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# **TEST REPORT**

APPLICANT : One for Fun Limited

ADDRESS : 3-5 Cambuslang Way, Gateway Office Park, Cambuslang,

Glasgow, G32 8ND

SAMPLE DESCRIPTION : GAMES CONTROLLER SENSORY MAZE, RAINBOW

SENSORY MAZE GAME, UNICORN SENSORY MAZE

GAME, DINOSAUR SENSORY MAZE GAME

<u>ITEM NO.</u> : SV21628, SV21629, SV21630, SV21631

COUNTRY OF ORIGIN : China

**COUNTRY OF DESTINATION** : Europe

AGE REQUESTED ON APPLICATION FORM : 3+

LABELED AGE GRADE : Not Present

AGE GRADE APPLIED IN TESTING : Over 3 Years

**SAMPLE RECEIVED DATE** : 30-May-2023

TURN AROUND TIME : 30-May-2023 to 05-Jun-2023

The following test item(s) was/were performed on submitted sample(s) and/or component(s) confirmed by applicant

| TEST REQUESTED                  | TEST METHOD/REGULATION          | RESULT          |
|---------------------------------|---------------------------------|-----------------|
| Physical and Mechanical Hazards | EN 71-1:2014+A1:2018            | Pass            |
| Labeling Requirement            | Directive 2009/48/EC            | See Test Result |
| Flammability of Toys            | EN 71-2:2020                    | Pass            |
| Migration of Certain Elements   | EN 71-3:2019+A1:2021            | Pass            |
| Phthalates Content              | REACH Annex XVII, Entry 51 & 52 | Pass            |
| Total Cadmium Content           | REACH Annex XVII, Entry 23      | Pass            |

Samples are obtained by express delivery, Results obtained refer only to samples, products or material received in Laboratory, as described in point related to sample description, and tested in conditions shown in present report. Eurofins Product Testing Service (Shanghai) Co., Ltd ensures that this job has been performed according to our Quality System and complying contract and legal conditions. If you happen to have any comments, please do it by sending email to <a href="mailto:info.sh@eurofins.com">info.sh@eurofins.com</a> and referring to this report number. Reproduction of this document is only valid if it is done completely and under the written permission of Eurofins Product Testing Service (Shanghai) Co., Ltd. If you happen to have any complaints, please do it by sending email to <a href="mailto:chinacomplaint@eurofins.com">chinacomplaint@eurofins.com</a> and referring to this report number.





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### Eurofins (Shanghai) contact information

Customer service: YukikoGao@eurofins.com/ 36202997 Sales specialist: JessicaWang@eurofins.com/ 36202997

\*\*\*\*\*\*\* FOR FURTHER DETAILS, PLEASE REFER TO THE FOLLOWING PAGE(S) \*\*\*\*\*\*\*\*\*\*\*\*\*

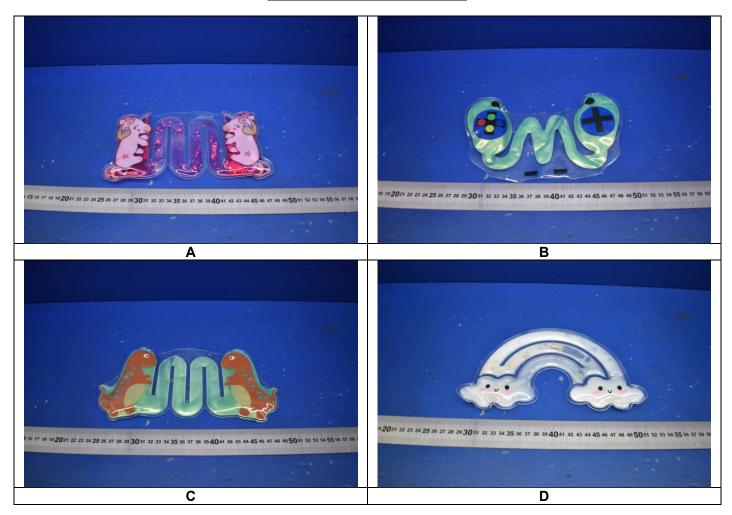
Signed for and on behalf of Eurofins Product Testing Service (Shanghai) Co., Ltd





