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EC-TYPE EXAMINATION REPORT

NB 1417

ÉMI-TÜV SÜD Kft.
Central Laboratory
KERMI Department
Budapest, 28/04/2022
File No.: R-1903225
1 / 14 pages

Name of Applicant	**Peppino-Impex Kft.**
address	H-1163 Budapest, Budapesti út 27.
Date of application:	18/03/2022
Name of test samples:	plastic building toy
Producer of tested samples:	Peppino-Impex Kft.
Subject of application:	Test of toys according to Directive 2009/48/EC (Regulation 38/2011 (X.5.) NGM), MSZ EN 71-1:2014+A1:2018, MSZ EN 71-2:2021, MSZ EN 71-3:2019+A1:2021, Lead, Cadmium, phthalates, and PAH determination.
Receipt date of test samples:	16/03/2022
Testing period:	18/03/2022 – 20/04/2022

NAH-1-1351/2019/K
TESTING LABORATORY

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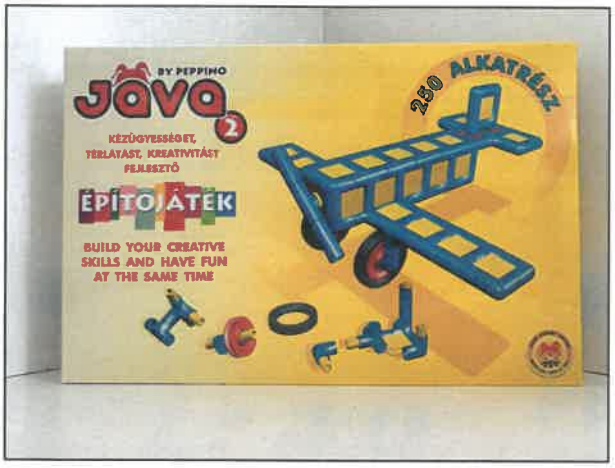
Name and photo of test samples:

Jáva 1 building toy



Jáva 2 building toy

Jáva 3 building toy

Jáva 4 building toy

Jáva 5 building toy

Jáva 6 building toy

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Jáva 7 building toy

Jáva 8 building toy

Jáva 9 building toy

Jáva 10 building toy

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Test results:

Tests required by Directive, 2009/48/EC
(Harmonized Hungarian legislation: regulation 38/2011 (X.5.) NGM)

I. General requirements

Requirement		Result
General requirements	Risks related to the shape, construction, composition, use and function shall be minimized	No risk.

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II. PARTICULAR SAFETY REQUIREMENTS
II/1.
MSZ EN 71-1:2014+A1:2018 Toy safety
Part 1.: Physical and mechanical properties

Requirements				Results
4. General requirements				
4.1.	Material cleanliness	The materials must be clear and free of insect impurities.		Materials are visually clean.
4.7.	Edges	8.11.	Sharpness of edges	No burr, no sharp edges.
4.8.	Points and metallic wires	8.12.	Sharpness of points	No hazardous sharp points.
6.	Packaging			Cardboard or plastic box. Plastic bag, average sheet thickness > 0.038 mm.
7.	Warnings and instruction for use	7.1.	General requirements	The warning labels comply with the requirements of Directive 2009/48/EC. Recommended age: 3 years+

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II/2.

MSZ EN 71-2:2021 Safety of toys
2. Part: Flammability

Requirement			Result
4.	Requirement		
4.1.	General requirements	Must not contain highly flammable solids.	No contain highly flammable solids.

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II./3. Chemical properties
II./3.b.
MSZ EN 71-3:2019+A1:2021 Safety of toys
Part 3. Migration of certain elements

