

TEST REPORT

AB-0505-T

72202510156
REVISION

22.09.2020

LAB LOCATION:TURKEY
LAB NO. : (7220)251-0156 REVISION
SERVICE TYPE: Regular
DATE IN: September 07th, 2020
DATE OUT: September 14th, 2020
REVISION DATE: September 22th, 2020

MATERIAL SUBMITTED : TC TİCARET BAKANLIĞI İSTANBUL GÜMRÜK ve DIŞ
TİC. BÖLGE MÜD. TİCARET DENETMENLERİ ŞUBE
MÜDÜRLÜĞÜ-1 (Avrupa)
(Attn: Nesim KARADUMAN)
IMPORTER COMPANY : Bigpoint Kirt. San. ve Tic. Ltd. Şti.
MODEL NO : BP740-12
COVER LETTER NO : 98552271-554.01.01-E-00057096970
SUPPLIER REFERENCE : /
ORDER NO : /
SAMPLE RECORD NO : /
APPLICATION NO : A24058721
BRAND NAME : /
BUYER : /
COUNTRY OF ORIGIN : /
SAMPLE DESCRIPTION : **Sample A: TOY**
COLOR : /
LABEL AGE GRADE : 36 M+
TESTED AGE GRADE : 36 M+
GENERAL CONCLUSION : PASS

SUMMARY OF TEST RESULTS

TEST REQUIRED	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
Polycyclic Aromatic Hydrocarbons (PAHs)*	P
*TÜRKAK ACCREDITED TESTS	

P:PASS

F:FAIL

C/N GY/EY

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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.

REMARK 2: 72202510156 test report dated September 14th , 2020 is not valid, it is replaced by this report 72202510156 REVISION.

REMARK 3: In this report the accessible part of the component I007 has been tested and test result has been revised accordingly. "Phthalates*" test result and overall conclusion have been changed as "PASS" from "FAIL".

EXECUTIVE SUMMARY: Only vendor selected tests have been performed and submitted sample has 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

-Photos 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	Manufacturer Name And Address	-	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

Test Item	Sample Description
I001	Red Printed Paper Box
I002	Blue Yellow Pink Green White Cream Printed Paper Box
I003	White Printed Paper Box
I004	Yellow Printed Paper Of Crayons
I005	Blue Printed Paper Of Crayon
I006	Red Orange Blue Green Printed Paper Of Crayons
I007	Transparent Plastic Of Box
I008	White Plastic
I009	Red Crayon
I010	Orange Crayon
I011	Cream Crayon
I012	Yellow Crayon
I013	Light Green Crayon
I014	Dark Green Crayon
I015	Light Blue Crayon
I016	Navy Crayon
I017	Pink Crayon
I018	Purple Crayon
I019	Brown Crayon
I020	Black Crayon

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

-	Unit	Req.	Result
Test Item(s)	-	-	I008
Type	-	III	III
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	ND
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
[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

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

-	Unit	Req.	Result						
Test Item(s)	-	-	I001	I002	I003	I004	I005	I006	I007
Type	-	III	III	III	III	III	III	III	III
Parameter	-	-	-	-	-	-	-	-	-
Aluminium (Al)	mg/kg	70000	726.4	722.4	741.2	12	14	13	23.8
Antimony (Sb)	mg/kg	560	ND	ND	ND	ND	ND	ND	ND
Arsenic (As)	mg/kg	47	ND	ND	ND	ND	ND	ND	ND
Barium (Ba)	mg/kg	18750	ND	ND	2.3	3.1	3.5	2.6	ND
Boron (B)	mg/kg	15000	ND	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	17	ND	ND	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	460	0.20	0.20	0.22	0.07	0.07	0.06	0.12
Chromium VI (Cr VI)	mg/kg	0.053	ND	ND	ND	ND	ND	ND	ND
Cobalt (Co)	mg/kg	130	ND	ND	ND	ND	ND	ND	ND
Copper (Cu)	mg/kg	7700	ND	ND	ND	ND	ND	ND	ND
Lead (Pb)	mg/kg	23	ND	ND	ND	ND	ND	ND	ND
Manganese (Mn)	mg/kg	15000	7.8	7.6	7.5	7.3	7.8	7.3	ND
Mercury (Hg)	mg/kg	94	ND	ND	ND	ND	ND	ND	ND
Nickel (Ni)	mg/kg	930	ND	ND	ND	ND	ND	ND	ND
Selenium (Se)	mg/kg	460	ND	ND	ND	ND	ND	ND	ND
Strontium (Sr)	mg/kg	56000	19.7	19.2	19.7	27.9	31.5	28.7	7.4
Tin (Sn)	mg/kg	180000	ND	ND	ND	ND	ND	ND	ND
Organic tin	mg/kg	12	ND	ND	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	46000	ND	ND	ND	ND	ND	ND	ND
Conclusion	-	-	PASS	PASS	PASS	PASS	PASS	PASS	PASS

Note / Key :

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Pb : 0.5 ; Each (Others) : 2

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

">" = Greater than

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-	Type I	Type II	Type III
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[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.			

