



TEST REPORT



AB-0505-T

72202100031

11.08.2020

LAB LOCATION: TURKEY
LAB NO. : (7220)210-0031
SERVICE TYPE: Regular
DATE IN: July 28th, 2020
DATE OUT: August 11th, 2020

MATERIAL SUBMITTED : BIGPOINT KIRTASIYE SAN. ve TİC. LTD. ŞTİ.
(Attn: info@bigpoint.com.tr)
SUPPLIER REFERENCE : BP746-12
STYLE NO : /
BUYER : BIGPOINT KIRTASIYE SAN. ve TİC. LTD. ŞTİ.
MANUFACTURER :
COUNTRY OF ORIGIN :
SAMPLE DESCRIPTION : **Sample A: 12 color Erasable Jumbo Wax Crayon**
COLOR : /
SUBMITTED CARE : /
INSTRUCTION : /
LOT NO : /
LABEL AGE GRADE : 36 M+
TESTED AGE GRADE : 36 M+
GENERAL CONCLUSION : PASS

SUMMARY OF TEST RESULTS

TEST REQUIRED	Sample A
EN 71-1:2014+A1:2018 Physical and Mechanical Properties*	P
EN 71:2:2011+A1:2014 Flammability*	P
EN 71 Part 3: 2019 Migration of Certain Elements*	P
Migration of Certain Elements Chromium III and Chromium VI Confirmation	P
Phthalates*	P
Total Cadmium Content*	P
Polynuclear Aromatic Hydrocarbons (PAHs)*	P
*TURKAK ACCREDITED TESTS	

P:PASS

F:FAIL

REMARK 1*= The reported expanded uncertainty is based on the standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. Unless otherwise is specified, the uncertainty of measurement has not been taken into account when assessing pass/fail of the sample against the requirements of the standard. In case consideration of measurement uncertainties when assessing pass/ fail limits, some results may be in borderline.

The test result, the uncertainties (if applicable) with confidence probability are given on the following pages which are part of this report.

C/N GY/EY

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BV CPS TEST LABORATUVARLARI LTD. STI.
BUREAU VERITAS CONSUMER PRODUCTS SERVICES
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Our report includes all the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from the date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents



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REMARK 1: “Migration of Certain Elements Chromium III and Chromium VI Confirmation*” analysis has been performed by subcontracted laboratory.

EXECUTIVE SUMMARY: Only vendor selected tests have been performed and submitted samples have been rated as “PASS”.

**Bureau Veritas Consumer Products Services Turkey
BV CPS Test Lab. Ltd. Sti.**

**Eylem Yaldizli
Senior Client Team Lead -Hardline**

**Yagiz Barin
Hardline & Pharma Lab. Manager**

-Photo of the Submitted Sample-



TEST RESULTS

EN 71-1: 2014 + A1:2018 PHYSICAL AND MECHANICAL PROPERTIES OF TOYS

Clause	Clause Description	Test Method	RESULT
4	General Requirements	-	(A)
4.1	Material Cleanliness	-	Pass
4.7 & 7.6	Edges	8.11	Pass
4.8 & 7.6	Points And Metallic Wires	8.12, 8.13	Pass
	WARNINGS, INSTRUCTIONS FOR USE		
7	CE Mark	-	Present
7	Importer Name And Address	-	Present
7	Product Identification	-	Present
7.1	General	-	Pass
7.2	Toys not intended for children under 36 months		Pass

***Remark: The methods indicated with “#” are not accredited.**

EN 71-2:2011 + A1: 2014 FLAMMABILITY OF TOYS

Clause	Clause Description	RESULT (A)
4.1	General requirements	PASS



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Test Item	Sample Description
I001	White Box
I002	Blue Crayon
I003	Brown Crayon
I004	Dark Green Crayon
I005	Light Green Crayon
I006	Yellow Crayon
I007	Cream Crayon
I008	Orange Crayon
I009	Red Crayon
I010	Pink Crayon
I011	Purple Crayon
I012	Navy Crayon
I013	Black Crayon

