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## **TEST REPORT**

APPLICANT : CSP INC

ADDRESS : 8248 W. ORANGE DR GLENDALE, AZ 85303 USA

**SAMPLE DESCRIPTION** : 3-D DIY CAR/PUZZLE

STYLE / ITEM NO. : K5-615

BUYER : KIDS' KORNER

AGE REQUESTED ON APPLICATION FORM : 3+

<u>LABELED AGE GRADE</u> : NOT FOR CHILDREN UNDER 3 YEARS

AGE GRADE APPLIED IN TESTING : OVER 5 YEARS

**SAMPLE RECEIVED DATE** : MAY 11, 2016; MAY 23, 2016; JUN. 06, 2016

**TEST PERIOD** : MAY 11, 2016 TO JUN. 16, 2016

**RESULT SUMMARY** : PLEASE REFER TO NEXT PAGE(S)

SIGNED FOR AND ON BEHALF OF EUROFINS TESTING TECHNOLOGY (SHENZHEN) CO. LTD.

Jamie Zhang Toy Physical Team Leader Harry Chen Assistant Lab Manager

Coco Luo Assistant Lab Manager

This test report is valid for the tested samples only. Without permission of the test center this test report is not permitted to be duplicated in extracts.

This test report does not entitle to carry any safety mark on this or similar products.



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### **RESULT SUMMARY:**

| TEST(S) REQUESTED BY APPLICANT:   | RESULT |
|---|--------|
| - In accordance with ASTM F963-11 Standard Consumer Safety Specification for Toy Safety:  | -      |
| Physical and Mechanical Test (except section 4.8 & 4.17)  | PASS   |
| Flammability Test   | PASS   |
| Total Lead Content and Migration of Certain Elements  | PASS   |
| - Total Lead Content according to US Consumer Product Safety Improvement Act 2008 (CPSIA).  | PASS   |
| - Total Lead Content according to California Proposition 65, Alameda Superior Court, BG07350969 and RG08378050 / San Francisco Superior Court, 07-462991. | PASS   |
| - Phthalates according to US Consumer Product Safety Improvement Act 2008 (CPSIA).  | PASS   |
| - Phthalates according to US California Proposition 65 and Assembly Bill AB 1108.   | PASS   |



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## ASTM F963-11, Standard Consumer Safety Specification for Toy Safety

| Section | Requirement  | Result   |
|---------|--|----------|
| 4       | Safety Requirements  |          |
| 4.1     | Material Quality   | Р        |
| 4.2     | Flammability   | Р        |
| 4.3     | Toxicology   |          |
| 4.3.1   | Hazardous Substances   | N/A      |
| 4.3.2   | Manufacturing and Packaging of Food  | N/A      |
| 4.3.3   | Indirect Food Additives  | N/A      |
| 4.3.4   | Cosmetics  | N/A      |
| 4.3.5   | Total Lead Content and Migration of Certain Elements Test (See data table for detailed results.) | Р        |
| 4.3.6   | Cosmetics, Liquids, Pastes, Putties, Gels, and Powders   | N/A      |
| 4.3.7   | Stuffing Materials(Visual Inspection)  | N/A      |
| 4.3.8   | DEHP(DOP)  | N/A      |
| 4.4     | Electrical/Thermal Energy  | N/A      |
| 4.5     | Sound-Producting Toys  | N/A      |
| 4.6     | Small Objects  | Р        |
| 4.7     | Accessible Edges   | Р        |
| 4.8     | Projections  | N/C      |
| 4.9     | Accessible Points  | Р        |
| 4.10    | Wires or Rods  | N/A      |
| 4.11    | Nails and Fasteners  | N/A      |
| 4.12    | Plastic Film   | N/A      |
| 4.13    | Folding Mechanisms and Hings   | 1        |
| 4.13.1  | Folding Mechanisms   | N/A      |
| 4.13.2  | Hing-Line Clearance  | N/A      |
| 4.14    | Cords, Straps, and Elastics  | <u> </u> |
| 4.14.1  | Cords, Straps, and Elastics in Toys  | N/A      |
| 4.14.2  | Self Retracting Pull Cords   | N/A      |



