

9F, NO. 39, Dunhua S. Road, Sec. 2, Taipei 106, Taiwan 15 London Road, Hindhead, GU26 6AB, United Kingdom

Tel: (886) 2 2704 8568 / (44) 20 7097 5173 Fax: (886) 2 2704 8141

# <u>Technical Documentation Control Information</u>

Technic	Technical Documentation Detail			
Document NO.	TD-1CM CB			
	Keep products safe and compliance with			
Purpose of Document	2009/48/EC Technical Documentation			
	requirements.			
Prepared By	Mika Chang			
First Draft Date	16-Mar-12			
Next Scheduled Review Date	1-Aug-24			

		Version History
Version Number	Approved Date	Reasons or Comments for Changes
1.0	16-Mar-12	Draw up the original technical documentation
1.1	28-May-13	Updated doc from test report no. TWNC00311395 & TWNC00311396.
1.2	19-Sep-14	Updated doc from test report no. TWNH00040249
1.3	15-Jul-15	Update test report for EN71-1/EN71-2/Cadmium REACH
1.4	5-Jun-17	Update test report for CPSIA/ASTM
1.5	2-Nov-18	Update test report for EN71-1/EN71-3
1.6	20-Jan-19	Revised test report for Phthalates REACH 2018/2005
1.7	10-May-19	Additional test report for CPSIA/ASTM/New EN71- 2/Phthalates REACH
1.8	22-May-22	Additional test report for New EN71-2/New EN71-3/Phthalates REACH/Cadmium REACH
1.9	30-Aug-23	New test report for EN71-1/Phthalates REACH/Cadmium REACH



Document TD-1CM CB
Date: 30-Aug-23

9F, NO. 39, Dunhua S. Road, Sec. 2, Taipei 106, Taiwan 15 London Road, Hindhead, GU26 6AB, United Kingdom Tel: (886) 2 2704 8568 / (44) 20 7097 5173 Fax: (886) 2 2704 8141

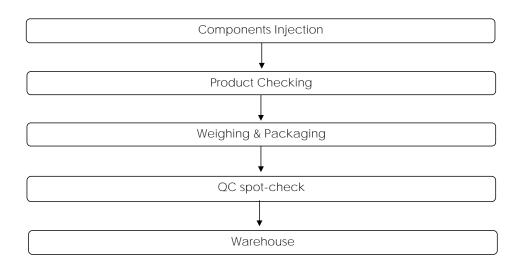
# <u>Technical Documentation</u>

#### A. Detailed Description of the Design and Manufacture

- 1. Product: 1cm Cubes and 1cm Interlocking Cubes
  Product Item Code: 12210-12219, 122100-122199, 12210C, 13510-13519, 135100-135199
- 2. Product Image:



- 3. Detailed description of the design
  Each cube displaces 1 cubic centimeter of water. Teach operations, sorting, graphing, perimeter, area, volume, patterns, chance, weight and measurement.
- 4. Detailed description of manufacture



5. The age suitability: For age 6 years and up

#### 6. BOM (Bill of Material)

Product : 1cm Cubes and 1cm Interlocking Cubes

Product Item Code : 12210-12219, 122100-122199, 13510-13519, 135100-135199

Part Number	Description	Material, Substance, Component	CAS, EINECS or CI	SDS required Y/N
1	BLACK PLASTIC	HIPS	N/A	N
2	BROWN PLASTIC	HIPS	N/A	N
3	PINK PLASTIC	HIPS	N/A	N
4	GREEN PLASTIC	HIPS	N/A	N
5	GRASS GREEN PLASTIC	HIPS	N/A	N
6	ORANGE PLASTIC	HIPS	N/A	N
7	BLUE PLASTIC	HIPS	N/A	N
8	RED PLASTIC	HIPS	N/A	N
9	YELLOW PLASTIC	HIPS	N/A	N
10	WHITE PLASTIC	HIPS	N/A	N
11	PURPLE PLASTIC	HIPS	N/A	N
12	LIGHT BROWN PLASTIC	HIPS	N/A	N



- 7. SDS (Safty Data Sheets): N/A
- 8. The Printing of the Packing of the Toy: N/A
- 9. The Instructions or Leaflet or Accompanying Documents N/A
- B. Safety Assessment of Potential Risk of Toys:
  - 1. Do not put any cube on the floor, avoid falling down.
  - 2. Warning!Choking Hazard-small parts.Not for child under 3 years.

#### Self Assessment / Internal Product Control

Manufacturer: Edx Education Co., Ltd.