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# **SAMPLE PHOTO(S)**



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# **COMPONENT LIST**

| Component No. | Component                                  | Sample No. |
|---------------|--|------------|
| 1             | Transparent soft plastic excluding coating | A,B,C,D    |
| 2             | Multi-color coating on plastic             | A          |
| 3             | Multi-color coating on plastic             | В          |
| 4             | Multi-color coating on plastic             | С          |
| 5             | Multi-color coating on plastic             | D          |



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## **TEST RESULT**

## **Physical and Mechanical Hazards**

Test Request: As specified in European Standard on Safety of Toys EN 71-1:2014+A1:2018

| Section   | Description  | Result |
|-----------|--|--------|
| 4         | General requirements   |        |
| 4.1       | Material cleanliness (by visual assessment)                          | Р      |
| 4.2       | Assembly   | N/A    |
| 4.3       | Flexible plastic sheeting  | N/A    |
| 4.4       | Toy Bags   | N/A    |
| 4.5       | Glass  | N/A    |
| 4.6       | Expanding Materials  | N/A    |
| 4.7       | Edges  | Р      |
| 4.8       | Points and Metallic Wires  | Р      |
| 4.9       | Protruding parts   | N/A    |
| 4.10      | Parts moving against each other                                      |        |
| 4.10.1    | Folding and sliding mechanisms                                       | N/A    |
| 4.10.2    | Driving mechanisms.  | N/A    |
| 4.10.3    | Hinges   | N/A    |
| 4.10.4    | Springs  | N/A    |
| 4.11      | Mouth-actuated toys and other toys intended to be put in the mouth   | N/A    |
| 4.12      | Balloons   | N/A    |
| 4.13      | Cords of toy kites and other flying toys.                            | N/A    |
| 4.14      | Enclosures   |        |
| 4.14.1    | Toys which a child can enter   | N/A    |
| 4.14.2    | Masks and helmets  | N/A    |
| 4.15      | Toys intended to bear the mass of a child                            |        |
| 4.15.1    | Toys propelled by the child or by other means                        | N/A    |
| 4.15.2    | Toy bicycles   | N/A    |
| 4.15.3    | Rocking horses and similar toys                                      | N/A    |
| 4.15.4    | Toys not propelled by a child  | N/A    |
| 4.15.5    | Toys scooters  | N/A    |
| 4.16      | Heavy immobile toys  | N/A    |
| 4.17      | Projectiles  |        |
| 4.17.1    | General  | N/A    |
| 4.17.2    | All projectiles  | N/A    |
| 4.17.3    | Projectile toy with stored energy                                    | N/A    |
| 4.17.4    | Certain projectile toys without stored energy                        | N/A    |
| 4.18      | Aquatic toys and inflatable toys                                     | N/A    |
| 4.19      | Percussion caps specifically designed for use in toys and toys using | N/A    |
|           | percussion caps  | IN/A   |
| 4.20      | Acoustics  |        |
| 4.20.2.1  | General  | N/A    |
| 4.20.2.2  | Close-to-the-ear toys  | N/A    |
| 4.20.2.3  | Table-top or floor toys  | N/A    |
| 4.20.2.4  | Hand-held toys   | N/A    |
| 4.20.2.5  | Toys using headphones or earphones                                   | N/A    |
| 4.20.2.6  | Rattles  | N/A    |
| 4.20.2.7  | Squeeze toys   | N/A    |
| 4.20.2.8  | Pull-along or push toys  | N/A    |
| 4.20.2.9  | Percussion toys  | N/A    |
| 4.20.2.10 | Wind toys  | N/A    |