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| Section | Requirement  | Result |
|---------|--|--------|
| 4.14.3  | Pull Toys  | N/A    |
| 4.14.4  | Strings and Lines for Flying Devices                             | N/A    |
| 4.14.5  | Cords on Toy Bags Intended for Children Up to 18 Months          | N/A    |
| 4.15    | Stability and Over-Load Requirements                             | 1      |
| 4.15.1  | Stability of Ride-On Toys and Toy Seats                          | N/A    |
| 4.15.2  | Sideways Stability Requirements                                  | N/A    |
| 4.15.3  | Fore and Aft Stability   | N/A    |
| 4.15.4  | Stability of Stationay Floor Toys                                | N/A    |
| 4.15.5  | Overload Requirements for Ride-On Toys and Toy Seats             | N/A    |
| 4.15.6  | Wheeled Ride-On Toys   | N/A    |
| 4.16    | Confined Spaces  | 1      |
| 4.16.1  | Ventilation  | N/A    |
| 4.16.2  | Closures   | N/A    |
| 4.16.3  | Toys that Enclose the Head                                       | N/A    |
| 4.17    | Wheels, Tires, and Axles   |        |
| 4.18    | Holes, Clearance, and Accessibility of Mechanisms                | •      |
| 4.18.1  | Accessible Clearances for Moveable Segments                      | N/A    |
| 4.18.2  | Circular Holes in Rigid Materials                                |        |
| 4.18.3  | Chains and Belts   | N/A    |
| 4.18.4  | Inaccessibility of Mechanisms                                    | N/A    |
| 4.18.5  | Winding Keys   | N/A    |
| 4.18.6  | Coil Springs   | N/A    |
| 4.19    | Simulated Protective Devices(such as helmets, hats, and goggles) | N/A    |
| 4.20    | 4.20 Pacifiers   |        |
| 4.20.1  | Pacifiers Nitrosamine Content                                    |        |
| 4.21    | Projectile Toys  | N/A    |
| 4.22    | Teethers and Teething Toys                                       | N/A    |
| 4.23    | Rattles  | N/A    |
| 4.24    | Squeeze Toys   | N/A    |



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| Section | Requirement  | Result |
|---------|--|--------|
| 4.25    | Battery-Operated Toys                              | N/A    |
| 4.25.10 | Battery-Powered Ride-On Toys                       | N/A    |
| 4.26    | Toys Intended to be Attached to a Crib or Playpen  | N/A    |
| 4.27    | Stuffed and Beanbag-Type Toys                      | N/A    |
| 4.28    | Stroller and Carriage Toys                         | N/A    |
| 4.29    | Art Materials (Label review only)                  | N/A    |
| 4.30    | Toy Gun Marking                                    | N/A    |
| 4.31    | Balloons   | N/A    |
| 4.32    | Certain Toys with Spherical Ends                   | N/A    |
| 4.33    | Marbles  | N/A    |
| 4.34    | Balls  | N/A    |
| 4.35    | Pompoms  | N/A    |
| 4.36    | Hemispheric-Shaped Objects                         | N/A    |
| 4.37    | Yo Yo Elastic Tether Toys                          | N/A    |
| 4.38    | Magnets  | N/A    |
| 4.39    | 4.39 Jaw Entrapment in Handles and Steering Wheels |        |
| 5       | Labeling Requirements                              |        |
| 5.2     | Age Grading Labeling                               | N/A    |
| 5.3     | Safety Lebeling Requirements                       | N/A    |
| 5.4     | Aquatic Toys                                       | N/A    |
| 5.5     | Crib and Playpen Toys                              | N/A    |
| 5.6     | Mobiles  | N/A    |
| 5.7     | 5.7 Stroller and Carriage Toys                     |        |
| 5.8     | Toys Intended to be Assembled By and Adult         |        |
| 5.9     | Simulated Protective Devices                       | N/A    |
| 5.10    | Toys with Functional Sharp Edges or Points         | N/A    |
| 5.11    | Small Objects, Small Balls, Marbles, and Balloons  | Р      |
| 5.12    | Toy Caps   | N/A    |