Manufacturer Address:

9F, NO. 39, Dunhua S. Road, Sec. 2, Taipei 106, Taiwan 15 London Road, Hindhead, GU26 6AB, United Kingdom

Tel: (886) 2 2704 8568 / (44) 20 7097 5173 Fax: (886) 2 2704 8141

Product: 1cm Cubes and 1cm Interlocking Cubes

Product Item Code: 12210-12219, 122100-122199, 13510-13519, 135100-135199

Product Image:



First party conformity assessment harmonized stanadards referenced in the OJEU used:

EN71 part 1: 2014+A1: 2018

EN71 part 2: 2020

EN71 part 2: 2011+A1: 2014 EN71 part 3: 2019+A1: 2021

EN71 part 3: UK toys (Safety) Regulations 2011 Phthalates: REACH, 2005/84/EC+A1: 2018/2005

Cadmium: REACH, 91/338/EEC

others:

ASTM part 1: ASTM F963-17 excluding section 7.1

ASTM part 1: ASTM F963-17 section 4.2

ASTM part 3: ASTM F963-17 standard CSs For Toy Safety

U.S CFR title 16 part 1500.50

Total Lead (Pb): US CPSIA 2008 Title I, Section 101

Phthalates: US CPSIA 2008 Phthalates: US 16 CFR Part 1307

California Prop65 for toy (Consent Judgement no. BG-350969 and RG-356892)

Approved by

30-Aug-23

Taipei, Taiwan

Andrea Lu

(place of issue)

Compliance Officer, Edx Education Co., Ltd.

(date of issue)

#### D. EC Declaration of Conformity (DoC)

Please find attached EC DoC (Document NO.: TD-1CM CB-DOC).

#### E. Address of Places of Manufacture and Storage

Manufacturer: Edx Education Co., Ltd.

Manufacturer Address:

9F, NO. 39, Dunhua S. Road, Sec. 2, Taipei 106, Taiwan 15 London Road, Hindhead, GU26 6AB, United Kingdom

Tel: (886) 2 2704 8568 / (44) 20 7097 5173 Fax: (886) 2 2704 8141

#### F. Test Reports

Please find attached certifications, TWNH00094064/TWNH00094138/TWNH00098827/TWNH00098828

Test Standard/	Report Number	Report Date	Issued by
EN71-1	TWNH00098828	25-Aug-23	Intertek Taiwan Tel : (+886 2) 6602-2888 Addr: 8F., No.423, Ruiguang Rd., Neihu,Taipei 11492, Taiwan
EN71-2 EN71-3	TWNH00094138	13-May-22	Intertek Taiwan Tel : (+886 2) 6602-2888 Addr: 8F., No.423, Ruiguang Rd., Neihu,Taipei 11492, Taiwan
Phthalates REACH	TWNH00098827	23-Aug-23	Intertek Taiwan Tel : (+886 2) 6602-2888 Addr: 8F., No.423, Ruiguang Rd., Neihu,Taipei 11492, Taiwan
Phthalates US 16 Part 1307	TWNH00098827	23-Aug-23	Intertek Taiwan Tel : (+886 2) 6602-2888 Addr: 8F., No.423, Ruiguang Rd., Neihu,Taipei 11492, Taiwan
Cadmium REACH	TWNH00098827	23-Aug-23	Intertek Taiwan Tel : (+886 2) 6602-2888 Addr: 8F., No.423, Ruiguang Rd., Neihu,Taipei 11492, Taiwan
ASTM	TWNH00094064	13-May-22	Intertek Taiwan Tel : (+886 2) 6602-2888 Addr: 8F., No.423, Ruiguang Rd., Neihu,Taipei 11492, Taiwan
CPSIA	TWNH00098827	23-Aug-23	Intertek Taiwan Tel : (+886 2) 6602-2888 Addr: 8F., No.423, Ruiguang Rd., Neihu,Taipei 11492, Taiwan



Document No. TD-1CM CB-DOC
Date: 30-Aug-23

9F, No. 39, Dunhua S Rd., Sec. 2, Taipei 10658, Taiwan 15 London Road, Hindhead, GU26 6AB, United Kingdom

Tel: (886) 2 2704 8568 / (44) 20 7097 5173 Fax: (886) 2 2704 8141

# EC DECLARATION QF CONFORMITY

 Manufacturer: Edx Education Co., Ltd./Edx Education UK Ltd. Manufacturer Address:

9F, No.39, Dunhua S. Road, Sec. 2, Taipei 106, Taiwan 15 London Road, Hindhead, GU26 6AB, United Kingdom