Tested samples: Sample 1: PE
Sample 2: PP
Sample 3: ABS
Sample 4: Rubber

Tested parameter	Result [mg/kg] ± 10 rel. %				LOQ [mg/kg]	Limit [mg/kg]
	1.	2.	3.	4.		III. category
Aluminium (Al)	0.37	<0.25	<0.25	0.50	0.25	28130
Antimony (Sb)	<0.025	<0.025	<0.025	<0.025	0.025	560
Arsenic (As)	<0.05	<0.05	<0.05	<0.05	0.05	47
Barium (Ba)	<0.15	<0.15	<0.15	<0.15	0.15	18750
Boron (B)	<0.25	<0.25	<0.25	<0.25	0.25	15000
Cadmium (Cd)	<0.025	<0.025	<0.025	<0.025	0.025	17
Chromium (III) (Cr)	<0.01	<0.01	<0.01	<0.01	0.01	460
Chromium (VI) (Cr)	<0.01	<0.01	<0.01	<0.01	0.01	0.053
Cobalt (Co)	<0.025	<0.025	<0.025	<0.025	0.025	130
Copper (Cu)	<0.025	<0.025	<0.025	<0.025	0.025	7700
Lead (Pb)	<0.025	<0.025	<0.025	<0.025	0.025	23
Manganese (Mn)	<0.025	<0.025	<0.025	<0.025	0.025	15000
Mercury (Hg)	<0.025	<0.025	<0.025	<0.025	0.025	94
Nickel (Ni)	<0.05	<0.05	<0.05	<0.05	0.05	930
Selenium (Se)	<0.05	<0.05	<0.05	<0.05	0.05	460
Strontium (Sr)	<0.05	<0.05	<0.05	0.12	0.05	56000
Tin (Sn)	<0.05	<0.05	<0.05	<0.05	0.05	180000
Organic tin	<0.05	<0.05	<0.05	<0.05	0.05	12
Zinc (Zn)	<0.25	0.26	<0.25	0.38	0.25	46000

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Tested samples: Sample 5: Colorant mix (black+white)
Sample 6: Colorant mix (silver+orange)
Sample 7: Colorant mix (yellow+blue)
Sample 8: Colorant mix (red)

Tested parameter	Result [mg/kg] ± 10 rel. %				LOQ [mg/kg]	Limit [mg/kg]
	5.	6.	7.	8.		III. category
Aluminium (Al)	3.40	9.37	0.65	<0.25	0.25	28130
Antimony (Sb)	<0.025	<0.025	<0.025	<0.025	0.025	560
Arsenic (As)	<0.05	<0.05	<0.05	<0.05	0.05	47
Barium (Ba)	3.26	69.97	0.30	<0.15	0.15	18750
Boron (B)	<0.25	<0.25	<0.25	<0.25	0.25	15000
Cadmium (Cd)	<0.025	<0.025	<0.025	<0.025	0.025	17
Chromium (III) (Cr)	0.03	<0.01	<0.01	<0.01	0.01	460
Chromium (VI) (Cr)	<0.01	<0.01	<0.01	<0.01	0.01	0.053
Cobalt (Co)	<0.025	<0.025	<0.025	<0.025	0.025	130
Copper (Cu)	<0.025	<0.025	<0.025	<0.025	0.025	7700
Lead (Pb)	<0.025	<0.025	<0.025	<0.025	0.025	23
Manganese (Mn)	0.94	0.09	1.86	<0.025	0.025	15000
Mercury (Hg)	<0.025	<0.025	<0.025	<0.025	0.025	94
Nickel (Ni)	<0.05	<0.05	<0.05	<0.05	0.05	930
Selenium (Se)	<0.05	<0.05	<0.05	<0.05	0.05	460
Strontium (Sr)	5.04	1.15	3.48	<0.05	0.05	56000
Tin (Sn)	<0.05	<0.05	<0.05	<0.05	0.05	180000
Organic tin	<0.05	<0.05	<0.05	<0.05	0.05	12
Zinc (Zn)	11.95	0.54	2.38	<0.25	0.25	46000

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The toy should not contain dangerous substances according to 1907/2006/EC (REACH) and amendments:

Total cadmium-, total lead content

Test method: MSZ EN 17294-2:2005, determination: ICP-MS

Tested samples: Sample 1: PE
Sample 2: PP
Sample 3: ABS
Sample 4: Rubber
Sample 5: Colorant mix (black+white+silver+orange)
Sample 6: Colorant mix (yellow+blue+red)

Tested Parameter	Result				Limit
	1.	2.	3.	4.	
Total cadmium content [mg/kg]	<0.1	<0.1	<0.1	<0.1	100 mg/kg
Total lead content [w/w%]	0.00001	<0.00001	<0.00001	<0.00001	0.05 w/w%

