

TEST REPORT	
EN 71-1:2011+A3:2014 / EN 71-2:2011+A1:2014/ EN 71-3:2013	
TOY Directive Harmonized Standards	
Report reference No.	15-TBK-1109
Date of issue	2015-12-08
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Testing laboratory	KOREA TESTING & RESEARCH INSTITUTE
Address	98, Gyoyukwon-Ro, Gwacheon-Si, Gyonggi-Do, KOREA
Testing location	Same as above
Applicant.....	CREAMHAUS FRIENDS INC.
Address	2907, Nambusunhwan-ro, Gangnam-gu, Seoul, Korea
Standard.....	EN 71-1:2011+A3:2014/ EN 71-2:2011+A1:2014/ EN 71-3:2013 (Toy)
Test Report Form No.....	EN 71-1:2011+A3:2014 / EN 71-2:2011+A1:2014/ EN 71-3:2013 (Toy) Rev.01 2013-10-17
TRF modified by.....	KTR
Master TRF	KTR-International Certification TEAM
Copyright blank test report.....	This test report is based on the contents of the standard.
Test procedure	EU-CE Mark (TOY Directive – 2009/48/EC Article 19.)
Labelled Age grading	-
Tested Age grading.....	-
Type of test object.....	CREAMHAUS PLAY MAT (SNOW PALETTE/ ICE CASTLE/ RETRO PALETTE &CUBE)
Trademark.....	 www.creamhaus.com
Model and/or type reference.....	CREAMHAUS PLAY MAT (SNOW PALETTE/ ICE CASTLE/ RETRO PALETTE &CUBE)
Manufacturer	Same as Applicant
Specification(s).....	-
Tests Requested	Conclusion
EN 71-1:2011 +A3:2014 - Safety of Toys - Mechanical and Physical Properties	PASS
EN 71-2:2011+A1:2014- Flammability	PASS
EN 71-3:2013 - Migration of certain elements	PASS

Test Report - EN 71-1:2011+A3:2014 / EN 71-2:2011+A1:2014/ EN 71-3:2013

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Tel.: 82-(0)2-2164-0027; Fax: 82-(0)2-2634-0037 / It should not be reproduced in full, without the written approval of KTR.

Possible test case verdicts:

- test case does not apply to the test object : N(.A.)
- test object does meet the requirement..... : P(ass)
- test object does not meet the requirement..... : F(ail)

Attachments: Test Sample Photo

General remarks:

"(See remark #)" refers to a remark appended to the report.

"(See appended table)" refers to a table appended to the report.

Throughout this report a comma is used as the decimal separator.

The test results presented in this report relate only to the object tested.

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General descriptions:

- The CREAMHAUS PLAY MAT (SNOW PALETTE/ ICE CASTLE/ RETRO PALETTE &CUBE) is mat for the children

Copy of marking plate:



CREAMHAUS FRIENDS

CREAMHAUS FRIENDS INC.



Name of goods: Creamhaus play mat

Material : Outer_Premium PU / Form: HD Non-crosslinking Foam

Address: 357, Cheomdansaneop-ro, Daesowon-myeon, Chungju-si, Chungcheongbuk-do, Korea

Tel +82(0)2-4292-2893 Fax +82(0)2-420-2901

Web&shop <http://www.creamhaus.com>

Manufactured in Korea

Direction for the Use

- Please use cloth with neutral detergent to remove stains then wipe with clean and dry cloth.
(Oily papers and cosmetic tissues may smear colors from the product.)
- Please dry the products under shaded area, it may get damaged under direct sun lights.
- Please do not use flammable products. (ex. Acetone)
- Please do not place the products near fire, it may results variations of product shape.
- Permanent markers(Ballpoint pens), oil based crayon, colored pencils will not be erasable.
- Heavy objects on the products may results product shape variations.
- Use of steam vacuum or vacuum cleaner may results variations of product shape.