Tel: (886) 2 2704 8568 /(44) 20 7097 5173 Fax: (886) 2 2704 8141

This declaration of conformity is issued under the sole responsibility

2. This declaration of conformity is issued under the sole responsibility of the manufacturer

Product: 1cm Cubes and 1cm Interlocking Cubes
 Product Item Code: 12210-12219, 122100-122199, 12210C, 13510-13519, 135100-135199

4. Product Image:



- 5. The object of the declaration described in point 3 &4 is in conformity with the relevant Community harmonization legislation: New Toy Safety Directive 2009/48/EC
- 6. References to the relevant harmonised standards used, or references to the specifications in relation to which conformity is declared:

EN71 part 1: 2014+A1; 2018

EN71 part 2: 2020

EN71 part 2: 2011+A1: 2014 EN71 part 3: 2019+A1: 2021

EN71 part 3: UK toys (Safety) Regulations 2011 Phthalates: REACH, 2005/84/EC+A1: 2018/2005

Cadmium: REACH, 91/338/EEC

ASTM part 1: ASTM F963-17 excluding section 7.1

ASTM part 2: ASTM F963-17, section 4.2

ASTM part 3: ASTM F963-17 standard CSS For Toy Safety

U.S CFR title 16 part 1500.50

Total Lead (Pb): US CPSIA 2008 Title I, Section 101

Phathalates: US CPSIA 2008 Phathalates: US 16 CFR Part 1307

California Prop65 for toy (Consent Judgment no. BG-350969 and RG-356892)

Signed for and on behalf of

30-Aug-23

Taipei, TAIWAN

Andrea Lu

(place of issue

Compliance Officer, Edx Education Co., Ltd.

(date of issue)



Number : TWNH00098827 Issue Date: Aug 23, 2023

EDX Education Co., Ltd. Applicant:

9F, No. 39, Sec. 2, Dunhua S. Rd.,

Taipei 10681, Taiwan

Sample Description:

One (1) Group of Submitted Samples Said To Be:

Item Name 1cm Cubes & 1 cm Interlocking Cubes

12210-12219, 122100-122199, 13510-13519, 135100-135199 Item No.

Quantity 1 Group Date Sample Received Aug 15, 2023 Date Test Started Aug 15, 2023

Test Conducted:

As requested by the applicant, for details please refer to attached pages.

Conclusion:

Please see page two.

Remarks:

# = Results were transferred from report No. TWNH00098330 dated Jun 15, 2023.

Authorized By:

On behalf of Intertek Testing Service

Taiwan Limited

Matt Wang General Manager Signed by:

Thomas Chou Manager









Number : TWNH00098827

Result

Not Applicable

(See Note)

Pass

Pass

**Pass** 

Pass

**Pass** 

**Pass** 

Conclusion:

**Tested Sample** Submitted Samples **Standard** Physical And Mechanical Test For Sharp Point & Sharp Edge & Small

U.S. CFR title 16 part 1500.50

Total Lead (Pb) Content in Surface Coating

- As per U.S. Consumer Product Safety Improvement Act 2008,

title I, section 101

Tested Components of **Submitted Samples** 

Total Lead (Pb) Content in Non-Surface Coating Materials (Substrate)

- As per U.S. Consumer Product Safety Improvement Act 2008, title I, section 101

**Phthalates Content** 

 As per US 16 CFR part 1307 for Prohibition of Children's Toys and Child Care Articles Containing Specified Phthalates

 As per California Proposition 65 was quoted from the Consent Judgement no. BG-350969 settled by the Superior Court of the state of California for the County of Alameda, for toys based on the California Proposition 65

 As per annex XVII items 51 and items 52 of the REACH regulation (EC) No. 1907/2006 and its amendment (EU) 2018/2005

Total Cadmium (Cd) Content

 As per annex XVII item 23 of the REACH regulation (EC) No. 1907/2006

Note: Since no scrapable surface coating was found on the submitted samples, the testing scope was not applicable to the submitted samples.

Authorized By:

On behalf of Intertek Testing Sery

Taiwan Limited

Matt Wang General Manager Signed by:

Thomas Chou Manager







homasChou



Number : TWNH00098827

Test Conducted

#### **Physical And Mechanical Test**

As per U.S. Code of Federal Regulations title 16 part 1500.50, the hazards of sharp points, sharp edge and small parts are assessed both before and after applicable use and abuse tests.

Applicant's specified age group for testing: For ages over 3 years.

#### Result:

#### A. Accessible part evaluation

After testing, no internal component was exposed and accessible on the submitted samples.

#### Sharp point evaluation (16 CFR 1500.48)

No sharp point is found after abuse test.

#### Sharp edge evaluation (16 CFR 1500.49)

The sharp edge is not assessed since there is no accessible metal or glass edge found on the submitted sample.

