# HANGZHOU JINJUYOU TECHNOLOGY CO., LTD

**Technical Report: (8822)108-0178** Jun 1, 2022
Date Received: Apr 18, 2022 Page 1 of 23

HANGZHOU JINJUYOU TECHNOLOGY CO., LTD
ROOM 2501, BLOCK 3, NO. 300-11, NO. 10 STREET (EAST),
QIANTANG NEW DISTRICT, HANGZHOU 310018, CHINA

| | | | |
|---|---|---|---|
| Sample Description: | PLASTIC BLOCKS TOY | | |
| Style No(s): | MNTL-T01/T02/T03/T04/T05/T06/T07/T08/T09/T10/T11/T12/T13/T14/T15/T16/T17/T18/T19/T20/G8111/G8117/G8118/G8119/G8120/G8121/G8122/G8123/G8124/G8125/P8202/G8213/G8217/G8218 | | |
| Vendor: | N/A | Sample Size: | 12 |
| Manufacturer: | HANGZHOU JINJUYOU TECHNOLOGY CO., LTD | SKN/SKU No.: | NOT PROVIDE |
| Labeled Age Grade: | 3+ | PO No.: | NOT PROVIDE |
| Appropriate Age Grade: | NOT REQUESTED | Ref #: | NOT PROVIDE |
| Client Specified Age Grade: | 3+ YEARS | Country of Origin: | CHINA |
| Tested Age Grade: | OVER 3 YEARS OF AGE | Assortment No.: | NOT PROVIDE |
| UPC Code: | N/A | Country of Destination: | EUROPE |
| | | Further Information Date: | MAY 6, 2022 |
| Test Starting Date: | APR 18, 2022 | Test Finished Date: | MAY 25, 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 |

To be continued

BUREAU VERITAS SHENZHEN CO.,LTD
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**REMARK**

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

| Test Requested | Conclusion |
|---|---|
| Migration of Certain Elements in Category III - Scraped off toy material requirements of client's specification with reference to the European Standard, "Safety of toys", EN 71-3:2019+A1:2021 | PASS |
| BBP, DBP ,DEHP and DIBP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 51(amended up to EU No.2018/2005) | PASS |
| DNOP, DINP and DIDP content requirements of the European Regulation (EC) No. 1907/2006 of the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex XVII concerning the Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles, Item no. 52 | PASS |

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

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

Note: The composite test sample(s) of the submitted samples was prepared in the manner requested by the client, when subject to the test performed.

**Tested Component(s) Description List:**

| Test Item(s) | Item / Component Description(s) | Location(s) | Style(s) |
|---|---|---|---|
| I001 | Purple coating | Ball | - |
| I002 | Dark purple coating | Ball | - |
| I003 | Blue coating | Ball | - |
| I004 | Dark blue coating | Ball | - |
| I005 | White coating | Ball | - |
| I006 | Yellow coating | Ball | - |
| I007 | Red coating | Ball | - |
| I008 | Light red coating | Ball | - |
| I009 | Orange coating | Ball | - |
| I010 | Green coating | Ball | - |
| I011 | Beige coating | Ball | - |
| I012 | Cyan coating | Ball | - |
| I013 | Black coating | Car | - |
| I014 | Silver coating | Car | - |
| I015 | Transparent Red plastic | Magnet Block | - |
| I016 | Transparent Orange plastic | Magnet Block | - |
| I017 | Transparent Yellow plastic | Magnet Block | - |
| I018 | Transparent Green plastic | Magnet Block | - |
| I019 | Transparent Blue plastic | Magnet Block | - |
| I020 | Transparent Purple plastic | Magnet Block | - |
| I021 | Transparent plastic | Magnet Block | - |
| I022 | Transparent Pink plastic | Magnet Block | - |
| I023 | Transparent Light yellow plastic | Magnet Block | - |
| I024 | Transparent Light green plastic | Magnet Block | - |
| I025 | Transparent Light purple plastic | Magnet Block | - |
| I026 | Transparent Light blue plastic | Magnet Block | - |
| I027 | Black plastic | Wheel of flat car | - |
| I028 | Orange red plastic | Car | - |
| I029 | Light blue plastic | Car | - |
| I030 | Translucent plastic | Wheel of car | - |
| I031 | Transparent soft plastic | Wheel of car | - |
| I032 | Transparent plastic | Bottom of car | - |

