



# Test Report

Report No. A2210079833101

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**Company Name** FELCON INTERNATIONAL DEVELOPMENT LIMITED

**shown on Report**

**Address** FLAT W, 17/F, INTERNATIONAL INDUSTRIAL CENTRE, 2-8 KWEI TEI STREET,  
FOTAN, N.T. HONG KONG

**The following sample(s) and sample information was/were submitted and identified by/on the behalf of the client**

Sample Name	Printed PVC
Quantity of Sample	2
Sample Received Date	Mar. 12, 2021
Testing Period	Mar. 12, 2021 to Mar. 18, 2021

**Test Conducted:**

As requested by the client. For details refer to next page(s)

Approved by

Hill Zheng

Technical Manager

Date Mar. 18, 2021

No. T487141291

Date

Centre Testing International Group Co.,Ltd.

CTI Building, Xing Dong Community, Xin'an Sub-district, Bao'an District, Shenzhen City, Guangdong Province, P.R. China

检验检测专用章  
Inspection & Testing Services

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## Executive Summary:

### TEST REQUEST

- 1) EN 71-3:2019 European Standard on Safety of Toys & Directive (EU) 2019/1922
  - Migration of certain elements
- 2) Annex XVII of European regulation (EC) No. 1907/2006 (REACH) with Amendment(s)
  - Cadmium and its compounds
  - Phthalates in plasticized materials
  - Lead and its compounds

### CONCLUSION

**PASS**

**PASS**

**PASS**

**PASS**

\*\*\*\*\* For further details, please refer to the following page(s) \*\*\*\*\*



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## 1) EN 71-3:2019 European Standard on Safety of Toys & Directive (EU) 2019/1922

### ▼ Migration of certain elements

Method(s) EN 71-3:2019 was/were used, and the item(s) was/were analyzed by ICP-OES, ICP-MS, IC-UV, LC-ICP-MS and/or GC-MS.

### Category III: scraped-off toy material

<u>Tested Item(s)</u>	<u>Result (mg/kg)</u>			<u>MDL</u> (mg/kg)	<u>Limit</u> (mg/kg)
	001	002	003		
Aluminium (Al)	N.D.	61	N.D.	50	28130
Antimony (Sb)	N.D.	N.D.	N.D.	5	560
Arsenic (As)	N.D.	N.D.	N.D.	5	47
Barium (Ba)	359	426	N.D.	50	18750
Boron (B)	N.D.	N.D.	N.D.	50	15000
Cadmium (Cd)	N.D.	N.D.	N.D.	1	17
Chromium (III) #1	N.D.	N.D.	N.D.	0.2	460
Chromium (VI)	N.D.	N.D.	N.D.	0.002	0.053
Cobalt (Co)	N.D.	N.D.	N.D.	5	130
Copper (Cu)	N.D.	N.D.	N.D.	50	7700
Lead (Pb)	N.D.	N.D.	N.D.	1	23
Manganese (Mn)	N.D.	N.D.	N.D.	50	15000
Mercury (Hg)	N.D.	N.D.	N.D.	5	94
Nickel (Ni)	N.D.	N.D.	N.D.	5	930
Selenium (Se)	N.D.	N.D.	N.D.	5	460
Strontium (Sr)	N.D.	N.D.	N.D.	50	56000
Tin (Sn) #2	N.D.	N.D.	N.D.	2	180000
Organic tin (TBT) #3	N.D.	N.D.	N.D.	0.05	12
Zinc (Zn)	N.D.	71	N.D.	50	46000

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Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- Filter paper was used instead of membrane filter in lab testing.
- The migration limit of aluminum is implemented in accordance with the European Union Directive (EU) 2019/1922 and will take effect on May 20, 2021.
- <sup>#1</sup> Trivalent chromium (Cr (III)) = Chromium (Cr) - Hexavalent chromium (Cr (VI)).
- <sup>#2</sup> Tin (Sn) content can be used for screen test for organic tins analysis to show compliance with the requirement of EN 71-3:2019.
- <sup>#3</sup> The migration of organic tin is expressed as tributyltin (TBT). Where the tin content exceeded the limit of organic tin, eleven organic tins listed in the table were determined by GC-MS and the client should note there are other organic tins that may be present in toy materials.