#### D. Small part evaluation (16 CFR 1501)

The small part is not assessed due to the age grading is 36 months and up.

Small part was found at the as received stage, but the assessment is not applicable due to the specified age grading is not for children under 36 months.

#### Total Lead (Pb) Content in Non-Surface Coating Materials (Substrate)

According to CPSIA test method: CPSC-CH-E1002-08.3(non-metal) and CPSC-CH-E1001-08.3(metal), by acid digestion and Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES) analysis.

Result (ppm)	<u>Limit (ppm)</u>
ND	100
	ND N

ppm = Parts per million based on weight of tested sample = mg/kg Remarks:

= Not detected ND Detection limit = 20 ppm









Number : TWNH00098827

Test Conducted

#### **Phthalates Content**

With reference to CPSIA test method: CPSC-CH-C1001-09.4, by solvent extraction and Gas Chromatographic-Mass Spectrometric (GC-MS) analysis.

Compound	Result (%)				Limit <sup>A</sup> (%)	$Limit^{B}$ (%)
<u>Compound</u>	(1/2/8)(#)	(3/4/5)	(6/7/9)	(10/11/12)	<u>LIIIII (76)</u>	<u>LIIIIII (70)</u>
Diethyl hexyl phthalate (DEHP)	ND	ND	ND	ND	0.1	0.1
Benzyl butyl phthalate (BBP)	ND	ND	ND	ND	0.1	0.1
Dibutyl phthalate (DBP)	ND	ND	ND	ND	0.1	0.1
Di-iso-decyl phthalate (DIDP)	ND	ND	ND	ND		0.1
Di-iso-nonyl phthalate (DINP)	ND	ND	ND	ND	0.1	
Di-iso-butyl phthalate (DIBP)	ND	ND	ND	ND	0.1	
Di-n-pentyl phthalate (DPENP)	ND	ND	ND	ND	0.1	
Di- <i>n</i> -hexyl phthalate (DHEXP, DnHP)	ND	ND	ND	ND	0.1	0.1
Dicyclohexyl phthalate (DCHP)	ND	ND	ND	ND	0.1	

Remarks: % = Percentage based on weight of tested sample

> ND = Not detected Detection limit = 0.010 %

= Limit of US 16 CFR part 1307 Limit of California Proposition 65

The above limit was quoted from the Consent Judgement No. BG-350969 settled by the Superior Court of the state of California for the county of Alameda, for toys based on the California Proposition 65.

#### **Phthalates Content**

By solvent extraction and determined by Gas Chromatography-Mass Spectrometer (GC-MS).

#### Entry 51 of Annex XVII to Regulation (EC) No 1907/2006:

Compound	Result (%)				Limit (0/)
<u>Compound</u>	(1/2/8)(#)	(3/4/5)	(6/7/9)	(10/11/12)	<u>Limit (%)</u>
Diethyl hexyl phthalate (DEHP)	ND	ND	ND	ND	0.1
Dibutyl phthalate (DBP)	ND	ND	ND	ND	0.1
Benzyl butyl phthalate (BBP)	ND	ND	ND	ND	0.1
Diisobutyl phthalate (DIBP)	ND	ND	ND	ND	0.1
Sum of DEHP, DBP, BBP & DIBP	ND	ND	ND	ND	0.1

#### Entry 52 of Annex XVII to Regulation (EC) No 1907/2006:

Compound		Limit (%)			
<u>Compound</u>	(1/2/8)(#)	(3/4/5)	<u>(6/7/9)</u>	(10/11/12)	<u>LIIIIII (76)</u>
Di-(iso-nonyl) phthalate (DINP)	ND	ND	ND	ND	
Di-(Iso-decyl) phthalate (DIDP)	ND	ND	ND	ND	
Di-(n-octyl) phthalate (DNOP)	ND	ND	ND	ND	
Sum of DINP, DIDP & DNOP	ND	ND	ND	ND	0.1

% Remarks: = Percentage based on weight of tested sample

> ND Not detected

Detection limit = 0.005% (for each compound)

The above limits are quoted from Annex XVII Items 51 and Items 52 of the REACH regulation (EC) No.

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









Number: TWNH00098827

Test Conducted

#### 5. Total Cadmium (Cd) Content

Acid digestion method was used and total cadmium content was determined by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES).