**Tested Component(s) Description List:**

| Test Item(s) | Item / Component Description(s) | Location(s) | Style(s) |
|---|---|---|---|
| I033 | Bright black plastic | Switch of car | - |
| I034 | Gray plastic | Sign | - |
| I035 | Clear laminated multicolor printed white paper with adhesive | Sticker | - |
| I036 | Beige wood | Ball | - |
| I037 | Silvery metal | Axle of flat car | - |
| I038 | Gold plated silvery metal | Rivet of Magnet Block | - |

**RESULTS:**

**APPROPRIATE AGE GRADE DETERMINATION**

| |
|---|
| The Appropriate Age Grade is determined with reference to the EN71 : Part 1 : 2014+A1:2018,<br>CEN ISO/TR 8124-8:2016 Safety of toys - Part 8: Age determination guidelines prepared by Technical Committee CEN/TC 52 and<br>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.<br>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 NOT MEET the requirement of this Subclause | | | | |
| M | The sample(s) MEET the requirement of this Subclause | | | | |
| N/A | Not Applicable | | | | |
| NR | Not Requested | | | | |
| NE | Not Evaluated | | | | |
| NP | None Present | | | | |
| NT | Not Tested | | | | |
| P | Present | | | | |
| R | Refer to Comment Section of this report | | | | |
| Symbol | Language Present | Symbol | Language Present | Symbol | Language Present |
| B | Belgian language | G | German language | PR | Portuguese language |
| D | Danish language | GR | Greek language | S | Spanish language |
| E | English language | H | Dutch language | SD | Swedish language |
| F | Finnish language | I | Italian language | SZ | Swiss language |
| FR | French language | N | Norwegian language | | |

**RESULTS:**

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

| Subclause | 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 & 7.6 | Edges | M |
| 4.8 & 7.6 | Points and metallic wires | M |
| 4.8e | Splinters | M |
| 4.9 | Protruding parts | NA |
| 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 | NA |
| 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 |

**RESULTS:**

| Subclause | Requirement | Result |
|---|---|---|
| 4.16 | Heavy immobile toys | NA |
| 4.17.2 | All projectiles | NA |
| 4.17.3 & 7.7 | Projectile toys with stored energy | NA |
| 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, 4.20.2.6-4.20.2.12 & 7.14 | Acoustics | NA |
| *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 | M |
| 4.23 | Magnet | |
| 4.23.2 a, b & c | Toy other than magnetic / electrical experimental sets intended for children over 8 years | M |
| 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 |

**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 | M |
| 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

**RESULTS:**

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

| Sub-clause | Test Method | Sub-clause | Test Method | Sub-clause | Test Method | Sub-clause | Test Method |
|---|---|---|---|---|---|---|---|
| 4.3 | 8.25.1 | 4.15.1.5 | 8.26.1 | 4.22 | 8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.32 | 5.4.5 | 8.40 |
| 4.5 | 8.5, 8.7, 8.11, 8.12 | 4.15.1.8 | 8.29 | 4.23 | 8.2, 8.3, 8.4.2.1, 8.4.2.2, 8.5, 8.6, 8.7, 8.8, 8.34, 8.35 | 5.4.6 | 8.40 |
| 4.6 | 8.2, 8.3, 8.4.2.1, 8.5, 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, 8.4.2.1, 8.5, 8.7, 8.8, 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, 8.12 | 4.15.5 | 8.11, 8.12, 8.21, 8.22, 8.26.3, 8.27 | 4.27.1 | 8.43 | 5.6 | 8.29 |
| 4.10.1 | 8.18.2, 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, 8.11, 8.12 | 4.17.1 | 8.3, 8.4.2.1, 8.7, 8.8, 8.42 | 4.27.3 | 8.4.2.6 | 5.10 | 8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.9, 8.32 |
| 4.11 | 8.2, 8.3, 8.4.2.1, 8.9, 8.17 | 4.17.2 | 8.3, 8.4.2.4,8.7, 8.8, 8.32.1, 8.43, 8.44 | 5.1 | 8.2, 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.9, 8.11, 8.12 | 5.11 | 8.33 |
| 4.13 | 8.19 | 4.17.3 | 8.3, 8.4.2.3, 8.4.2.5, 8.11, 8.12, 8.24, 8.42 | 5.3 | 8.4.2.1, 8.25 | 5.12 | 8.3, 8.4.2.1, 8.5, 8.6, 8.7, 8.8, 8.9, |
| 4.14.1 | 8.31.1, 8.31.2 | 4.17.4 | 8.3, 8.4.2.3, 8.4.2.5, 8.11, 8.12, 8.24, 8.42 | 5.4.1 | 8.40 | 5.13 | 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.32 |
| 4.14.2 | 8.3, 8.4.2.1, 8.5, 8.7, 8.8, 8.11, 8.12 | 4.18 | 8.2, 8.3, 8.4.2.1 | 5.4.2 | 8.38, 8.40, 8.41 | 5.14 | 8.38 |
| 4.15.1.3 | 8.11, 8.12, 8.21, 8.22 | 4.20 | 8.28 | 5.4.3 | 8.38, 8.40, 8.41 | 6 | 8.3, 8.4.2.1, 8.25.1, 8.32.1 |
| 4.15.1.4 | 8.23.1 | 4.21 | 8.30 | 5.4.4 | 8.36, 8.38 | | |