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# **TEST RESULT**

| Section   | Description  | Result |
|-----------|--|--------|
| 4.20.2.11 | Cap-firing toys  | N/A    |
| 4.20.2.12 | Voice toys   | N/A    |
| 4.21      | Toys containing a non-electrical heat source                             | N/A    |
| 4.22      | Small balls  | N/A    |
| 4.23      | Magnets  | N/A    |
| 4.24      | Yo-yo balls  | N/A    |
| 4.25      | Toys attached to food  | N/A    |
| 4.26      | Toy disguise costumes  | N/A    |
| 4.27      | Flying toys  |        |
| 4.27.1    | General  | N/A    |
| 4.27.2    | Rotors and propellers on flying toys                                     | N/A    |
| 4.27.3    | Rotors and propellers on remote controlled flying toys                   | N/A    |
| 5         | Toys intended for children under 36 months                               |        |
| 5.1       | General requirements   | N/A    |
| 5.2       | Soft-filled toys and soft-filled parts of a toy                          | N/A    |
| 5.3       | Plastic sheeting   | N/A    |
| 5.4       | Cords, chains and electrical cables in toys                              | N/A    |
| 5.5       | Liquid-filled toys   | N/A    |
| 5.6       | Speed limitation of electrically-driven ride-on toys                     | N/A    |
| 5.7       | Glass and porcelain  | N/A    |
| 5.8       | Shape and size of certain toys   | N/A    |
| 5.9       | Toys comprising monofilament fibres                                      | N/A    |
| 5.10      | Small balls  | N/A    |
| 5.11      | Play figures   | N/A    |
| 5.12      | Hemispheric-shaped toys  | N/A    |
| 5.13      | Suction cups   | N/A    |
| 5.14      | Straps intended to be worn fully or partially around the neck            | N/A    |
| 5.15      | Sledges with cords for pulling   | N/A    |
| 6         | Packaging  | N/A    |
| 7         | Warnings, markings and instructions for use                              |        |
| 7.1       | General  | N/A    |
| 7.2       | Toys not intended for children under 36 months                           | N/A    |
| 7.3       | Latex Balloons   | N/A    |
| 7.4       | Aquatic toys   | N/A    |
| 7.5       | Functional Toys  | N/A    |
| 7.6       | Hazardous sharp functional edges and points                              | N/A    |
| 7.7       | Projectiles toys   | N/A    |
| 7.8       | Imitation protective masks and helmets                                   | N/A    |
| 7.9       | Toy kites  | N/A    |
| 7.10      | Roller skates, inline skates, skateboards and certain other ride-on toys | N/A    |
| 7.11      | Toys intended to be strung across a cradle, cot, or perambulator         | N/A    |
| 7.12      | Liquid-filled teethers   | N/A    |
| 7.13      | Percussion caps specifically designed for use in toys                    | N/A    |
| 7.14      | Acoustics  | N/A    |
| 7.15      | Toys bicycles  | N/A    |
| 7.16      | Toys intended to bear the mass of a child                                | N/A    |
| 7.17      | Toys comprising monofilament fibres                                      | N/A    |
| 7.18      | Toy scooters   | N/A    |
| 7.19      | Rocking horses and similar toys  | N/A    |
| 7.19      | Magnetic/electrical experimental sets                                    | N/A    |



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## **TEST RESULT**

| Section | Description   | Result |
|---------|---|--------|
| 7.21    | Toy with electrical cables exceeding 300mm in length                                      | N/A    |
| 7.22    | Toys with cords or chains intended for children of 18 months and over but under 36 months | N/A    |
| 7.23    | Toys intended to be attached to a cradle, cot or perambulator                             | N/A    |
| 7.24    | Sledges with cords for pulling  | N/A    |
| 7.25    | Flying toys   |        |
| 7.25.1  | Flying toys   | N/A    |
| 7.25.2  | Remote controlled flying toys   | N/A    |
| 7.26    | Improvised projectiles  | N/A    |