TEST RESULTS

Total Cadmium Content*

Test Method : In House Test Method CPSD-AN-00004-MTHD

Parameter	Unit	Result	Requirement by Client
-	-	I001	-
Total Cadmium (Cd)	ppm	N.D.	100
Conclusion	-	PASS	-

Parameter	Unit	Result	Requirement by Client
-	-	I002+I003+I004	-
Total Cadmium (Cd)	ppm	N.D.	100
Conclusion	-	PASS	-

Parameter	Unit	Result	Requirement by Client
-	-	I005+I006+I007	-
Total Cadmium (Cd)	ppm	N.D.	100
Conclusion	-	PASS	-

Parameter	Unit	Result	Requirement by Client
-	-	I008+I009+I010	-
Total Cadmium (Cd)	ppm	N.D.	100
Conclusion	-	PASS	-

Parameter	Unit	Result	Requirement by Client
-	-	I011+I012+I013	-
Total Cadmium (Cd)	ppm	N.D.	100
Conclusion	-	PASS	-

Note / Key :

ND = Not detected
 mg/kg = milligram(s) per kilogram = ppm = part(s) per million
 10 000 mg/kg = 1 %
 Detection Limit (mg/kg) : 10

“>” = Greater than
 % = percent

No. = Number(s)

TEST RESULTS

MIGRATION OF CERTAIN ELEMENTS

Test Method: European Standard EN 71 Part 3: 2019, Section 8.

See Soluble Element (Parameter) and its corresponding Maximum Allowable Limit (Req.) in Result Table	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

Test Item(s)	Unit	Req.	Result
Type	-	-	I001
Parameter	-	-	-
Aluminium (Al)	mg/kg	70000	ND
Antimony (Sb)	mg/kg	560	ND
Arsenic (As)	mg/kg	47	ND
Barium (Ba)	mg/kg	18750	ND
Boron (B)	mg/kg	15000	ND
Cadmium (Cd)	mg/kg	17	ND
Chromium III (Cr III)	mg/kg	460	ND
Chromium VI (Cr VI)	mg/kg	0.053	ND
Cobalt (Co)	mg/kg	130	ND
Copper (Cu)	mg/kg	7700	4.3
Lead (Pb)	mg/kg	23	ND
Manganese (Mn)	mg/kg	15000	ND
Mercury (Hg)	mg/kg	94	ND
Nickel (Ni)	mg/kg	930	ND
Selenium (Se)	mg/kg	460	ND
Strontium (Sr)	mg/kg	56000	ND
Tin (Sn)	mg/kg	180000	ND
Organic tin	mg/kg	12	ND
Zinc (Zn)	mg/kg	46000	ND
Conclusion	-	-	PASS

Note / Key :

ND = Not detected

NR = Not requested

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

[] = Detection Limit by test method with reference to EN 71 Part 3: 2019, Annex F

Detection Limit (mg/kg) :

For Type I and Type II - Each (As, Cd, Cr III and Hg) : 0.15 ; Cr VI : 0.005 [0.002] ; Organic tin : 0.04 ;

Pb : 0.5 ; Each (Others) : 2

For Type III - Cr III : 0.15 ; Cr VI : 0.05 [0.002] ; Each (Others) : 2

“>” = Greater than

g = gram(s)

Req. = Requirement

INCON: Inconclusive

Remark :

- Result(s) of organic tin was (were) calculated by assuming the soluble tin content was wholly contributed from tributyltin (TBT) cation unless further specified.
- The European Commission amended the maximum allowable limit(s) of migratable lead of European Parliament and Council Directive 2009/48/EC in particular regarding to Annex II, Part III, Point 13. See details in Comment.