LOQ: Cd: 0.1 mg/kg; Pb: 0.00001 w/w%

Tested Parameter	Result		Limit
	5.	6.	
Total cadmium content [mg/kg]	0.5	<0.1	100 mg/kg
Total lead content [w/w%]	0.00095	0.00011	0.05 w/w%

LOQ: Cd: 0.1 mg/kg; Pb: 0.00001 w/w%

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The toy should not contain dangerous substances according to 1907/2006/EC (REACH) and amendments:

Phthalates

Test methods: CPSC-CH-C1001-09.3

Tested samples: Sample 1: PE
Sample 2: PP
Sample 3: ABS
Sample 4: Rubber

No.	Tested Parameter	CAS No.	Result [w/w%]				LOQ [w/w%]	Limit [w/w%]
			1.	2.	3.	4.		
01	Di-methyl phthalate	131-11-3	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
02	Di-ethyl phthalate	84-66-2	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
03	Di-propyl phthalate (DPrP)	131-16-8	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
04	Di-butyl phthalate (DBP)	84-74-2	<LOQ	<LOQ	<LOQ	<LOQ	0.005	0.1
05	Di-iso-buthyl phthalate (DiBP)	84-69-5	<LOQ	<LOQ	<LOQ	<LOQ	0.005	0.1
06	Benzyl butyl phthalate (BBP)	85-68-7	<LOQ	<LOQ	<LOQ	<LOQ	0.005	0.1
07	Di-pentyl phthalate (DPP)	131-18-0	<LOQ	<LOQ	<LOQ	<LOQ	0.005	0.1
08	Di-iso-pentyl phthalate (DiPP)	605-50-5	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
09	N-pentyl-isopentyl phthalate (nPiPP)	776297-69-9 84777-06-0	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
10	Di-hexyl phthalate (DHP) (DnHP)	84-75-3	<LOQ	<LOQ	<LOQ	<LOQ	0.005	0.1
11	Di-n-octyl phthalate (DnOP)	117-84-0	<LOQ	<LOQ	<LOQ	<LOQ	0.005	0.1
12	Di-iso-octyl phthalate (DiOP)	27554-26-3	<LOQ	<LOQ	<LOQ	<LOQ	0.05	---
13	Di-nonyl phthalate (DNP)	84-76-4	<LOQ	<LOQ	<LOQ	<LOQ	0.05	---
14	Di-iso-nonyl phthalate (DiNP)	68515-48-0	<LOQ	<LOQ	<LOQ	<LOQ	0.05	0.1
15	Di-decyl phthalate (DDP)	84-77-5	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
16	Di-iso-decyl phthalate (DiDP)	26761-40-0	<LOQ	<LOQ	<LOQ	<LOQ	0.05	0.1
17	Di-un-decyl phthalate (DUP)	3648-20-2	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
18	Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	<LOQ	<LOQ	<LOQ	<LOQ	0.005	0.1
19	Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
20	Di-allyl phthalate (DAP)	131-17-9	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
21	Di-phenyl phthalate (DPhP)	84-62-8	<LOQ	<LOQ	<LOQ	<LOQ	0.005	---
22	1.2-Benzenedicarboxylic acid. di-C6-8-branched alkyl esters. C-7 Rich (DiHP)	71888-89-6	<LOQ	<LOQ	<LOQ	<LOQ	0.05	---

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Tested samples: Sample 5: Colorant mix (black+white+silver+orange+ yellow+blue+red)