Tested Component	Result (ppm)	<u>Limit (ppm)</u>
(1)(#)	ND	100
(2)(#)	ND	100
(3)	ND	100
(4)	ND	100
(5)	ND	100
(6)	ND	100
(7)	ND	100
(8)(#)	ND	100
(9)	ND	100
(10)	ND	100
(11)	ND	100
(12)	ND	100

#### Limit:

Not detected for cadmium plating

100 ppm for all plastic materials, paint contain less than 10% zinc, brazing fillers & metal parts of jewelry 1000 ppm for recovered PVC, coatings & paint contain greater than 10% zinc

ppm = Parts per million based on weight of tested sample = mg/kg Remarks:

> ND = Not detected Detection limit = 5 ppm

Above limit was quoted according to annex XVII items 23 of the REACH regulation (EC) No.

1907/2006.

#### **Tested Components:**

- Red plastic cube
- (2) Yellow plastic cube
- Blue plastic cube (3)
- (4) Green plastic cube
- Orange plastic cube (5)
- Purple plastic cube (6)
- (7) White plastic cube
- (8) Black plastic cube
- (9) Pink plastic cube
- (10) Grass green plastic cube
- (11) Dark brown plastic cube
- (12) Reddish brown plastic cube



Fax: (+886-2) 6602-2420

www.intertek-twn.com

Tel: (+886-2) 6602-2888 · 2797-8885







Intertek Testing Services Taiwan Ltd.

全國公證檢驗股份有限公司

### **TEST REPORT**

Number: TWNH00098827

#### Sample photo:



End of Report

Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: http://www.intertektwn.com/terms/. Intertek's responsibility and liability are limited to the terms and conditions of the agreement.

This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk.

Reporting Statements of Conformity: Please note that the test results contain statement of conformity with the decision rules which are based on the specifications of customers, regulations and standards, and does not consider measurement uncertainty.



Fax: (+886-2) 6602-2420

www.intertek-twn.com

Tel: (+886-2) 6602-2888 · 2797-8885





Number : TWNH00098828 Issue Date: Aug 25, 2023

Applicant: EDX Education Co., Ltd.

9F, No. 39, Sec. 2, Dunhua S. Rd.,

Taipei 10681, Taiwan

Sample Description:

One (1) Group of Submitted Samples Said To Be:

Item Name 1cm Cubes & 1 cm Interlocking Cubes

12210-12219, 122100-122199, 13510-13519, 135100-135199 Item No.

Quantity 1 Group Date Sample Received Aug 15, 2023 Date Test Started Aug 15, 2023

Test Conducted:

As requested by the applicant, for details please refer to attached pages.

Conclusion:

**Tested Sample** Standard Result **Submitted Samples** Mechanical and physical properties **Pass** 

— As per European standard on safety of toys EN 71 part 1:

2014 + A1 : 2018

Authorized By:

On behalf of Intertek Testing Service

Taiwan Limited

Matt Wang General Manager









Number: TWNH00098828

Note: The attention of the applicant is drawn to the need for the item to be labeled as below

- Toys made available on the market shall bear the CE marking. The CE marking shall be subject to the general principles set out in Article 30 of Regulation (EC) No 765/2008. The CE marking shall be affixed visibly, legibly and indelibly to the toy, to an affixed label or to the packaging. In the case of small toys and toys consisting of small parts, the CE marking may alternatively be affixed to a label or an accompanying leaflet. Where, in the case of toys sold in counter displays, that is not technically possible, and on condition that the counter display was originally used as packaging for the toy, the CE marking may be affixed to the counter display. Where the CE marking is not visible from outside the packaging, if any, it shall as a minimum be affixed to the packaging. Where specific legislation does not impose specific dimensions, the CE marking shall be at least 5 mm high.
- The manufacturer's name, registered trade name or registered trade mark and the address at which the manufacturer can be contacted shall be indicated on the toy or, where that is not possible, on its packaging or in a document accompanying the toy. This requirement applies also to the name and address etc. of any importer.
- 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.
- Manufacturers and importers shall ensure that the toy is accompanied by instructions and safety
  information in a language or languages easily understood by consumers, as determined by the Member
  State concerned.
- A Member State may, within its territory, stipulate that warnings and safety instructions shall be written in a language or languages easily understood by consumers, as determined by that Member State.

If this information is not fixed to the toy itself, it should be accompanied by a notice in advising the purchaser to retain it.