Proposals to amendment of European Parliament and Council Directive 2009/48/EC, Annex II, Part III, Point 13 :			
-	Type I	Type II	Type III
Element(s)	Aluminium (Al)	Aluminium (Al)	Aluminium (Al)
Current	5 625 mg/kg	1 406 mg/kg	70 000 mg/kg
Proposed^[b]	2 250 mg/kg	560 mg/kg	28 130 mg/kg
<p>[a] denotes as these maximum allowable limits apply from May 20, 2021 according to European Commission Directive (EU) 2019/1922 of 18 November 2019 amending, for the purposes of adaptation to technical and scientific developments, point 13 of part III of Annex II to Directive 2009/48/EC of the European Parliament and of the Council on the Safety of Toys, as regards aluminium.</p>			

TEST RESULTS

MIGRATION OF CERTAIN ELEMENTS

Test Method: European Standard EN 71 Part 3: 2019, Section 8.

See Soluble Element (Parameter) and its corresponding Maximum Allowable Limit (Req.) in Result Table	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

Test Item(s)	Unit	Req.	Result						
			I002	I004	I005	I006	I007	I008	I009
Type	-	I	I	I	I	I	I	I	I
Parameter	-	-	-	-	-	-	-	-	-
Aluminium (Al)	mg/kg	5625	ND	ND	ND	ND	ND	ND	ND
Antimony (Sb)	mg/kg	45	ND	ND	ND	ND	ND	ND	ND
Arsenic (As)	mg/kg	3.8	ND	ND	ND	ND	ND	ND	ND
Barium (Ba)	mg/kg	1500	ND	ND	2.2	ND	ND	ND	2.2
Boron (B)	mg/kg	1200	ND	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	1.3	ND	0.2	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	37.5	ND	ND	ND	ND	ND	ND	ND
Chromium VI (Cr VI)	mg/kg	0.02	ND	ND	ND	ND	ND	ND	ND
Cobalt (Co)	mg/kg	10.5	ND	ND	ND	ND	ND	ND	ND
Copper (Cu)	mg/kg	622.5	ND	ND	ND	ND	ND	ND	ND
Lead (Pb)	mg/kg	2	ND	ND	ND	ND	ND	ND	ND
Manganese (Mn)	mg/kg	1200	ND	ND	ND	ND	ND	ND	ND
Mercury (Hg)	mg/kg	7.5	ND	ND	ND	ND	ND	ND	ND
Nickel (Ni)	mg/kg	75	ND	ND	ND	ND	ND	ND	ND
Selenium (Se)	mg/kg	37.5	ND	ND	ND	ND	ND	ND	ND
Strontium (Sr)	mg/kg	4500	ND	ND	ND	ND	ND	ND	ND
Tin (Sn)	mg/kg	15000	ND	ND	ND	ND	ND	ND	ND
Organic tin	mg/kg	0.9	ND	ND	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	3750	ND	ND	ND	ND	ND	ND	ND
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS	PASS

Note / Key :

ND = Not detected

NR = Not requested

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

[] = Detection Limit by test method with reference to EN 71 Part 3: 2019, Annex F

Detection Limit (mg/kg) :

For Type I and Type II - Each (As, Cd, Cr III and Hg) : 0.15 ; Cr VI : 0.005 [0.002] ; Organic tin : 0.04 ;

Pb : 0.5 ; Each (Others) : 2

For Type III - Cr III : 0.15 ; Cr VI : 0.05 [0.002] ; Each (Others) : 2

">" = Greater than

g = gram(s)

Req. = Requirement

INCON: Inconclusive

Remark :

- Result(s) of organic tin was (were) calculated by assuming the soluble tin content was wholly contributed from tributyltin (TBT) cation unless further specified.
- The European Commission amended the maximum allowable limit(s) of migratable lead of European Parliament and Council Directive 2009/48/EC in particular regarding to Annex II, Part III, Point 13. See details in Comment.