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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

-	Unit	Req.	Result						
Test Item(s)	-	-	I009	I010	I011	I012	I013	I014	I015
Type	-	I	I	I	I	I	I	I	I
Parameter	-	-	-	-	-	-	-	-	-
Aluminium (Al)	mg/kg	5625	6.9	2.5	2.0	5.8	7.6	6.2	5.5
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	13.5	ND	ND	4.2	7.5	ND	6.5
Boron (B)	mg/kg	1200	ND	ND	ND	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	1.3	ND	ND	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	37.5	0.119	0.052	0.041	0.094	0.153	0.121	0.081
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	12.1	5.7	5.8	10.3	16.8	14.8	11.9
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

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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

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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
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	Type III	Scraped-off toy material

-	Unit	Req.	Result				
Test Item(s)	-	-	I016	I017	I018	I019	I020
Type	-	I	I	I	I	I	I
Parameter	-	-	-	-	-	-	-
Aluminium (Al)	mg/kg	5625	5.6	3.6	ND	4.4	2.6
Antimony (Sb)	mg/kg	45	ND	ND	ND	ND	ND
Arsenic (As)	mg/kg	3.8	ND	ND	ND	ND	ND
Barium (Ba)	mg/kg	1500	7.7	5.0	ND	ND	ND
Boron (B)	mg/kg	1200	ND	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	1.3	ND	ND	ND	ND	ND
Chromium III (Cr III)	mg/kg	37.5	0.102	0.084	0.037	0.078	0.043
Chromium VI (Cr VI)	mg/kg	0.02	ND	ND	ND	ND	ND
Cobalt (Co)	mg/kg	10.5	ND	ND	ND	ND	ND
Copper (Cu)	mg/kg	622.5	ND	ND	ND	ND	ND
Lead (Pb)	mg/kg	2	ND	ND	ND	ND	ND
Manganese (Mn)	mg/kg	1200	ND	ND	ND	ND	ND
Mercury (Hg)	mg/kg	7.5	ND	ND	ND	ND	ND
Nickel (Ni)	mg/kg	75	ND	ND	ND	ND	ND
Selenium (Se)	mg/kg	37.5	ND	ND	ND	ND	ND
Strontium (Sr)	mg/kg	4500	8.7	9.5	4.2	10.4	4.3
Tin (Sn)	mg/kg	15000	ND	ND	ND	ND	ND
Organic tin	mg/kg	0.9	ND	ND	ND	ND	ND
Zinc (Zn)	mg/kg	3750	ND	ND	ND	ND	ND
Conclusion	-	-	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
[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
-	-	I001	I002	0.053
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	PASS	

Parameter	Unit	Results		Limit
-	-	I003	I004	0.053
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	PASS	

Parameter	Unit	Results		Limit
-	-	I005	I006	0.053
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	PASS	

Parameter	Unit	Results		Limit
-	-	I007	I008	0.053
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	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) : 0.053

“>” = Greater than
% = percent

No. = Number(s)

TEST RESULTS

CHROMIUM (VI) CONFIRMATION

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

Parameter	Unit	Results		Limit
-	-	I009	I010	0.02
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	PASS	

Parameter	Unit	Results		Limit
-	-	I011	I012	0.02
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	PASS	

Parameter	Unit	Results		Limit
-	-	I013	I014	0.02
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	PASS	

Parameter	Unit	Results		Limit
-	-	I015	I016	0.02
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	PASS	

Parameter	Unit	Results		Limit
-	-	I017	I018	0.02
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	PASS	

Parameter	Unit	Results		Limit
-	-	I019	I020	0.02
Chromium (VI)	mg/kg	ND	ND	
Conclusion	-	PASS	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

POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)*

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

Parameter	Unit	Results		Requirements
-	-	I007+I008	I009	Each of 8 PAHs < 0.5 mg/kg
Benzo (a) pyrene	mg/kg	<0.2	<0.2	
Benzo (e) pyrene	mg/kg	<0.2	<0.2	
Benzo (a) anthracene	mg/kg	<0.2	<0.2	
Chrysene	mg/kg	<0.2	<0.2	
Benzo (b) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (j) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (k) fluoranthene	mg/kg	<0.2	<0.2	
Dibenzo(a,h)anthracene	mg/kg	<0.2	<0.2	
Sum	mg/kg	<0.2	<0.2	
Conclusion	-	PASS	PASS	-

Parameter	Unit	Results		Requirements
-	-	I010	I011	Each of 8 PAHs < 0.5 mg/kg
Benzo (a) pyrene	mg/kg	<0.2	<0.2	
Benzo (e) pyrene	mg/kg	<0.2	<0.2	
Benzo (a) anthracene	mg/kg	<0.2	<0.2	
Chrysene	mg/kg	<0.2	<0.2	
Benzo (b) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (j) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (k) fluoranthene	mg/kg	<0.2	<0.2	
Dibenzo(a,h)anthracene	mg/kg	<0.2	<0.2	
Sum	mg/kg	<0.2	<0.2	
Conclusion	-	PASS	PASS	-

