1,<br>8.4.2.2, 8.5,<br>8.6, 8.7, 8.8,<br>8.34, 8.35 | 5.4.6          | 8.40  |
| 4.6        | 8.2, 8.3,<br>8.4.2.1, 8.5,<br>8.7, 8.8, 8.14  | 4.15.2.4       | 8.26.2   | 4.24           | 8.37   | 5.4.7          | 8.20  |
| 4.7        | 8.11  | 4.15.3         | 8.21, 8.23.1   | 4.25           | 8.2, 8.3,<br>8.4.2.1, 8.5,<br>8.7, 8.8,<br>8.32.1                      | 5.7.8          | 8.39  |
| 4.8        | 8.12, 8.13                                    | 4.15.4         | 8.21, 8.23.1   | 4.26           | 8.38   | 5.5            | 8.15  |
| 4.9        | 8.4.2.3, 8.11,<br>8.12                        | 4.15.5         | 8.11, 8.12,<br>8.21, 8.22,<br>8.26.3, 8.27             | 4.27.1         | 8.43   | 5.6            | 8.29  |
| 4.10.1     | 8.18.2,<br>8.18.3                             | 4.16           | 8.23.2   | 4.27.2         | 8.4.2.6  | 5.8            | 8.16  |
| 4.10.2     | 8.5, 8.6, 8.7,<br>8.11, 8.12                  | 4.17.1         | 8.3, 8.4.2.1,<br>8.7, 8.8, 8.42                        | 4.27.3         | 8.4.2.6  | 5.10           | 8.3, 8.4.2.1, 8.5,<br>8.6, 8.7, 8.8, 8.9,<br>8.32 |
| 4.11       | 8.2, 8.3,<br>8.4.2.1, 8.9,<br>8.17            | 4.17.2         | 8.3,<br>8.4.2.4,8.7,<br>8.8, 8.32.1,<br>8.43, 8.44     | 5.1            | 8.2, 8.3,<br>8.4.2.1, 8.5,<br>8.7, 8.8, 8.9,<br>8.11, 8.12             | 5.11           | 8.33  |
| 4.13       | 8.19  | 4.17.3         | 8.3, 8.4.2.3,<br>8.4.2.5, 8.11,<br>8.12, 8.24,<br>8.42 | 5.3            | 8.4.2.1, 8.25  | 5.12           | 8.3, 8.4.2.1, 8.5,<br>8.6, 8.7, 8.8, 8.9,         |
| 4.14.1     | 8.31.1,<br>8.31.2                             | 4.17.4         | 8.3, 8.4.2.3,<br>8.4.2.5, 8.11,<br>8.12, 8.24,<br>8.42 | 5.4.1          | 8.40   | 5.13           | 8.3, 8.4.2.1, 8.5,<br>8.7, 8.8, 8.32              |
| 4.14.2     | 8.3, 8.4.2.1,<br>8.5, 8.7, 8.8,<br>8.11, 8.12 | 4.18           | 8.2, 8.3,<br>8.4.2.1                                   | 5.4.2          | 8.38, 8.40,<br>8.41  | 5.14           | 8.38  |
| 4.15.1.3   | 8.11, 8.12,<br>8.21, 8.22                     | 4.20           | 8.28   | 5.4.3          | 8.38, 8.40,<br>8.41  | 6              | 8.3, 8.4.2.1,<br>8.25.1, 8.32.1                   |
| 4.15.1.4   | 8.23.1  | 4.21           | 8.30   | 5.4.4          | 8.36, 8.38   |                |   |



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#### **RESULTS:**

#### FLAMMABILITY (EN 71 PART 2: 2020)

| Subclause | Requirement   | Result |
|-----------|---|--------|
| 4.1       | Cellulose nitrate   | NP     |
| 4.1       | Highly flammable solids   | NP     |
| 4.1       | Surface flash on a piled surface  | NA     |
| *4.1      | Flammable gases   | NA     |
| *4.1      | Extremely flammable liquids, highly flammable liquids, flammable liquids and flammable gels | NT     |
| 4.2       | Toys to be worn on the head   | М      |
| 4.3       | Toy disguise costumes and toys intended to be worn by child in play                         | NA     |
| 4.3       | warning on product and packaging (10 - 30 mm/s)   | NA     |
| 4.4       | Toys intended to be entered by child  | NA     |
| 4.4       | warning on product and packaging (10 – 30 mm/s)   | NA     |
| 4.5       | Soft-filled toys  | M      |

#### REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 2

| Sub-<br>clause | Test<br>Method | Sub-<br>clause | Test<br>Method | Sub-<br>clause | Test<br>Method | Sub-<br>clause | Test<br>Method |
|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 4.2.2          | 5.2            | 4.2.4          | 5.3            | 4.3            | 5.4            | 4.5            | 5.5            |
| 4.2.3          | 5.3            | 4.2.5          | 5.4            | 4.4            | 5.4            | -              | -              |

\* Note: Subclause indicated with \* are not accredited.

M = Meet NM = Not Meet N/A = Not Applicable R = Refer to Comment Section

P = Present NP = Not Present



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#### **RESULTS:**

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

Test Method: European Standard EN 71-3:2019+A1:2021 Section 8.

Class: Category III - Scraped off toy material

|                       | Requirement  |        |        | Result (mg/kg) |        |        |
|-----------------------|--------------|--------|--------|----------------|--------|--------|
| Analyte               | (mg/kg)      |        |        | Test Item(s)   |        |        |
|                       | Category III | 1001   | 1002   | 1003           | 1004   | 1005   |
| Aluminium (Al)        | 28130        | 6      | 16     | 12             | 26     | 5      |
| Arsenic (As)          | 47           | ND     | ND     | ND             | ND     | ND     |
| Boron (B)             | 15000        | ND     | ND     | ND             | ND     | ND     |
| Barium (Ba)           | 18750        | ND     | ND     | ND             | ND     | ND     |
| Cadmium (Cd)          | 17           | ND     | ND     | ND             | ND     | ND     |
| Cobalt (Co)           | 130          | ND     | ND     | ND             | ND     | ND     |
| Chromium III (Cr III) | 460          | ND     | ND     | 0.22           | ND     | ND     |
| Chromium VI (Cr VI)   | 0.053        | ND#    | ND#    | ND#            | ND#    | ND     |
| Copper (Cu)           | 7700         | ND     | ND     | ND             | ND     | ND     |
| Mercury (Hg)          | 94           | ND     | ND     | ND             | ND     | ND     |
| Manganese (Mn)        | 15000        | ND     | ND     | ND             | ND     | ND     |
| Nickel (Ni)           | 930          | ND     | ND     | ND             | ND     | ND     |
| Lead (Pb)             | 23           | ND     | ND     | ND             | ND     | ND     |
| Antimony (Sb)         | 560          | ND     | ND     | ND             | ND     | ND     |
| Selenium (Se)         | 460          | ND     | ND     | ND             | ND     | ND     |
| Tin (Sn)              | 180000       | ND     | ND     | ND             | ND     | ND     |
| Organic tin           | 12           | ND     | ND     | ND             | ND     | ND     |
| Strontium (Sr)        | 56000        | 2      | 3      | 4              | 3      | ND     |
| Zinc (Zn)             | 46000        | 5      | 23     | 17             | 13     | 3      |
| Mass of trace am      | ount (gram)  | 0.0179 | 0.0656 | 0.0765         | 0.0598 | 0.0146 |
| Conclusion            |              | PASS   | PASS   | PASS           | PASS   | PASS   |