### Remark:

P - Pass, F - Fail, N/A - Not Applicable, N/C - Not Conduct as per client's request



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## **TEST RESULT**

## **Labeling Requirement**

Test Request: Labeling requirement including Washing/Cleaning instruction, CE mark, importer /

manufacturer name and address, product identification as specified in Directive 2009/48/EC

- Safety of toys

| Labeling Content              | Observation Result | Location | Conclusion   |
|-------------------------------|--------------------|----------|--------------|
| Washing/Cleaning Instruction  | Not Applicable     | -        | -            |
| CE Mark                       | Not Present        | -        | See Remark 1 |
| Importer's Name & Address     | Not Present        | -        | See Remark 2 |
| Manufacturer's Name & Address | Not Present        | -        | See Remark 2 |
| Product ID                    | Not Present        | -        | See Remark 3 |

#### Remark:

- 1. According to TSD 2009/48/EC, The CE marking shall be affixed before the toy is placed on the market and its height must be at least 5mm.
- 2. According to TSD 2009/48/EC, manufacturer's and importer's name, registered trade name or registered trade mark and the address at which the manufacturer can be contacted must be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy.
- 3. 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.

#### Flammability of Toys

Test Request: As Specified in European Standard on Safety of Toys EN 71-2:2020

| Section | Description   | Result |
|---------|---|--------|
| 4       | Requirements  |        |
| 4.1     | General Requirements  | Р      |
| 4.2     | Toys to be worn on the head   | N/A    |
| 4.3     | Toy disguise costumes and toys intended to be worn by a child in play | N/A    |
| 4.4     | Toys intended to be entered by a child                                | N/A    |
| 4.5     | Soft-filled toys  | N/A    |

#### Remark:

P - Pass, F - Fail, N/A - Not Applicable



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## **TEST RESULT**

## **Migration of Certain Elements**

Test Request: Migration of certain elements as specified in European Standard on Safety of Toys EN 71-

3:2019+A1:2021.

Test Method: General elements, with reference to EN 71-3:2019+A1:2021, analysis was performed by

ICP-MS;

Extractable Chromium (VI), with reference to EN 71-3:2019+A1:2021, analysis was

performed by IC-ICP-MS;

Extractable organic tin, with reference to EN 71-3:2019+A1:2021, analysis was performed

by GC-MS.

| Toot Itom/o):                          |       | Result |     |     |     |     |  |  |
|--|-------|--------|-----|-----|-----|-----|--|--|
| Test Item(s):                          | Unit  | 1      | 2   | 3   | 4   | 5   |  |  |
| Category Type                          |       | III    | III | III | III | III |  |  |
| Extractable Lead (Pb)                  | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Antimony (Sb)              | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Arsenic (As)               | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Barium (Ba)                | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Cadmium (Cd)               | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Mercury (Hg)               | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Selenium (Se)              | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Boron (B)                  | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Cobalt (Co)                | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Manganese (Mn)             | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Strontium (Sr)             | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Zinc (Zn)                  | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Copper (Cu)                | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Aluminum (AI)              | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Nickel (Ni)                | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Tin (Sn)                   | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Chromium#2                 | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Organic Tin#1              | mg/kg | ND     | ND  | ND  | ND  | ND  |  |  |
| Extractable Chromium (III) (Cr III) #3 | mg/kg | -      | -   | -   | -   | -   |  |  |
| Extractable Chromium (VI) (Cr VI)      | mg/kg | -      | -   | -   | -   | -   |  |  |

#### Note:

- #1 The migration of organic tin is expressed as tributyltin.
- #2 If the migration of total Chromium is below the maximum limit for Chromium (VI), it can be inferred that the material complies with the requirements for both Chromium(III) and Chromium(VI).
- #3 In particular Chromium (III) is calculated by subtracting the Chromium (VI) concentration from the total chromium concentration.