**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 | NA |
| 4.2 | Toys to be worn on the head | NA |
| 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 | NA |

REQUIREMENTS & TEST METHODS CROSS REFERENCE TABLE FOR PART 2

| Sub-clause | Test Method | Sub-clause | Test Method | Sub-clause | Test Method | Sub-clause | Test 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*

**RESULTS:**

**Migration of Certain Elements - client's specification with reference to EN 71-3:2019+A1:2021**

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

Class: Category III - Scraped off toy material

| Analyte | Requirement (mg/kg) | Result (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| | | Test Item(s) | | | | |
| | Category III | I001 | I002 | I003 | I004 | I005 |
| Aluminium (Al) | 28130 | 84 | 100 | 270 | 100 | 430 |
| Arsenic (As) | 47 | ND | ND | ND | ND | ND |
| Boron (B) | 15000 | ND | ND | ND | 4 | ND |
| Barium (Ba) | 18750 | ND | 3 | ND | 3 | 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 | 2 | ND |
| Mercury (Hg) | 94 | ND | ND | ND | ND | ND |
| Manganese (Mn) | 15000 | 3 | 5 | 4 | 9 | 10 |
| 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 | 3 | 8 | 2 | 3 | 3 |
| Zinc (Zn) | 46000 | 20 | 26 | 41 | 18 | 49 |
| Mass of trace amount (gram) | | 0.0570 | 0.0464 | - | 0.0837 | - |
| Conclusion | | PASS | PASS | PASS | PASS | PASS |

**RESULTS:**

| Analyte | Requirement (mg/kg) | Result (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| | | Test Item(s) | | | | |
| | Category III | I006 | I007 | I008 | I009 | I010 |
| Aluminium (Al) | 28130 | 230 | 56 | 300 | 250 | 38 |
| Arsenic (As) | 47 | ND | ND | ND | ND | ND |
| Boron (B) | 15000 | 4 | ND | 3 | 5 | 9 |
| Barium (Ba) | 18750 | ND | 8 | 4 | 2 | 2 |
| Cadmium (Cd) | 17 | ND | ND | ND | ND | ND |
| Cobalt (Co) | 130 | ND | ND | ND | ND | ND |
| Chromium III (Cr III) | 460 | ND | 0.18 | 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 | 3 | 7 | 8 | 7 | 11 |
| 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 | 3 | 49 | 7 | 5 | 8 |
| Zinc (Zn) | 46000 | 32 | 15 | 45 | 75 | 10 |
| Mass of trace amount (gram) | | 0.0733 | 0.0610 | 0.0808 | 0.0982 | 0.0596 |
| Conclusion | | PASS | PASS | PASS | PASS | PASS |

**RESULTS:**

| Analyte | Requirement (mg/kg) | Result (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| | | Test Item(s) | | | | |
| | Category III | I011 | I012 | I013 | I015 | I016 |
| Aluminium (Al) | 28130 | 370 | 350 | 530 | 2 | ND |
| Arsenic (As) | 47 | ND | ND | ND | ND | ND |
| Boron (B) | 15000 | 2 | 2 | ND | ND | ND |
| Barium (Ba) | 18750 | 2 | 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 | 5 | 7 | ND | ND | ND |
| Nickel (Ni) | 930 | ND | ND | ND | ND | ND |
| Lead (Pb) | 23 | ND | ND | 2 | 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 | 5 | 4 | ND | ND | ND |
| Zinc (Zn) | 46000 | 46 | 49 | 7 | ND | ND |
| Mass of trace amount (gram) | | 0.0984 | 0.0855 | 0.0355 | - | - |
| Conclusion | | PASS | PASS | PASS | PASS | PASS |

**RESULTS:**

| Analyte | Requirement (mg/kg) | Result (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| | | Test Item(s) | | | | |
| | Category III | I017 | I018 | I019 | I020 | I021 |
| Aluminium (Al) | 28130 | ND | ND | ND | ND | ND |
| 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 | 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 | ND | ND | ND | ND |
| Zinc (Zn) | 46000 | ND | ND | ND | ND | ND |
| Mass of trace amount (gram) | | - | - | - | - | - |
| Conclusion | | PASS | PASS | PASS | PASS | PASS |