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#### **RESULTS:**

|                       | Requirement  |        |        | Result (mg/kg) |        |        |
|-----------------------|--------------|--------|--------|----------------|--------|--------|
| Analyte               | (mg/kg)      |        |        | Test Item(s)   |        |        |
|                       | Category III | 1006   | 1007   | 1008           | 1009   | I010   |
| Aluminium (AI)        | 28130        | 54     | 8      | 7              | 27     | 8      |
| Arsenic (As)          | 47           | ND     | ND     | ND             | ND     | ND     |
| Boron (B)             | 15000        | ND     | ND     | ND             | ND     | ND     |
| Barium (Ba)           | 18750        | ND     | ND     | ND             | ND     | ND     |
| Cadmium (Cd)          | 17           | ND     | ND     | ND             | ND     | ND     |
| Cobalt (Co)           | 130          | ND     | ND     | ND             | ND     | ND     |
| Chromium III (Cr III) | 460          | ND     | ND     | ND             | 0.72   | ND     |
| Chromium VI (Cr VI)   | 0.053        | ND     | ND#    | ND             | ND#    | ND#    |
| Copper (Cu)           | 7700         | ND     | ND     | ND             | 8      | ND     |
| Mercury (Hg)          | 94           | ND     | ND     | ND             | ND     | ND     |
| Manganese (Mn)        | 15000        | ND     | ND     | ND             | 2      | ND     |
| Nickel (Ni)           | 930          | ND     | ND     | ND             | 9      | ND     |
| Lead (Pb)             | 23           | ND     | ND     | ND             | ND     | ND     |
| Antimony (Sb)         | 560          | ND     | ND     | ND             | ND     | ND     |
| Selenium (Se)         | 460          | ND     | ND     | ND             | ND     | ND     |
| Tin (Sn)              | 180000       | ND     | ND     | ND             | ND     | ND     |
| Organic tin           | 12           | ND     | ND     | ND             | ND     | ND     |
| Strontium (Sr)        | 56000        | ND     | 3      | 2              | 5      | 2      |
| Zinc (Zn)             | 46000        | 10     | 13     | 9              | 78     | 10     |
| Mass of trace am      | ount (gram)  | 0.0525 | 0.0562 | 0.0544         | 0.0816 | 0.0533 |
| Conclusi              | ion          | PASS   | PASS   | PASS           | PASS   | PASS   |



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#### **RESULTS:**

|                             | Requirement  |              | Result (mg/kg) |      |      |      |  |
|-----------------------------|--------------|--------------|----------------|------|------|------|--|
| Analyte                     | (mg/kg)      | Test Item(s) |                |      |      |      |  |
|                             | Category III | I011         | 1012           | I013 | 1014 | l015 |  |
| Aluminium (AI)              | 28130        | 4            | 13             | ND   | 2    | ND   |  |
| Arsenic (As)                | 47           | ND           | ND             | ND   | ND   | ND   |  |
| Boron (B)                   | 15000        | 3            | ND             | ND   | ND   | ND   |  |
| Barium (Ba)                 | 18750        | ND           | ND             | ND   | ND   | ND   |  |
| Cadmium (Cd)                | 17           | ND           | ND             | ND   | ND   | ND   |  |
| Cobalt (Co)                 | 130          | ND           | ND             | ND   | ND   | ND   |  |
| Chromium III (Cr III)       | 460          | ND           | ND             | ND   | ND   | ND   |  |
| Chromium VI (Cr VI)         | 0.053        | ND           | ND#            | ND   | ND   | ND   |  |
| Copper (Cu)                 | 7700         | ND           | ND             | ND   | ND   | ND   |  |
| Mercury (Hg)                | 94           | ND           | ND             | ND   | ND   | ND   |  |
| Manganese (Mn)              | 15000        | ND           | ND             | ND   | ND   | ND   |  |
| Nickel (Ni)                 | 930          | ND           | ND             | ND   | ND   | ND   |  |
| Lead (Pb)                   | 23           | ND           | ND             | ND   | ND   | ND   |  |
| Antimony (Sb)               | 560          | ND           | ND             | ND   | ND   | ND   |  |
| Selenium (Se)               | 460          | ND           | ND             | ND   | ND   | ND   |  |
| Tin (Sn)                    | 180000       | ND           | ND             | ND   | ND   | ND   |  |
| Organic tin                 | 12           | ND           | ND             | ND   | ND   | ND   |  |
| Strontium (Sr)              | 56000        | ND           | 3              | ND   | ND   | ND   |  |
| Zinc (Zn)                   | 46000        | 2            | 12             | ND   | ND   | 3    |  |
| Mass of trace amount (gram) |              | 0.0103       | 0.0609         | -    | -    | -    |  |
| Conclusion                  |              | PASS         | PASS           | PASS | PASS | PASS |  |

mg/kg = milligrams per kilogram (ppm=parts per million)