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| Section | Requirement  | Result |  |  |
|---------|--|--------|--|--|
| 5.13    | Art Materials  | N/A    |  |  |
| 5.14    | Electric Toys  | N/A    |  |  |
| 5.15    | Battery-Operated Toys  | N/A    |  |  |
| 5.16    | Promotional Materials  | Р      |  |  |
| 5.17    | Magnets  | N/A    |  |  |
| 6       | Instructional Literature   |        |  |  |
| 6.1     | Definition and Description   | Р      |  |  |
| 6.2     | Crib and Playpen Toys  | N/A    |  |  |
| 6.3     | Mobiles  | N/A    |  |  |
| 6.4     | Toys Intended to be Assembled By a Adult                           | N/A    |  |  |
| 6.5     | Battery-Operated Toys  | N/A    |  |  |
| 6.6     | Toys in Contact with Food  | N/A    |  |  |
| 7       | Producer's Markings  |        |  |  |
| 7.1     | Producer's Markings  | Р      |  |  |
| 7.2     | Battery-Powered Ride-on Toys                                       |        |  |  |
| 8       | Test methods   |        |  |  |
| 8.5     | Normal Use Testing   | Р      |  |  |
| 8.7.1   | Drop Test  | Р      |  |  |
| 8.7.2   | Tip over Test for Large, Bulky Toys                                | N/A    |  |  |
| 8.7.3   | Tumble Test for Wheeled Toys                                       | N/A    |  |  |
| 8.7.4   | Impact Test for Toys that Cover the Face                           | N/A    |  |  |
| 8.8     | Torque Tests for Removal of Components                             | Р      |  |  |
| 8.9     | 8.9 Tension Test for Removed of Components                         |        |  |  |
| 8.9.1   | 3.9.1 Tension Test for Seams in Stuffed Toys and Beanbag Type Toys |        |  |  |
| 8.10    | Compression Test   |        |  |  |
| 8.11    | Tests for Tire Removal and Snap-in Wheel and Axle Assembly Removal |        |  |  |
| 8.12    | Flexure Test   | N/A    |  |  |
| 8.13    | Test for Mouth-Actuated Toys                                       | N/A    |  |  |

Note: P = Pass N/A = Not Applicable N/C = Not Conduct



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### **Material list**

| Testing material No. | Component          | Material   | Colour            |
|----------------------|--------------------|------------|-------------------|
| 1                    | Wheels             | Plastic    | Black             |
| 2                    | Printing on card   | Printing   | Multicolor        |
| 3                    | Substrate of card  | Paper/glue | White/transparent |
| 4                    | Interlayer of card | Foam       | White             |
| 5                    | Gear               | Plastic    | Red               |
| 6                    | Gear               | Plastic    | Yellow            |
| 7                    | Gear               | Plastic    | White             |
| 8                    | Axes of gear       | Metal      | Silvery           |
| 9                    | Coating on wheels  | Coating    | Silvery           |



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# ASTM F963-11 4.3.5.1(1), Total Lead Content in Paint and Similar Surface-coating Materials

Test method : CPSC-CH-E1003-09.1

The sample was digested with acid. Then the lead content was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit : 90 mg/kg – according to ASTM F963-11 Standard Consumer Safety

Specification for Toy Safety.

Detection Limit : 10 mg/kg

| Test No. | Material No. | Test result (mg/kg) |
|----------|--------------|---------------------|
| Pb-1     | 9            | N.D.                |

#### ASTM F963-11 4.3.5.2(2)(a), Total Lead Content in Accessible Component Parts

Test method : CPSC-CH-E1001-08.3; CPSC-CH-E1002-08.3

The sample was digested with acid. Then the lead content was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit : 100 mg/kg – according to ASTM F963-11 Standard Consumer Safety

Specification for Toy Safety.