**RESULTS:**

| Analyte | Requirement (mg/kg) | Result (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| | | Test Item(s) | | | | |
| | Category III | I022 | I023 | I024 | I025 | I026 |
| Aluminium (Al) | 28130 | ND | ND | ND | ND | ND |
| 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 | 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 | ND | ND | ND | ND |
| Zinc (Zn) | 46000 | ND | ND | ND | ND | ND |
| Mass of trace amount (gram) | | - | - | - | - | - |
| Conclusion | | PASS | PASS | PASS | PASS | PASS |

**RESULTS:**

| Analyte | Requirement (mg/kg) | Result (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| | | Test Item(s) | | | | |
| | Category III | I027 | I028 | I029 | I030 | I031 |
| Aluminium (Al) | 28130 | 3 | 6 | 9 | ND | ND |
| 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 | 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 | ND | ND | ND | ND |
| Zinc (Zn) | 46000 | ND | ND | ND | ND | ND |
| Mass of trace amount (gram) | | - | - | - | - | - |
| Conclusion | | PASS | PASS | PASS | PASS | PASS |

**RESULTS:**

| Analyte | Requirement (mg/kg) | Result (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| | | Test Item(s) | | | | |
| | Category III | I032 | I033 | I034 | I035 | I036 |
| Aluminium (Al) | 28130 | ND | ND | 2 | 130 | 8 |
| Arsenic (As) | 47 | ND | ND | ND | ND | ND |
| Boron (B) | 15000 | ND | ND | ND | ND | ND |
| Barium (Ba) | 18750 | ND | ND | ND | 3 | 15 |
| 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 | 4 | 21 |
| 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 | ND | ND | 9 | 23 |
| Zinc (Zn) | 46000 | 2 | ND | ND | 2 | 3 |
| Mass of trace amount (gram) | | - | 0.0785 | - | - | - |
| Conclusion | | PASS | PASS | PASS | PASS | PASS |

**RESULTS:**

| Analyte | Requirement (mg/kg) | Result (mg/kg) | | | | |
|---|---|---|---|---|---|---|
| | | Test Item(s) | | | | |
| | Category III | I037 | I038 | - | - | - |
| Aluminium (Al) | 28130 | ND | ND | - | - | - |
| Arsenic (As) | 47 | ND | ND | - | - | - |
| Boron (B) | 15000 | 2 | ND | - | - | - |
| Barium (Ba) | 18750 | ND | ND | - | - | - |
| Cadmium (Cd) | 17 | ND | ND | - | - | - |
| Cobalt (Co) | 130 | ND | ND | - | - | - |
| Chromium III (Cr III) | 460 | 2.01 | ND | - | - | - |
| Chromium VI (Cr VI) | 0.053 | ND# | ND | - | - | - |
| Copper (Cu) | 7700 | ND | 1080 | - | - | - |
| Mercury (Hg) | 94 | ND | ND | - | - | - |
| Manganese (Mn) | 15000 | 8 | ND | - | - | - |
| Nickel (Ni) | 930 | 34 | ND | - | - | - |
| Lead (Pb) | 23 | ND | ND | - | - | - |
| Antimony (Sb) | 560 | ND | ND | - | - | - |
| Selenium (Se) | 460 | ND | ND | - | - | - |
| Tin (Sn) | 180000 | ND | ND | - | - | - |
| Organic tin | 12 | ND | ND | - | - | - |
| Strontium (Sr) | 56000 | ND | ND | - | - | - |
| Zinc (Zn) | 46000 | ND | 820 | - | - | - |
| Mass of trace amount (gram) | | - | - | - | - | - |
| Conclusion | | 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.

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.

**RESULTS:**

**BBP/DBP/DEHP/DIBP Contents in Toys and Childcare Articles – European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 51**

Test Method : With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

| Test Parameter: | BBP | DBP | DEHP | DIBP | SUM | - |
|---|---|---|---|---|---|---|
| Limit (%): | 0.1 (Sum of Four phthalates) | | | | | - |
| Test Item(s) | Result (%) | | | | | Conclusion |
| I001+I002+I003 | ND | ND | ND | ND | ND | PASS |
| I004+I005+I006 | ND | ND | ND | ND | ND | PASS |
| I007+I008+I009 | ND | ND | ND | ND | ND | PASS |
| I010+I011+I012 | ND | ND | ND | ND | ND | PASS |
| I013+I014 | ND | ND | ND | ND | ND | PASS |
| I015+I016+I017 | ND | ND | ND | ND | ND | PASS |
| I018+I019+I020 | ND | ND | ND | ND | ND | PASS |
| I021+I022+I023 | ND | ND | ND | ND | ND | PASS |
| I024+I025+I026 | ND | ND | ND | ND | ND | PASS |
| I027 | ND | ND | ND | ND | ND | PASS |
| I028+I029+I030 | ND | ND | ND | ND | ND | PASS |
| I031+I032+I033 | ND | ND | ND | ND | ND | PASS |
| I034+I035 | ND | ND | ND | ND | ND | PASS |