Authorized By:

On behalf of Intertek Testing Sery

Taiwan Limited

Matt Wang General Manager









Number: TWNH00098828

Test Conducted

5)

7.2

#### **Mechanical and Physical Properties**

As per European standard on safety of toys EN 71 part 1:2014 + A1 : 2018

Toys not intended for children under 36 months

Appropriate age group for testing #1: For ages over 3 years

<u>Claus</u> 4* 5 6	<u>e</u>	Testing item  General requirements  Toys intended for children under 36 months  Packaging	Assessment P NA#2 NA
7*		Warnings, markings and instructions for use	P#1
Rema	rks:	<ul> <li>P = Pass; NA = Not applicable</li> <li>#1 = The applicant has certified that proper age grading, label and marking we final product, and the age grading, label and marking certified meet the this standard. It is applicant's responsibility to make sure the final product grading, label and marking as certified.</li> <li>#2 = Small part was found at the as received stage, but the assessment is not to the specified age grading is not for children under 36 months.</li> <li>* = The following subclauses of the standard are found applicable:</li> </ul>	requirement of ct with the age
1) 2) 3) 4)	4.1 4.7 4.8 7.1	Material cleanliness Edges Points and metallic, wires General	





Number: TWNH00098828

#### Sample photo:



End of Report

Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: <a href="http://www.intertek-twn.com/terms/">http://www.intertek-twn.com/terms/</a>. Intertek's responsibility and liability are limited to the terms and conditions of the agreement.

This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk.

Reporting Statements of Conformity: Please note that the test results contain statement of conformity with the decision rules which are based on the specifications of customers, regulations and standards, and does not consider measurement uncertainty.







Number : TWNH00094138 Issue Date: May 13, 2022

Applicant: EDX Education Co., Ltd.

9F, No. 39, Sec. 2, Dunhua S. Rd.,

Taipei 10681, Taiwan

Sample Description:

One (1) Groups of Submitted Samples Said To Be:

1cm Cubes & 1cm Intertlocking Cubes Item Name

Item No. 12210-12219, 122101-122199, 13510-13519, 135101-135199

Quantity 1 Group Country of Origin Taiwan Date Job Applied May 12, 2022

Test Conducted:

As requested by the applicant, for details please refer to attached pages.

Conclusion:

Tested sample Result Standard

**Submitted Samples** Flammability test

> As per European standard on safety of toys EN 71 part 2 : **Pass**

As per European standard on safety of toys EN 71 part 2 : **Pass** 

2011 + A1 : 2014

Tested Components of 19 Toxic Element Migration Test

**Submitted Samples**  As per European standard on safety of toys EN 71-3 : Pass

2019+A1:2021

As per European Council directive 2009/48/EC and amendment

(EU) 2019/1922 on the safety of toys

 As per UK toys (safety) regulations 2011 **Pass** 

Remarks:

# = Results were transferred from report No. TWNH00089593 dated May 24, 2021.

Authorized By:

On behalf of Intertek Testing Sery

Taiwan Limited

Matt Wang Director

Signed by:

Thomas Chou Manager



homasChou

Page 1 of 7

**Pass** 





Number: TWNH00094138

Test Conducted

#### 1. Flammability Test

As per European standard on safety of toys EN 71 part 2: 2020

<u>Clause</u>	<u>Testing item</u>	<u>Assessment</u>
4.1	General	
	<ul> <li>Cellulose nitrate</li> </ul>	Р
	<ul> <li>Highly flammable solids</li> </ul>	Р
	<ul><li>Pile surface</li></ul>	NA
	<ul> <li>Flammable gas and liquid</li> </ul>	NA
4.2	Toys to be worn on the head (5.2/5.3/5.4)	NA
4.3	Toy disguise costumes and toys intended to be worn by a child in play (5.4)	NA
4.4	Toys intended to be entered by a child (5.4)	NA
4.5	Soft-filled toys(5.5)	NA

Remarks: Pass

> NA Not applicable

#### **Flammability Test**

As per European standard on safety of toys EN 71 part 2: 2011+ A1: 2014.

<u>Clause</u>	<u>Testing item</u>	<u>Assessment</u>	
4.1	General		
	<ul> <li>Cellulose nitrate</li> </ul>	Р	
	<ul><li>Pile surface</li></ul>	NA	
	<ul> <li>Flammable gas and liquid</li> </ul>	NA	
4.2	Toys to be worn on the head (5.2/5.3/5.4)	NA	
4.3	Toy disguise costumes and toys intended to be worn by a child in play (5.4)	NA	
4.4	Toys intended to be entered by a child (5.4)		
4.5	Soft-filled toys(5.5)	NA	
Remarks:	P = Pass		
	NA = Not applicable		







Number: TWNH00094138

Test Conducted

#### 3. 19 Toxic Element Migration Test

As per EN 71-3:2019+A1:2021 and followed by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES) and Inductively Coupled Plasma Mass Spectrometer (ICP-MS).

Further confirmation test was determined by High Performance Liquid Chromatography with Diode Array Detection (HPLC-DAD), Liquid Chromatography /Inductively Coupled Plasma Mass Spectrometer (LC/ICP-MS), and Gas Chromatography-Mass Spectrometer (GC-MS) when necessary.