Detection Limit : 10 mg/kg

| Test No. | Material No. | Test result (mg/kg) |
|----------|--------------|---------------------|
| Pb-2     | 2            | N.D.                |
| Pb-3     | 1            | 43                  |
| Pb-4     | 3            | N.D.                |
| Pb-5     | 4            | N.D.                |
| Pb-6     | 5            | N.D.                |
| Pb-7     | 6            | N.D.                |
| Pb-8     | 7            | N.D.                |
| Pb-9     | 8            | N.D.                |

Note: - 1 mg/kg = 1 ppm = 0.0001% - N.D. = Not Detected



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## <u>ASTM F963-11 4.3.5.1(2), Migration of Certain Elements in Paint and Similar Surface-coating</u> **Materials**

Test method : As per ASTM F963-11, soluble toxic element contents are determined by

Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Detection limit : 2.5 mg/kg for each of the 8 soluble toxic elements

|          |              |               |        |      | Testing  | element  |      |      |      |
|----------|--------------|---------------|--------|------|----------|----------|------|------|------|
|          |              | As            | Ba     | Cd   | Cr       | Hg       | Pb   | Sb   | Se   |
| Test No. | Material No. | Limit (mg/kg) |        |      |          |          |      |      |      |
|          |              | 25            | 1000 7 | 75   | 60       | 60       | 90   | 60   | 500  |
|          |              |               |        | T    | est resu | It (mg/k | g)   |      |      |
| No. 1    | 4            | N.D.          | 5.5    | N.D. | N.D.     | N.D.     | N.D. | N.D. | N.D. |

Note: -1 mg/kg = 1 ppm = 0.0001%



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#### **Total Lead Content (CPSIA)**

Test method : CPSC-CH-E1001-08.3; CPSC-CH-E1002-08.3; CPSC-CH-E1003-09.1

The sample was digested with acid. Then the lead content was determined by

Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit : For surface coating materials: 90 mg/kg

For non-surface coating (substrate): 100 mg/kg

- according to US Consumer Product Safety Improvement Act 2008

(CPSIA Sec.101).

Detection limit : 10 ppm

| Test No. | Material No. | Test result (mg/kg) |
|----------|--------------|---------------------|
| Pb-1     | 1            | 43                  |
| Pb-2     | 2            | N.D.                |
| Pb-3     | 3            | N.D.                |
| Pb-4     | 4            | N.D.                |
| Pb-5     | 5            | N.D.                |
| Pb-6     | 6            | N.D.                |
| Pb-7     | 7            | N.D.                |
| Pb-8     | 8            | N.D.                |
| Pb-9     | 9            | N.D.                |

Note: -1 mg/kg = 1 ppm = 0.0001%



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#### **Total Lead Content (California Proposition 65)**

Test method : CPSC-CH-E1001-08.3; CPSC-CH-E1002-08.3; CPSC-CH-E1003-09.1

The sample was digested with acid. Then the lead content was determined by Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES).

Limit a. PVC component: ≤ 200 ppm, and

b. Non-PVC component: ≤ 600 ppm, and

c. Baby bibs:  $\leq$  200 ppm.

- according to California Proposition 65, Alameda Superior Court,

BG07350969 and RG08378050 / San Francisco Superior Court, 07-462991

Detection limit : 10 ppm

| Test No. | Material No. | Test result (mg/kg) |
|----------|--------------|---------------------|
| Pb-1     | 1            | 43                  |
| Pb-2     | 2            | N.D.                |
| Pb-3     | 3            | N.D.                |
| Pb-4     | 4            | N.D.                |
| Pb-5     | 5            | N.D.                |
| Pb-6     | 6            | N.D.                |
| Pb-7     | 7            | N.D.                |
| Pb-8     | 8            | N.D.                |
| Pb-9     | 9            | N.D.                |

Note: -1 mg/kg = 1 ppm = 0.0001%



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#### **Phthalates (CPSIA)**

Test method : CPSIA Sec.108, CPSC-CH-C1001-09.3.

Limit : 0.1% per substance - according to US Consumer Product Safety Improvement

Act 2008 (CPSIA).