#### Remarks:

mg/kg = milligram per kilogram
MDL = Method Detection Limit
ND = Not Detected, less than MDL



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## **TEST RESULT**

### Limits –MDL per category type:

| Test Item(s):                       | Unit  | Limit | MDL  | Limit | MDL   | Limit  | MDL  |  |
|-------------------------------------|-------|-------|------|-------|-------|--------|------|--|
| Category Type                       |       |       |      | I     | il    |        | III  |  |
| Extractable Lead (Pb)               | mg/kg | 2.0   | 1.0  | 0.5   | 0.2   | 23     | 10   |  |
| Extractable Antimony (Sb)           | mg/kg | 45    | 5    | 11.3  | 1     | 560    | 10   |  |
| Extractable Arsenic (As)            | mg/kg | 3.8   | 0.2  | 0.9   | 0.1   | 47     | 5    |  |
| Extractable Barium (Ba)             | mg/kg | 1500  | 50   | 375   | 10    | 18750  | 50   |  |
| Extractable Cadmium (Cd)            | mg/kg | 1.3   | 0.1  | 0.3   | 0.05  | 17     | 1    |  |
| Extractable Mercury (Hg)            | mg/kg | 7.5   | 0.5  | 1.9   | 0.2   | 94     | 10   |  |
| Extractable Selenium (Se)           | mg/kg | 37.5  | 2    | 9.4   | 1     | 460    | 10   |  |
| Extractable Boron (B)               | mg/kg | 1200  | 50   | 300   | 10    | 15000  | 50   |  |
| Extractable Cobalt (Co)             | mg/kg | 10.5  | 1    | 2.6   | 0.2   | 130    | 10   |  |
| Extractable Manganese (Mn)          | mg/kg | 1200  | 50   | 300   | 10    | 15000  | 50   |  |
| Extractable Strontium (Sr)          | mg/kg | 4500  | 50   | 1125  | 50    | 56000  | 50   |  |
| Extractable Zinc (Zn)               | mg/kg | 3750  | 50   | 938   | 50    | 46000  | 50   |  |
| Extractable Copper (Cu)             | mg/kg | 622.5 | 10   | 156   | 10    | 7700   | 50   |  |
| Extractable Aluminum (AI)           | mg/kg | 2250  | 50   | 560   | 50    | 28130  | 50   |  |
| Extractable Nickel (Ni)             | mg/kg | 75    | 5    | 18.8  | 2     | 930    | 10   |  |
| Extractable Tin (Sn)                | mg/kg | 15000 | 50   | 3750  | 50    | 180000 | 50   |  |
| Extractable Organic Tin             | mg/kg | 0.9   | 0.2  | 0.2   | 0.2   | 12     | 0.2  |  |
| Extractable Chromium                | mg/kg | -     | 0.02 | -     | 0.005 | -      | 0.02 |  |
| Extractable Chromium (III) (Cr III) | mg/kg | 37.5  | 2    | 9.4   | 1     | 460    | 10   |  |
| Extractable Chromium (VI) (Cr VI)   | mg/kg | 0.02  | 0.02 | 0.005 | 0.005 | 0.053  | 0.02 |  |

Category I: dry, brittle, powder-like or pliable toy material

Category II: liquid or sticky toy material Category III: scrapped-off toy material

"-" = Not Regulated



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## **TEST RESULT**

### **Phthalates Content**

Test Request: Phthalates content as specified in entry 51&52 of annex XVII of REACH Regulation (EC) No

1907/2006 and its amendment Commission Regulation (EU) 2018/2005.