Category III: Scraped-off toy material

Floment			Result	<u>Detection limit</u>	<u>Limit</u>			
<u>Element</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	<u>(6)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Aluminium (Al)	ND	ND	ND	ND	ND	ND	300	28130
Antimony (Sb)	ND	ND	ND	ND	ND	ND	10	560
Arsenic (As)	ND	ND	ND	ND	ND	ND	10	47
Barium (Ba)	285	200	ND	ND	ND	ND	10	18750
Boron (B)	ND	ND	ND	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	ND	ND	ND	5	17
Chromium (III) (Cr(III))	ND	ND	ND	ND	ND	ND	10	460
Chromium (VI) (Cr(VI))	ND	ND	ND	ND	ND	ND	0.025	0.053
Cobalt (Co)	ND	ND	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	ND	ND	10	7700
Lead (Pb)	ND	ND	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	ND	ND	10	15000
Mercury (Hg)	ND	ND	ND	ND	ND	ND	10	94
Nickel (Ni)	ND	ND	ND	ND	ND	ND	10	930
Selenium (Se)	ND	ND	ND	ND	ND	ND	10	460
Strontium (Sr)	ND	ND	ND	ND	ND	ND	100	56000
Tin (Sn)	ND	ND	ND	ND	ND	ND	10	180000
Organic tin	ND	ND	ND	ND	ND	ND	3.0	12
Zinc (Zn)	ND	ND	ND	ND	ND	ND	100	46000







Number: TWNH00094138

Test Conducted

#### **19 Toxic Element Migration Test**

Element			Result	Detection limit	<u>Limit</u>			
LIGHTEHL	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>	<u>(10)</u>	<u>(11)</u>	<u>(12)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Aluminium (Al)	ND	ND	ND	ND	ND	ND	300	28130
Antimony (Sb)	ND	ND	ND	ND	ND	ND	10	560
Arsenic (As)	ND	ND	ND	ND	ND	ND	10	47
Barium (Ba)	301	265	177	255	193	ND	10	18750
Boron (B)	ND	ND	ND	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	ND	ND	ND	5	17
Chromium (III) (Cr(III))	ND	ND	ND	ND	ND	ND	10	460
Chromium (VI) (Cr(VI))	ND	ND	ND	ND	ND	ND	0.025	0.053
Cobalt (Co)	ND	ND	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	ND	ND	10	7700
Lead (Pb)	ND	ND	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	ND	ND	10	15000
Mercury (Hg)	ND	ND	ND	ND	ND	ND	10	94
Nickel (Ni)	ND	ND	ND	ND	ND	ND	10	930
Selenium (Se)	ND	ND	ND	ND	ND	ND	10	460
Strontium (Sr)	ND	ND	ND	ND	ND	ND	100	56000
Tin (Sn)	ND	ND	ND	ND	ND	ND	10	180000
Organic tin	ND	ND	ND	ND	ND	ND	3.0	12
Zinc (Zn)	ND	ND	ND	ND	ND	ND	100	46000

Remarks: ND = Not detected

- Unless test result was marked with " $\Delta$ ", organic tin content was derived from migration tin (Sn)

- According to the annex F to EN 71-3: 2019+A1:2021, the content of chromium (III) from the migration solution was calculated through the formula: chromium (III) = total chromium chromium(VI).







Number: TWNH00094138

Test Conducted

#### **19 Toxic Element Migration Test**

As per EN 71-3:2019 and followed by Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES) and Inductively Coupled Plasma Mass Spectrometer (ICP-MS).

Further confirmation test was determined by High Performance Liquid Chromatography with Diode Array Detection (HPLC-DAD), Liquid Chromatography /Inductively Coupled Plasma Mass Spectrometer (LC/ICP-MS), and Gas Chromatography-Mass Spectrometer (GC-MS) when necessary.

Category III: Scraped-off toy material

Elomont			Result (	Detection limit	<u>Limit</u>			
<u>Element</u>	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>	<u>(6)</u>	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Aluminium (AI)	ND	ND	ND	ND	ND	ND	300	28130 /70000 <sup>++</sup>
Antimony (Sb)	ND	ND	ND	ND	ND	ND	10	560
Arsenic (As)	ND	ND	ND	ND	ND	ND	10	47
Barium (Ba)	285	200	ND	ND	ND	ND	10	18750
Boron (B)	ND	ND	ND	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	ND	ND	ND	5	17
Chromium (III) (Cr(III))	ND	ND	ND	ND	ND	ND	10	460
Chromium (VI) (Cr(VI))	ND	ND	ND	ND	ND	ND	0.025	0.053 /0.2 <sup>++</sup>
Cobalt (Co)	ND	ND	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	ND	ND	10	7700
Lead (Pb)	ND	ND	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	ND	ND	10	15000
Mercury (Hg)	ND	ND	ND	ND	ND	ND	10	94
Nickel (Ni)	ND	ND	ND	ND	ND	ND	10	930
Selenium (Se)	ND	ND	ND	ND	ND	ND	10	460
Strontium (Sr)	ND	ND	ND	ND	ND	ND	100	56000
Tin (Sn)	ND	ND	ND	ND	ND	ND	10	180000
Organic tin	ND	ND	ND	ND	ND	ND	3.0	12
Zinc (Zn)	ND	ND	ND	ND	ND	ND	100	46000