Proposals to amendment of European Parliament and Council Directive 2009/48/EC, Annex II, Part III, Point 13 :			
-	Type I	Type II	Type III
Element(s)	Aluminium (Al)	Aluminium (Al)	Aluminium (Al)
Current	5 625 mg/kg	1 406 mg/kg	70 000 mg/kg
Proposed^[b]	2 250 mg/kg	560 mg/kg	28 130 mg/kg
<p>[a] denotes as these maximum allowable limits apply from May 20, 2021 according to European Commission Directive (EU) 2019/1922 of 18 November 2019 amending, for the purposes of adaptation to technical and scientific developments, point 13 of part III of Annex II to Directive 2009/48/EC of the European Parliament and of the Council on the Safety of Toys, as regards aluminium.</p>			

TEST RESULTS

MIGRATION OF CERTAIN ELEMENTS

Test Method: European Standard EN 71 Part 3: 2019, Section 8.

See Soluble Element (Parameter) and its corresponding Maximum Allowable Limit (Req.) in Result Table	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

Test Item(s)	Unit	Req.	Result			
			I010	I011	I012	I013
Type	-	I	I	I	I	I
Parameter	-	-	-	-	-	-
Aluminium (Al)	mg/kg	5625	ND	ND	ND	ND
Antimony (Sb)	mg/kg	45	ND	ND	ND	ND
Arsenic (As)	mg/kg	3.8	ND	ND	ND	ND
Barium (Ba)	mg/kg	1500	ND	ND	ND	ND
Boron (B)	mg/kg	1200	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	1.3	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	37.5	ND	ND	ND	ND
Chromium VI (Cr VI)	mg/kg	0.02	ND	ND	ND	ND
Cobalt (Co)	mg/kg	10.5	ND	ND	ND	ND
Copper (Cu)	mg/kg	622.5	ND	ND	ND	ND
Lead (Pb)	mg/kg	2	ND	ND	ND	ND
Manganese (Mn)	mg/kg	1200	ND	ND	ND	ND
Mercury (Hg)	mg/kg	7.5	ND	ND	ND	ND
Nickel (Ni)	mg/kg	75	ND	ND	ND	ND
Selenium (Se)	mg/kg	37.5	ND	ND	ND	ND
Strontium (Sr)	mg/kg	4500	ND	ND	ND	ND
Tin (Sn)	mg/kg	15000	ND	ND	ND	ND
Organic tin	mg/kg	0.9	ND	ND	ND	ND
Zinc (Zn)	mg/kg	3750	ND	ND	ND	ND
Conclusion	-	-	PASS	PASS	PASS	PASS

Note / Key :

ND = Not detected

NR = Not requested

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

[] = Detection Limit by test method with reference to EN 71 Part 3: 2019, Annex F

Detection Limit (mg/kg) :

For Type I and Type II - Each (As, Cd, Cr III and Hg) : 0.15 ; Cr VI : 0.005 [0.002] ; Organic tin : 0.04 ;

Pb : 0.5 ; Each (Others) : 2

For Type III - Cr III : 0.15 ; Cr VI : 0.05 [0.002] ; Each (Others) : 2

“>” = Greater than

g = gram(s)

Req. = Requirement

INCON: Inconclusive

Remark :

- Result(s) of organic tin was (were) calculated by assuming the soluble tin content was wholly contributed from tributyltin (TBT) cation unless further specified.
- The European Commission amended the maximum allowable limit(s) of migratable lead of European Parliament and Council Directive 2009/48/EC in particular regarding to Annex II, Part III, Point 13. See details in Comment.

Proposals to amendment of European Parliament and Council Directive 2009/48/EC, Annex II, Part III, Point 13 :			
-	Type I	Type II	Type III
Element(s)	Aluminium (Al)	Aluminium (Al)	Aluminium (Al)
Current	5 625 mg/kg	1 406 mg/kg	70 000 mg/kg
Proposed^[b]	2 250 mg/kg	560 mg/kg	28 130 mg/kg
<p>[a] denotes as these maximum allowable limits apply from May 20, 2021 according to European Commission Directive (EU) 2019/1922 of 18 November 2019 amending, for the purposes of adaptation to technical and scientific developments, point 13 of part III of Annex II to Directive 2009/48/EC of the European Parliament and of the Council on the Safety of Toys, as regards aluminium.</p>			

TEST RESULTS

MIGRATION OF CERTAIN ELEMENTS

Test Method: European Standard EN 71 Part 3: 2019, Section 8.