No.	Tested Parameter	CAS No.	Result [w/w%]	LOQ [w/w%]	Limit [w/w%]
			5.		
01	Di-methyl phthalate	131-11-3	<LOQ	0.005	---
02	Di-ethyl phthalate	84-66-2	<LOQ	0.005	---
03	Di-propyl phthalate (DPrP)	131-16-8	<LOQ	0.005	---
04	Di-butyl phthalate (DBP)	84-74-2	<LOQ	0.005	0.1
05	Di-iso-buthyl phthalate (DiBP)	84-69-5	<LOQ	0.005	0.1
06	Benzyl butyl phthalate (BBP)	85-68-7	<LOQ	0.005	0.1
07	Di-pentyl phthalate (DPP)	131-18-0	<LOQ	0.005	0.1
08	Di-iso-pentyl phthalate (DiPP)	605-50-5	<LOQ	0.005	---
09	N-pentyl-isopentyl phthalate (nPiPP)	776297-69-9 84777-06-0	<LOQ	0.005	---
10	Di-hexyl phthalate (DHP) (DnHP)	84-75-3	<LOQ	0.005	0.1
11	Di-n-octyl phthalate (DnOP)	117-84-0	<LOQ	0.005	0.1
12	Di-iso-octyl phthalate (DiOP)	27554-26-3	<LOQ	0.05	---
13	Di-nonyl phthalate (DNP)	84-76-4	<LOQ	0.05	---
14	Di-iso-nonyl phthalate (DiNP)	68515-48-0	<LOQ	0.05	0.1
15	Di-decyl phthalate (DDP)	84-77-5	<LOQ	0.005	---
16	Di-iso-decyl phthalate (DiDP)	26761-40-0	<LOQ	0.05	0.1
17	Di-un-decyl phthalate (DUP)	3648-20-2	<LOQ	0.005	---
18	Bis(2-ethylhexyl) phthalate (DEHP)	117-81-7	<LOQ	0.005	0.1
19	Bis(2-methoxyethyl) phthalate (DMEP)	117-82-8	<LOQ	0.005	---
20	Di-allyl phthalate (DAP)	131-17-9	<LOQ	0.005	---
21	Di-phenyl phthalate (DPhP)	84-62-8	<LOQ	0.005	---
22	1.2-Benzenedicarboxylic acid. di-C6-8-branched alkyl esters. C-7 Rich (DiHP)	71888-89-6	<LOQ	0.05	---

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Polycyclic aromatic hydrocarbons (PAH)

Test methods: AfPS GS 2019:01 PAK

Tested samples: Sample 1: PE
Sample 2: PP
Sample 3: ABS
Sample 4: Rubber
Sample 5: Colorant (black)
Sample 6: Colorant (white)

PAH	CAS no.	Result [mg/kg]					
		1.	2.	3.	4.	5.	6.
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Phenantrene	85-01-8	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Pyrene	129-00-0	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Anthracene	120-12-7	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Fluoranthene	206-44-0	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Naphthalane	91-20-3	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Sum of 15 PAH (EPA)		<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ

LOQ: 0.2 mg/kg

Requirements: 1272/2013/EU: max. 0.5 mg/kg for parameters marked in **bold.**

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Tested samples: Sample 7: Colorant (silver)
Sample 8: Colorant (orange)
Sample 9: Colorant (yellow)
Sample 10: Colorant (blue)
Sample 11: Colorant (red)

PAH	CAS no.	Result [mg/kg]				
		7.	8.	9.	10.	11.
Benzo [a] pyrene	50-32-8	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo[e]pyrene	192-97-2	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo[j]fluoranthene	205-82-3	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo[a]anthracene	56-55-3	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo [b] fluoranthene	205-99-2	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo [k]fluoranthene	207-08-9	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Chrysene	218-01-9	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Dibenzo [a,h] anthracene	53-70-3	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Benzo [g,h,i]perylene	191-24-2	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Indeno [1,2,3-cd] pyrene	193-39-5	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Phenantrene	85-01-8	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Pyrene	129-00-0	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Anthracene	120-12-7	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Fluoranthene	206-44-0	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Naphthalane	91-20-3	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ
Sum of 15 PAH (EPA)		<LOQ	<LOQ	<LOQ	<LOQ	<LOQ

LOQ: 0.2 mg/kg

Requirements: 1272/2013/EU: max. 0.5 mg/kg for parameters marked in **bold.**

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II./5. Hygiene

Tested parameter	Requirement	Result
Hygiene	Toys must be so designed and manufactured as to meet the requirements of hygiene and cleanliness to avoid any risk of infection. sickness. and contamination	Clean by wet wipe.

II./6. Radioactivity

Tested parameter	Requirement	Result
Radioactivity	Toys must not contain radioactive elements or substances in forms or proportions like to be detrimental to a child's health. According to KERMI-014	The samples did not exceed background radiation.

The samples were used for tests.

József Nagy
Expert

ÉMI-TÜV SÜD KR. KERMI Osztály

Szilveszter Kárpáti
Testing expert

András Varjú
Head of department