Test Method: EPA 3550C:2007, EPA 8270E:2018, solvent extraction and quantification by GC-MS.

| Test Item(s)                  | CAS No. Unit |   | Limit | MDL   | Result |    |    |    |
|-------------------------------|--------------|---|-------|-------|--------|----|----|----|
| ,                             |              |   |       |       | 1      | 2  | 3  | 4  |
| Di-n-butyl phthalate (DBP)    | 84-74-2      | % | -     | 0.005 | ND     | ND | ND | ND |
| Benzylbutyl phthalate (BBP)   | 85-68-7      | % | -     | 0.005 | ND     | ND | ND | ND |
| Diethylhexyl phthalate (DEHP) | 117-81-7     | % | -     | 0.005 | ND     | ND | ND | ND |
| Diisobutyl phthalate (DIBP)   | 84-69-5      | % | -     | 0.005 | ND     | ND | ND | ND |
| Sum of DEHP, DBP, BBP, DIBP   | -            | % | 0.1   | -     | ND     | ND | ND | ND |
| Di-n-octyl phthalate (DNOP)   | 117-84-0     | % | -     | 0.005 | ND     | ND | ND | ND |
| Diisononyl phthalate (DINP)   | 28553-12-0   | % | -     | 0.005 | ND     | ND | ND | ND |
| Diisodecyl phthalate (DIDP)   | 26761-40-0   | % | ı     | 0.005 | ND     | ND | ND | ND |
| Sum of DNOP, DINP, DIDP       | -            | % | 0.1   | -     | ND     | ND | ND | ND |

| Test Item(s)                  | CAS No. Unit |   | Limit | MDL   | Result |
|-------------------------------|--------------|---|-------|-------|--------|
|                               |              |   |       |       | 5      |
| Di-n-butyl phthalate (DBP)    | 84-74-2      | % | -     | 0.005 | ND     |
| Benzylbutyl phthalate (BBP)   | 85-68-7      | % | -     | 0.005 | ND     |
| Diethylhexyl phthalate (DEHP) | 117-81-7     | % | -     | 0.005 | ND     |
| Diisobutyl phthalate (DIBP)   | 84-69-5      | % | -     | 0.005 | ND     |
| Sum of DEHP, DBP, BBP, DIBP   | -            | % | 0.1   | -     | ND     |
| Di-n-octyl phthalate (DNOP)   | 117-84-0     | % | -     | 0.005 | ND     |
| Diisononyl phthalate (DINP)   | 28553-12-0   | % | -     | 0.005 | ND     |
| Diisodecyl phthalate (DIDP)   | 26761-40-0   | % | -     | 0.005 | ND     |
| Sum of DNOP, DINP, DIDP       | -            | % | 0.1   | -     | ND     |

#### Remarks:

MDL = method detection limit ND = Not detected, less than MDL

"-"= Not Regulated



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## **TEST RESULT**

## **Total Cadmium Content**

Test Request: Total cadmium content as specified in Commission Regulation (EU) 2016/217 amending

entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EPA 3050B:1996, EPA 3052:1996, EN 1122:2001 Method B, acid digestion method was

used and total cadmium content was determined by ICP-OES.

| Test Item(s) | Unit  | Limit   | MDL | Result |    |    |    |  |
|--------------|-------|---------|-----|--------|----|----|----|--|
|              | Unit  | Liffiit | MDL | 2      | 3  | 4  | 5  |  |
| Cadmium (Cd) | mg/kg | 1000    | 5   | ND     | ND | ND | ND |  |

#### Remark:

mg/kg = milligram per kilogram
MDL = method detection limit
ND = Not detected, less than MDL

### **Total Cadmium Content**

Test Request: Total cadmium content as specified in Commission Regulation (EU) 2016/217 amending

entry 23 of Annex XVII of REACH Regulation (EC) No 1907/2006.

Test Method: EPA 3050B:1996, EPA 3052:1996, EN 1122:2001 Method B, acid digestion method was

used and total cadmium content was determined by ICP-OES.

| Test Item(s) | Unit  | Limit | MDL | Result |
|--------------|-------|-------|-----|--------|
|              |       |       |     | 1      |
| Cadmium (Cd) | mg/kg | 100   | 5   | ND     |

#### Remark:

mg/kg = milligram per kilogram
MDL = method detection limit
ND = Not detected, less than MDL