See Soluble Element (Parameter) and its corresponding Maximum Allowable Limit (Req.) in Result Table	Type I	Dry, brittle, powder-like or pliable toy material
	Type II	Liquid or sticky toy material
	Type III	Scraped-off toy material

Note / Key :

	Unit	Req.	Result
Test Item(s)	-	-	1003
Type	-	I	I
Parameter	-	-	-
Aluminium (Al)	mg/kg	5625	ND
Antimony (Sb)	mg/kg	45	ND
Arsenic (As)	mg/kg	3.8	ND
Barium (Ba)	mg/kg	1500	ND
Boron (B)	mg/kg	1200	ND
Cadmium (Cd)	mg/kg	1.3	ND
Chromium III (Cr III)	mg/kg	37.5	0.021
Chromium VI (Cr VI)	mg/kg	0.02	ND
Cobalt (Co)	mg/kg	10.5	ND
Copper (Cu)	mg/kg	622.5	ND
Lead (Pb)	mg/kg	2	ND
Manganese (Mn)	mg/kg	1200	ND
Mercury (Hg)	mg/kg	7.5	ND
Nickel (Ni)	mg/kg	75	ND
Selenium (Se)	mg/kg	37.5	ND
Strontium (Sr)	mg/kg	4500	ND
Tin (Sn)	mg/kg	15000	ND
Organic tin	mg/kg	0.9	ND
Zinc (Zn)	mg/kg	3750	ND
Conclusion	-	-	PASS

ND = Not detected

">" = Greater than

Req. = Requirement

NR = Not requested

g = gram(s)

INCON: Inconclusive

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

[] = Detection Limit by test method with reference to EN 71 Part 3: 2019, Annex F

Detection Limit (mg/kg) :

For Type I and Type II - Each (As, Cd, Cr III and Hg) : 0.15 ; Cr VI : 0.005 [0.002] ; Organic tin : 0.04 ;

Pb : 0.5 ; Each (Others) : 2

For Type III - Cr III : 0.15 ; Cr VI : 0.05 [0.002] ; Each (Others) : 2

Remark :

- Result(s) of organic tin was (were) calculated by assuming the soluble tin content was wholly contributed from tributyltin (TBT) cation unless further specified.
- The European Commission amended the maximum allowable limit(s) of migratable lead of European Parliament and Council Directive 2009/48/EC in particular regarding to Annex II, Part III, Point 13. See details in Comment.

Proposals to amendment of European Parliament and Council Directive 2009/48/EC, Annex II, Part III, Point 13 :			
-	Type I	Type II	Type III
Element(s)	Aluminium (Al)	Aluminium (Al)	Aluminium (Al)
Current	5 625 mg/kg	1 406 mg/kg	70 000 mg/kg
Proposed^[b]	2 250 mg/kg	560 mg/kg	28 130 mg/kg
[a] denotes as these maximum allowable limits apply from May 20, 2021 according to European Commission Directive (EU) 2019/1922 of 18 November 2019 amending, for the purposes of adaptation to technical and scientific developments, point 13 of part III of Annex II to Directive 2009/48/EC of the European Parliament and of the Council on the Safety of Toys, as regards aluminium.			

TEST RESULTS

CHROMIUM (VI) CONFIRMATION

Test Method : European Standard EN 71 Part 3: 2019, Section 8.

Parameter	Unit	Results	Limit
-	-	I003	0.02
Chromium (VI)	mg/kg	ND	
Conclusion	-	PASS	

Note / Key :

ND = Not detected

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

10 000 mg/kg = 1 %

Detection Limit (mg/kg) : 0.02

“>” = Greater than

% = percent

No. = Number(s)

TEST RESULTS

PHTHALATES*

Test Method : BV In-house Test Method CPSD-AN-00095-MTHD
Solvent extraction and analysis by Gas Chromatograph Mass Spectrometer (GC-MS)
or Liquid Chromatograph Mass Spectrometer (LC-MS).