Detection limit : 0.005% per substance

A: For toys and childcare articles:

| Test No.                     |          |      | Phthalates-1 |
|------------------------------|----------|------|--------------|
| Material No.                 |          |      | 4            |
| Parameter                    | CAS No.  | Unit | Test result  |
| Dibutylphthalate (DBP)       | 84-74-2  | %    | N.D.         |
| Benzylbutylphthalate (BBP)   | 85-68-7  | %    | N.D.         |
| Diethylhexylphthalate (DEHP) | 117-81-7 | %    | 0.006        |

B: Additional requirements for toys and childcare articles, which can be placed in the mouth by children:

| Test No.                   |            |      | Phthalates-1 |
|----------------------------|------------|------|--------------|
| Material No.               |            |      | 4            |
| Parameter                  | CAS No.    | Unit | Test result  |
| Di-n-octylphthalate (DNOP) | 117-84-0   | %    | N.D.         |
| Diisodecylphthalate (DIDP) | 26761-40-0 | %    | N.D.         |
| Diisononylphthalate (DINP) | 28553-12-0 | %    | N.D.         |

Note: -1 mg/kg = 1 ppm = 0.0001%



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#### **Phthalates (California Proposition 65)**

Test method : CPSIA Sec.108, CPSC-CH-C1001-09.3.

Limit : See below - US California Proposition 65 and Assembly Bill AB 1108.

Detection Limit : 0.005 % per substance

| Test No.                     |            |      | Phthalates-1 |  |
|------------------------------|------------|------|--------------|--|
| Material No.                 |            |      | 4            |  |
| Parameter                    | CAS No.    | Unit | Test result  |  |
| Dibutylphthalate (DBP)       | 84-74-2    | %    | N.D.         |  |
| Benzylbutylphthalate (BBP)   | 85-68-7    | %    | N.D.         |  |
| Diethylhexylphthalate (DEHP) | 117-81-7   | %    | 0.006        |  |
| Di-n-octylphthalate (DNOP)   | 117-84-0   | %    | N.D.         |  |
| Diisodecylphthalate (DIDP)   | 26761-40-0 | %    | N.D.         |  |
| Diisononylphthalate (DINP)   | 28553-12-0 | %    | N.D.         |  |
| Di-n-hexyl phthalate (DnHP)  | 84-75-3    | %    | N.D.         |  |

#### Requirements:

| Ordinance      | Parameter                    | Maximum Allowable Limit |
|----------------|------------------------------|-------------------------|
| Proposition 65 | Dibutylphthalate (DBP)       | 0.1%                    |
|                | Benzylbutylphthalate (BBP)   | 0.1%                    |
|                | Diethylhexylphthalate (DEHP) | 0.1%                    |
|                | Diisodecylphthalate (DIDP)   | 0.1%                    |
|                | Di-n-hexyl phthalate (DnHP)  | 0.1%                    |

| Ordinance              | Parameter   | Maximum Allowable Limit |  |  |  |
|------------------------|---|-------------------------|--|--|--|
| Assembly Bill No. 1108 | For toys and Childcare articles:  |                         |  |  |  |
| Chapter 672            | Dibutylphthalate (DBP)  | 0.1%                    |  |  |  |
|                        | Benzylbutylphthalate (BBP)  | 0.1%                    |  |  |  |
|                        | Diethylhexylphthalate (DEHP)  | 0.1%                    |  |  |  |
|                        | For toys and Childcare articles intended for use by a child under three |                         |  |  |  |
|                        | years of age if that product can be placed in the child's mouth:        |                         |  |  |  |
|                        | Di-n-octylphthalate (DNOP)  | 0.1%                    |  |  |  |
|                        | Diisodecylphthalate (DIDP)  | 0.1%                    |  |  |  |
|                        | Diisononylphthalate (DINP)  | 0.1%                    |  |  |  |

Note: -1 mg/kg = 1 ppm = 0.0001%



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#### Other Information / Remark:

- According to the customer's requirement, the appointed material has been tested.



\*\*\*END OF THE REPORT\*\*\*