Organic tin = migration of total organic tin is expressed as tributyltin cation content in mg/kg

# = Verified results (see note)

ND = Not detected

Detection Limit ( mg/kg ):

Category III - Al : 2; Sb : 2; As : 2; Ba : 2; B : 2; Cd : 2; Cr III : 0.15; Cr VI : 0.025; Co : 2; Cu : 2; Pb : 2; Mn : 2;

Hg: 2; Ni: 2; Se: 2; Sr: 2; Sn: 2; Organic tin: 2; Zn: 2

#### Remark:

- Results of Cr III and Cr VI were reported as sum of soluble Chromium content unless specified.
- Result(s) of organic tin was (were) calculated while assuming the tin content wholly contributed from tributyltin cation unless specified.
- -The pH measured shall be reported after migration if it was outside the range of 1.1 to 1.3.
- This report is to Supersede BV(Dong guan) report No. (8822)096-0008(H) dated on May 23, 2022

#### Note:

If soluble chromium content or soluble tin content exceeded the screening limits of soluble chromium (VI) or organic tin content, the results were verified by below method

- Chromium VI: EN 71-3:2019+A1:2021, Annex F by Ion-chromatography with ICP-MS detector analysis.
- Organic tin: EN 71-3:2019+A1:2021, Annex G by Gas Chromatography-Mass Spectroscopy analysis.



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## **RESULTS:**















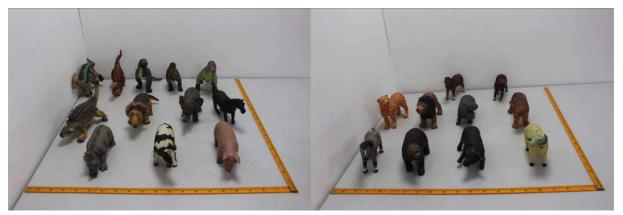
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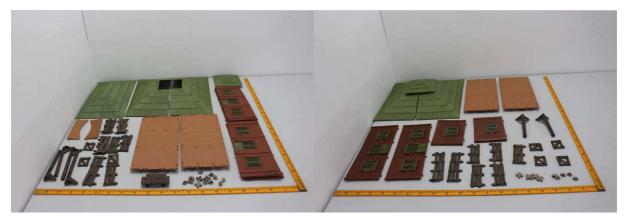






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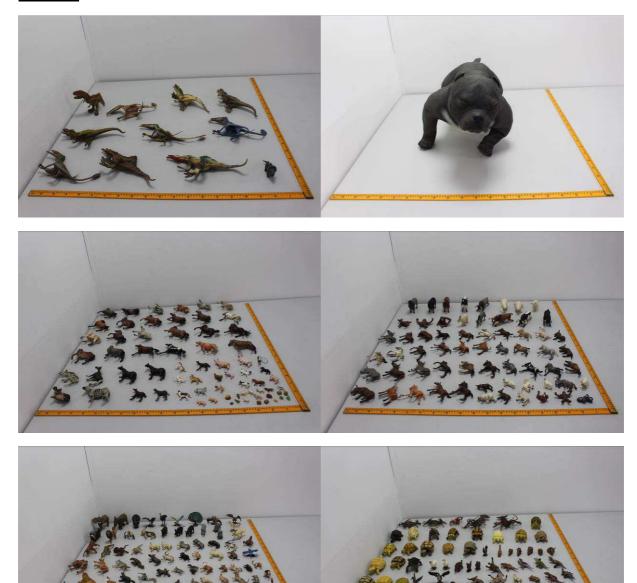




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**END OF REPORT**