Limit:	Sum of (DBP, BBP, DEHP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum)) Sum of (DNOP, DIDP, DINP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum))
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-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I001	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	162	mg/kg	PASS
	Sum	162	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
Overall Conclusion		-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I002	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
Overall Conclusion		-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I003	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
Overall Conclusion		-	-	PASS

Remark1:

Note:

ND = Not detected

% = percent = 10000 mg/kg

Detection Limit (mg/kg): Each 50; Sum 150

">" = More than

mg/kg = milligram per kilogram

Conc. = Concentration

Remark2:

- The list of phthalates is summarized in table of Appendix

Remark3:

Recommended Max. limit specified by entries 51 and 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC)

TEST RESULTS

PHTHALATES*

Test Method : BV In-house Test Method CPSD-AN-00095-MTHD
Solvent extraction and analysis by Gas Chromatograph Mass Spectrometer (GC-MS)
or Liquid Chromatograph Mass Spectrometer (LC-MS).

Limit:	Sum of (DBP, BBP, DEHP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum)) Sum of (DNOP, DIDP, DINP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum))
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-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I004	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I005	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I006	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

Remark1:

Note:

ND = Not detected

% = percent = 10000 mg/kg

Detection Limit (mg/kg): Each 50; Sum 150

“>” = More than

mg/kg = milligram per kilogram

Conc. = Concentration

Remark2:

- The list of phthalates is summarized in table of Appendix

Remark3:

Recommended Max. limit specified by entries 51 and 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC)

TEST RESULTS

PHTHALATES*

Test Method : BV In-house Test Method CPSD-AN-00095-MTHD
Solvent extraction and analysis by Gas Chromatograph Mass Spectrometer (GC-MS)
or Liquid Chromatograph Mass Spectrometer (LC-MS).

Limit:	Sum of (DBP, BBP, DEHP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum)) Sum of (DNOP, DIDP, DINP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum))
---------------	--

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I007	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I008	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I009	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

Remark1:

Note:

ND = Not detected

% = percent = 10000 mg/kg

Detection Limit (mg/kg): Each 50; Sum 150

">" = More than

mg/kg = milligram per kilogram

Conc. = Concentration

Remark2:

- The list of phthalates is summarized in table of Appendix

Remark3:

Recommended Max. limit specified by entries 51 and 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC)

TEST RESULTS

PHTHALATES*

Test Method : BV In-house Test Method CPSD-AN-00095-MTHD
Solvent extraction and analysis by Gas Chromatograph Mass Spectrometer (GC-MS)
or Liquid Chromatograph Mass Spectrometer (LC-MS).

Limit:	Sum of (DBP, BBP, DEHP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum)) Sum of (DNOP, DIDP, DINP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum))
---------------	--

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I010	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I011	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I012	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

Remark1:

Note:

ND = Not detected

% = percent = 10000 mg/kg

Detection Limit (mg/kg): Each 50; Sum 150

">" = More than

mg/kg = milligram per kilogram

Conc. = Concentration

Remark2:

- The list of phthalates is summarized in table of Appendix

Remark3:

Recommended Max. limit specified by entries 51 and 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC)

TEST RESULTS

PHTHALATES*

Test Method : BV In-house Test Method CPSD-AN-00095-MTHD
Solvent extraction and analysis by Gas Chromatograph Mass Spectrometer (GC-MS)
or Liquid Chromatograph Mass Spectrometer (LC-MS).

Limit:	Sum of (DBP, BBP, DEHP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum)) Sum of (DNOP, DIDP, DINP) : Less than 1000 mg/kg (Sum) (0.1 % (Sum))
---------------	--

- Tested Item(s)	Results			Conclusion
	Detected Analytes	Conc.	Unit	
I013	DBP (Dibutylphthalate)	ND	mg/kg	-
	BBP (Butylbenzylphthalate)	ND	mg/kg	-
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	-
	DIDP (Diisodecylphthalate)	ND	mg/kg	-
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	-
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

Remark1:

Note:

ND = Not detected

% = percent = 10000 mg/kg

Detection Limit (mg/kg): Each 50; Sum 150

“>” = More than

mg/kg = milligram per kilogram

Conc. = Concentration

Remark2:

-

The list of phthalates is summarized in table of Appendix

Remark3:

Recommended Max. limit specified by entries 51 and 52 of Regulation (EC) No 552/2009 amending Annex XVII of REACH Regulation (EC) No 1907/2006 (previously restricted under Directive 2005/84/EC)

TEST RESULTS

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)*

Test method: BV CPS In House Method, CPSD-AN-00090-MTHD ZEK - 01.4-08

Parameter	Unit	Results			Requirements by Client
		I001	I002	I003	
-	-				
Benzo (a) pyrene	mg/kg	ND	ND	ND	0.5 mg/kg
Benzo (e) pyrene	mg/kg	ND	ND	ND	
Benzo (a) anthracene	mg/kg	ND	ND	ND	
Chrysene	mg/kg	ND	ND	ND	
Benzo (b) fluoranthene	mg/kg	ND	ND	ND	
Benzo (j) fluoranthene	mg/kg	ND	ND	ND	
Benzo (k) fluoranthene	mg/kg	ND	ND	ND	
Dibenzo(a,h)anthracene	mg/kg	ND	ND	ND	
Sum	mg/kg	ND	ND	ND	
Conclusion	-	PASS	PASS	PASS	-

Parameter	Unit	Results			Requirements by Client
		I004	I005	I006	
-	-				
Benzo (a) pyrene	mg/kg	ND	ND	ND	0.5 mg/kg
Benzo (e) pyrene	mg/kg	ND	ND	ND	
Benzo (a) anthracene	mg/kg	ND	ND	ND	
Chrysene	mg/kg	ND	ND	ND	
Benzo (b) fluoranthene	mg/kg	ND	ND	ND	
Benzo (j) fluoranthene	mg/kg	ND	ND	ND	
Benzo (k) fluoranthene	mg/kg	ND	ND	ND	
Dibenzo(a,h)anthracene	mg/kg	ND	ND	ND	
Sum	mg/kg	ND	ND	ND	
Conclusion	-	PASS	PASS	PASS	-

ND: NOT DETECTED

">" = Greater than

Req. = Requirement

NR = Not requested

g = gram(s)

INCON. = Inconclusive

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

Detection Limit (mg/kg) : Each : 0.2; Sum : 0.2

Remark : - The list of list of Polynuclear Aromatic Hydrocarbons are summarized in table of Appendix.

TEST RESULTS

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)*

Test method: BV CPS In House Method, CPSD-AN-00090-MTHD ZEK - 01.4-08

Parameter	Unit	Results			Requirements by Client
		I007	I008	I009	
-	-				0.5 mg/kg
Benzo (a) pyrene	mg/kg	ND	ND	ND	
Benzo (e) pyrene	mg/kg	ND	ND	ND	
Benzo (a) anthracene	mg/kg	ND	ND	ND	
Chrysene	mg/kg	ND	ND	ND	
Benzo (b) fluoranthene	mg/kg	ND	ND	ND	
Benzo (j) fluoranthene	mg/kg	ND	ND	ND	
Benzo (k) fluoranthene	mg/kg	ND	ND	ND	
Dibenzo(a,h)anthracene	mg/kg	ND	ND	ND	
Sum	mg/kg	ND	ND	ND	
Conclusion	-	PASS	PASS	PASS	-

Parameter	Unit	Results			Requirements by Client
		I010	I011	I012	
-	-				0.5 mg/kg
Benzo (a) pyrene	mg/kg	ND	ND	ND	
Benzo (e) pyrene	mg/kg	ND	ND	ND	
Benzo (a) anthracene	mg/kg	ND	ND	ND	
Chrysene	mg/kg	ND	ND	ND	
Benzo (b) fluoranthene	mg/kg	ND	ND	ND	
Benzo (j) fluoranthene	mg/kg	ND	ND	ND	
Benzo (k) fluoranthene	mg/kg	ND	ND	ND	
Dibenzo(a,h)anthracene	mg/kg	ND	ND	ND	
Sum	mg/kg	ND	ND	ND	
Conclusion	-	PASS	PASS	PASS	-

ND: NOT DETECTED

">" = Greater than

Req. = Requirement

NR = Not requested

g = gram(s)

INCON. = Inconclusive

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

Detection Limit (mg/kg) : Each : 0.2; Sum : 0.2

Remark : - The list of list of Polynuclear Aromatic Hydrocarbons are summarized in table of Appendix.