Organic tins tested under EN 71-3:2019
Methyl tin (MeT)
Butyl tin (BuT)
Dibutyl tin (DBT)
Tributyl tin (TBT)
Tetrabutyl tin (TeBT)
n-Octyl tin (MOT)
Di-n-octyl tin (DOT)
Di-n-propyl tin (DProT)
Diphenyl tin (DPhT)
Triphenyl tin (TPhT)
Dimethyl tin (DMT)

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## 2) Annex XVII of European regulation (EC) No. 1907/2006 (REACH) with Amendment(s)

### ▼ Cadmium and its compounds

As specified in entry 23, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendments No.552/2009 & No.494/2011 & No.835/2012 & No. 2016/217, method(s) US EPA 3050B:1996 & US EPA 6010D:2018 & EN 1122:2001(E) method B was/were used, and the item(s) was/were analyzed by ICP-OES.

Tested Item(s)	Result (mg/kg)		MDL (mg/kg)	Limit (mg/kg)
	001	002		
Cadmium (Cd)	N.D.	N.D.	2	1000

Tested Item(s)	Result (mg/kg)		MDL (mg/kg)	Limit (mg/kg)
	003			
Cadmium (Cd)	N.D.		2	100

Remark:

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million

### ▼ Phthalates in plasticized materials

As specified in entry 51 & entry 52, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendment No.552/2009 & No. 2015/326 & (EU) 2018/2005, method(s) EN 14372:2004 was/were used, and the item(s) was/were analyzed by GC-MS.

Tested Item(s)	Result (mg/kg)			MDL (mg/kg)	Limit (mg/kg)
	001	002	003		
Di-2-ethylhexyl Phthalate (DEHP)	N.D.	N.D.	N.D.	30	1000
Dibutyl Phthalate (DBP)	N.D.	N.D.	N.D.	30	1000
Benzylbutyl Phthalate (BBP)	N.D.	N.D.	N.D.	30	1000
Di-isobutyl Phthalate (DIBP)	N.D.	N.D.	N.D.	30	1000
SUM(DEHP+DBP+BBP+ DIBP)	N.D.	N.D.	N.D.	--	1000
Diisononyl Phthalate (DINP)	N.D.	N.D.	N.D.	50	--
Di-n-octyl Phthalate (DNOP)	N.D.	N.D.	N.D.	30	--
Diisodecyl Phthalate (DIDP)	N.D.	N.D.	N.D.	50	--
SUM(DINP+DNOP+DIDP)	N.D.	N.D.	N.D.	--	1000

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**Remark:**

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million
- 1000 mg/kg = 0.1%

**▼ Lead and its compounds**

As specified in entry 63, annex XVII of European regulation (EC) No. 1907/2006 (REACH) with amendments No.836/2012 & No.2015/628, method(s) US EPA 3052:1996 & US EPA 6010D:2018 was/were used, and the item(s) was/were analyzed by ICP-OES.

Tested Item(s)	Result (mg/kg)			MDL (mg/kg)	Limit (mg/kg)
	001	002	003		
Lead (Pb)	N.D.	N.D.	N.D.	2	500

**Remark:**

- MDL = Method Detection Limit
- N.D. = Not Detected (<MDL)
- mg/kg = ppm = parts per million

**Tested Sample/Part Description**

- 001 Black grey coating with grey coating(pattern)
- 002 Multi-color coating(pattern)
- 003 White PVC

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## Photo(s) of the sample(s)



### Statement:

1. This report is considered invalid without approved signature, special seal and the seal on the perforation;
2. Company Name and Address shown on Report, the sample(s) and sample information was/were provided by the client who should be responsible for the authenticity which CTI hasn't verified;
3. The result(s) shown in this report refer(s) only to the sample(s) tested;
4. Without written approval of CTI, this report can't be reproduced except in full.

\*\*\* End of Report \*\*\*