Note / key:

BBP = Butyl benzyl phthalate
DBP = Dibutyl phthalate
DEHP = Di(2-ethylhexyl) phthalate
DIBP= Diisobutyl phthalate
ND = Not detected
% = percent
10000 mg/kg = 1 %
mg/kg = milligram(s) per kilogram
Detection Limit (%) : Each 0.005

**RESULTS:**

**DNOP/DINP/DIDP Contents in Toys and Childcare Articles which can be placed in the Mouth by the Children – European Regulation (EC) No. 1907/2006 REACH Annex XVII, Item no. 52**

Test Method : With referenced to EN 14372:2004 Section 6.3.2, sample was extracted with organic solvent and then analyzed by Gas Chromatograph Mass Spectrometer

| Test Parameter: | DIDP | DINP | DNOP | SUM | - |
|---|---|---|---|---|---|
| Limit (%): | 0.1 (Sum of three phthalates) | | | | - |
| Test Item(s) | Result (%) | | | | Conclusion |
| I001+I002+I003 | ND | ND | ND | ND | PASS |
| I004+I005+I006 | ND | ND | ND | ND | PASS |
| I007+I008+I009 | ND | ND | ND | ND | PASS |
| I010+I011+I012 | ND | ND | ND | ND | PASS |
| I013+I014 | ND | ND | ND | ND | PASS |
| I015+I016+I017 | ND | ND | ND | ND | PASS |
| I018+I019+I020 | ND | ND | ND | ND | PASS |
| I021+I022+I023 | ND | ND | ND | ND | PASS |
| I024+I025+I026 | ND | ND | ND | ND | PASS |
| I027 | ND | ND | ND | ND | PASS |
| I028+I029+I030 | ND | ND | ND | ND | PASS |
| I031+I032+I033 | ND | ND | ND | ND | PASS |
| I034+I035 | ND | ND | ND | ND | PASS |

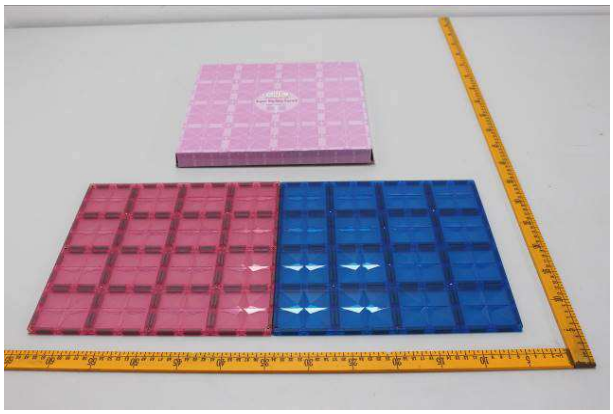
Note / key:

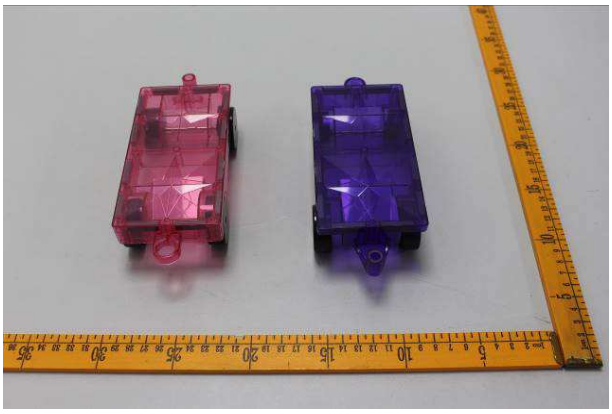
DNOP = Di-n-octyl phthalate
DINP = Di-iso-nonyl phthalate
DIDP = Di-iso-decyl phthalate
ND = Not detected
% = percent
10000 mg/kg = 1 %
mg/kg = milligram(s) per kilogram
Detection Limit (%) : Each 0.005

**RESULTS:**




**RESULTS:**



**RESULTS:**

END OF REPORT