TEST RESULTS

POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)*

Test method: BV CPS In House Method, CPSD-AN-00090-MTHD ZEK - 01.4-08

Parameter	Unit	Results	Requirements by Client
-	-	I013	
Benzo (a) pyrene	mg/kg	ND	0.5 mg/kg
Benzo (e) pyrene	mg/kg	ND	
Benzo (a) anthracene	mg/kg	ND	
Chrysene	mg/kg	ND	
Benzo (b) fluoranthene	mg/kg	ND	
Benzo (j) fluoranthene	mg/kg	ND	
Benzo (k) fluoranthene	mg/kg	ND	
Dibenzo(a,h)anthracene	mg/kg	ND	
Sum	mg/kg	ND	
Conclusion	-	PASS	

ND: NOT DETECTED

">" = Greater than

Req. = Requirement

NR = Not requested

g = gram(s)

INCON. = Inconclusive

mg/kg = milligram(s) per kilogram = ppm = part(s) per million

Detection Limit (mg/kg) : Each : 0.2; Sum : 0.2

Remark : - The list of list of Polynuclear Aromatic Hydrocarbons are summarized in table of Appendix.



**BUREAU
VERITAS**

AB-0505-T

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11.08.2020

APPENDIX A

TEST NAME	STANDARD NAME	MEASUREMENT UNCERTAINTY
Polybag /Plastic Thickness Sheeting Measurement	EN 71-1 4.3, 5.3 & 6, 8.25.1	±12,2 %
Yo-Yo Ball Test	EN 71-1 part 4.24, 8.37.1 6 8.37.2	±2,8 %
Torque Test	EN 71-1 part 8.3	±15,7 %
Perimeter of Toys	EN 71-1 part 8.36	±1,2 %
Tension Test	EN 71-1 part 8.4	±18,1 %
Kinetic Energy Test	EN 71-1 part 8.24	±0,9 %
Soft Filled Toys	EN 71-2 part 4.5	±6,97 %
Heavy Metal	DIN EN 71 Part 3	± %9
	BS EN 71: Part 3	± %9

APPENDIX B

TEST NAME	STANDARD NAME	MEASUREMENT UNCERTAINTY
Phthalates	In-house test method CPSD-AN-00095-MTHD	±0.16 x result

List of Phthalates:

No.	Name of Analytes	CAS-No.	No.	Name of Analytes	CAS-No.
1	Butylbenzylphthalate (BBP)	85-68-7	5	Di-iso-nonylphthalate (DINP)	28553-12-0
2	Dibutylphthalate (DBP)	84-74-2	6	Diisodecylphthalate (DIDP)	26761-40-0
3	Di(2-ethylhexyl)-phthalate (DEHP)	117-81-7	7	-	-
4	Di-n-octylphthalate (DNOP)	117-84-0	-	-	-

APPENDIX C

No.	Name of Analytes	CAS-No.
1	Benzo (a) anthracene	56-55-3
2	Chrysene	218-01-9
3	Benzo (a) pyrene	50-32-8
4	Benzo (e) pyrene	192-97-2
5	Dibenzo (a,h) anthracene	53-70-3
6	Benzo (b) fluoranthene	205-99-2
7	Benzo (k) fluoranthene	207-08-9
8	Benzo (j) fluoranthene	205-82-3

APPENDIX D

TEST NAME	STANDARD NAME	MEASUREMENT UNCERTAINTY
Total Cadmium Content	BS EN 1122 CPSD-AN-00004-MTHD	± %3

-END OF REPORT-