Number: TWNH00094138

Test Conducted

#### **19 Toxic Element Migration Test**

Floment			Result (	<u>Detection limit</u>	<u>Limit</u>			
<u>Element</u>	<u>(7)</u>	<u>(8)</u>	<u>(9)</u>	(10)	<u>(11)</u>	(12)	<u>(mg/kg)</u>	<u>(mg/kg)</u>
Aluminium (AI)	ND	ND	ND	ND	ND	ND	300	28130 /70000 <sup>++</sup>
Antimony (Sb)	ND	ND	ND	ND	ND	ND	10	560
Arsenic (As)	ND	ND	ND	ND	ND	ND	10	47
Barium (Ba)	301	265	177	255	193	ND	10	18750
Boron (B)	ND	ND	ND	ND	ND	ND	50	15000
Cadmium (Cd)	ND	ND	ND	ND	ND	ND	5	17
Chromium (III) (Cr(III))	ND	ND	ND	ND	ND	ND	10	460
Chromium (VI) (Cr(VI))	ND	ND	ND	ND	ND	ND	0.025	0.053 /0.2 <sup>++</sup>
Cobalt (Co)	ND	ND	ND	ND	ND	ND	10	130
Copper (Cu)	ND	ND	ND	ND	ND	ND	10	7700
Lead (Pb)	ND	ND	ND	ND	ND	ND	10	23
Manganese (Mn)	ND	ND	ND	ND	ND	ND	10	15000
Mercury (Hg)	ND	ND	ND	ND	ND	ND	10	94
Nickel (Ni)	ND	ND	ND	ND	ND	ND	10	930
Selenium (Se)	ND	ND	ND	ND	ND	ND	10	460
Strontium (Sr)	ND	ND	ND	ND	ND	ND	100	56000
Tin (Sn)	ND	ND	ND	ND	ND	ND	10	180000
Organic tin	ND	ND	ND	ND	ND	ND	3.0	12
Zinc (Zn)	ND	ND	ND	ND	ND	ND	100	46000

Remarks: ND = Not detected

= The limit was quoted according to UK toys (safety) regulations 2011 and its amendment.

- Unless test result was marked with "Δ", organic tin content was derived from migration tin (Sn)
- According to the annex F to EN 71-3: 2019, the content of chromium (III) from the migration solution was calculated through the formula: chromium (III) = total chromium - chromium(VI).

#### Tested Components:

- (1) Red plastic cube
- (2) Yellow plastic cube
- (3) Blue plastic cube
- (4) Green plastic cube
- (5) Orange plastic cube
- (6) Purple plastic cube
- (7) Pink plastic cube
- (8) White plastic cube
- (9) Grass green plastic cube
- (10) Black plastic cube
- (11) Brown plastic cube
- (12) Reddish brown plastic cube









Number: TWNH00094138

#### Sample photo:



End of Report

Except where explicitly agreed in writing, all work and services performed by Intertek is subject to our standard Terms and Conditions which can be obtained at our website: http://www.intertektwn.com/terms/. Intertek's responsibility and liability are limited to the terms and conditions of the agreement.

This report is made solely on the basis of your instructions and / or information and materials supplied by you and provide no warranty on the tested sample(s) be truly representative of the sample source. The report is not intended to be a recommendation for any particular course of action, you are responsible for acting as you see fit on the basis of the report results. Intertek is under no obligation to refer to or report upon any facts or circumstances which are outside the specific instructions received and accepts no responsibility to any parties whatsoever, following the issue of the report, for any matters arising outside the agreed scope of the works. This report does not discharge or release you from your legal obligations and duties to any other person. You are the only one authorized to permit copying or distribution of this report (and then only in its entirety). Any such third parties to whom this report may be circulated rely on the content of the report solely at their own risk.

Reporting Statements of Conformity: Please note that the test results contain statement of conformity with the decision rules which are based on the specifications of customers, regulations and standards, and does not consider measurement uncertainty