Note / Key :

ND = Not detected
mg/kg = milligram(s) per kilogram = ppm = part(s) per million
1 % = 10 000 mg/kg
Detection Limit (mg/kg) : Each : 0.2

“>” = Greater than

Conc. = Concentration
% = percent

Remark 2 :

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

TEST RESULTS

POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)*

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

Parameter	Unit	Results		Requirements
-	-	I012	I013	Each of 8 PAHs < 0.5 mg/kg
Benzo (a) pyrene	mg/kg	<0.2	<0.2	
Benzo (e) pyrene	mg/kg	<0.2	<0.2	
Benzo (a) anthracene	mg/kg	<0.2	<0.2	
Chrysene	mg/kg	<0.2	<0.2	
Benzo (b) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (j) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (k) fluoranthene	mg/kg	<0.2	<0.2	
Dibenzo(a,h)anthracene	mg/kg	<0.2	<0.2	
Sum	mg/kg	<0.2	<0.2	
Conclusion	-	PASS	PASS	-

Parameter	Unit	Results		Requirements
-	-	I014	I015	Each of 8 PAHs < 0.5 mg/kg
Benzo (a) pyrene	mg/kg	<0.2	<0.2	
Benzo (e) pyrene	mg/kg	<0.2	<0.2	
Benzo (a) anthracene	mg/kg	<0.2	<0.2	
Chrysene	mg/kg	<0.2	<0.2	
Benzo (b) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (j) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (k) fluoranthene	mg/kg	<0.2	<0.2	
Dibenzo(a,h)anthracene	mg/kg	<0.2	<0.2	
Sum	mg/kg	<0.2	<0.2	
Conclusion	-	PASS	PASS	-

Note / Key :

ND = Not detected
mg/kg = milligram(s) per kilogram = ppm = part(s) per million
1 % = 10 000 mg/kg
Detection Limit (mg/kg) : Each : 0.2

“>” = Greater than

Conc. = Concentration

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Remark 2 :

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

TEST RESULTS

POLYNUCLEAR AROMATIC HYDROCARBONS (PAHs)*

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

Parameter	Unit	Results		Requirements
-	-	I016	I017	Each of 8 PAHs < 0.5 mg/kg
Benzo (a) pyrene	mg/kg	<0.2	<0.2	
Benzo (e) pyrene	mg/kg	<0.2	<0.2	
Benzo (a) anthracene	mg/kg	<0.2	<0.2	
Chrysene	mg/kg	<0.2	<0.2	
Benzo (b) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (j) fluoranthene	mg/kg	<0.2	<0.2	
Benzo (k) fluoranthene	mg/kg	<0.2	<0.2	
Dibenzo(a,h)anthracene	mg/kg	<0.2	<0.2	
Sum	mg/kg	<0.2	<0.2	
Conclusion	-	PASS	PASS	-

Parameter	Unit	Results			Requirements
-	-	I018	I019	I020	Each of 8 PAHs < 0.5 mg/kg
Benzo (a) pyrene	mg/kg	<0.2	<0.2	<0.2	
Benzo (e) pyrene	mg/kg	<0.2	<0.2	<0.2	
Benzo (a) anthracene	mg/kg	<0.2	<0.2	<0.2	
Chrysene	mg/kg	<0.2	<0.2	<0.2	
Benzo (b) fluoranthene	mg/kg	<0.2	<0.2	<0.2	
Benzo (j) fluoranthene	mg/kg	<0.2	<0.2	<0.2	
Benzo (k) fluoranthene	mg/kg	<0.2	<0.2	<0.2	
Dibenzo(a,h)anthracene	mg/kg	<0.2	<0.2	<0.2	
Sum	mg/kg	<0.2	<0.2	<0.2	
Conclusion	-	PASS	PASS	PASS	-

Note / Key :

ND = Not detected
mg/kg = milligram(s) per kilogram = ppm = part(s) per million
1 % = 10 000 mg/kg
Detection Limit (mg/kg) : Each : 0.2

“>” = Greater than

Conc. = Concentration

% = percent

Remark 2 :

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

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	
I007	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	ND	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I008	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	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	
I009	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

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

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I011	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	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	
I012	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

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

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I014	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	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	
I015	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I016	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I017	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	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	
I018	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I019	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	Overall Conclusion	-	-	PASS

-	Results			Conclusion
Tested Item(s)	Detected Analytes	Conc.	Unit	
I020	DBP (Dibutylphthalate)	ND	mg/kg	PASS
	BBP (Butylbenzylphthalate)	ND	mg/kg	PASS
	DEHP (Di(2-ethylhexyl)-phthalate)	ND	mg/kg	PASS
	Sum	-	mg/kg	PASS
	DNOP (Di-n-octylphthalate)	ND	mg/kg	PASS
	DIDP (Diisodecylphthalate)	ND	mg/kg	PASS
	DINP (Di-iso-nonylphthalate)	ND	mg/kg	PASS
	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)

APPENDIX

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 & 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

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

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

- END OF REPORT -