EN 71-1:2011 / EN 71-2:2011+A1:2014/ EN 71-3:2013			
Clause	Requirement – Test	Result - Remark	Verdict
EN 71-1	Mechanical and Physical Properties		-
4.	General requirements		-
4.1	Material Cleanliness	-	P
	Toys and material used in toys shall be visually clean and free from infestation. The material shall be assessed visually by the unaided eye rather than under magnification.	Clean	P
4.7	Edges	-	P
	Accessible edges shall not present an unreasonable risk of injury.	No Sharp Edges	P
4.8	Points and metallic wires	-	P
	Metallic wires and accessible points shall not present an unreasonable risk of injury.	No Sharp Points	P
5	Toys intended for children under 36 months	-	-
5.1	General requirements	-	P
	When tested according to 8.3(torque test), 8.4(tension test), 8.6(tip over test), 8.7(impact test), 8.8(compression test), toys shall not produce small parts or accessible sharp edges, or accessible sharp points.	No Small Parts No Sharp Edges No Sharp Points	P
6	Packaging		-
	Plastic sheeting and bags shall have an average sheet thickness of 0,038 mm or more when tested according to 8.25.1(plastic sheeting thickness).	0.054 mm	P
EN 71-2	Flammability		P
4.	Requirements	P	

EN 71-1:2011 / EN 71-2:2011+A1:2014/ EN 71-3:2013			
Clause	Requirement – Test	Result - Remark	Verdict
4.1.	<p>The following materials shall not be used in the manufacture of toys:</p> <ul style="list-style-type: none"> -celluloid (cellulose nitrate), except when used in varnish, paint or glue, or in balls of the type used for table tennis or similar games, and materials with the same behaviour in fire as celluloid. Specific materials to which the test flame is applied in order to check compliance of the toy with requirements in 4.2 to 4.5 are considered to comply with this requirement if the toy meets its appropriate requirements in 4.2 to 4.5; -materials with a piled surface which produce surface flash on the approach of a flame. Piled surfaces showing no momentary area of flame over the area of the piled surface remote from the test flame are considered to meet this requirement; -highly flammable solids. <p>In addition, toys shall not contain flammable gases, highly flammable liquids, flammable liquids, flammable gels except as provided for below:</p> <ul style="list-style-type: none"> -flammable liquids, flammable gels and preparations supplied in sealed containers having a maximum volume of 15 ml per container; - highly flammable liquids and flammable liquids being entirely retained within a porous material in capillary channels of writing instruments; - flammable liquids with a viscosity greater than $260 \times 10^{-6} \text{ m}^2/\text{s}$ corresponding to a flow time of more than 38 s when determined in accordance with EN ISO 2431 using cup No. 6; -highly flammable liquids contained in toys covered in EN 71-5. 	-Suitable for 4.1 clause	P
EN 71-3	Migration of certain elements		
	<p>The migration of elements from toys and parts of toys as specified in clause 1 shall comply with the limits given in Table 1 when tested in accordance with clauses 7(Sampling and sample preparation), 8 (Methods of analysis) and 9 (Calculation of results).</p> <p>The requirements of this standard do not apply to toys or parts of toys which, due to their accessibility, function, volume or mass, clearly exclude any hazard due to sucking, licking or swallowing or prolonged skin contact when the toy or part of toy is used as intended or in a foreseeable way, bearing in mind the behaviour of children.</p>	Please see the Table 1.	P

Table 1. Migration of certain elements

- **Test Part Description:** 1. White Pole 2. Cream Body 3. Mono Blue Body 4. Mono Yellow Body 5. Gray Body, 6. Pink Body 7. Yellow Body 8. Blue Body 9. Yellow Label 10. Blue Label 11. Silver Metal Zipper 12. Cream Zipper Plastic 13. Cream Zipper Silicon

- **Test Method:** EN 71-3:2013.

* Precise test of Al, Sb, As, Ba, B Cd, Cr, Co, Cu, Pb, Mn, Hg, Ni, Se, Sr, Sn, Zn, using ICP-AES, ICP-MS

* Precise test of Organic Tin using GC/MS

* Precise test of Cr(VI) using IC UV detector

- **Remarks:**

(1) 1mg/kg=1 ppm = 0.0001%

(2) MDL = Method Detection Limit

(3) ND = Not Detected (<MDL)

(4) Cr(VI) is determined by UV-VIS Spectrometry and Cr(III) is calculated as total Cr

Organic Tin is determined by screening of total Tin

No	Element	Limit in scraped-off toy material	Unit	MDL	1	2	3	4
1	Soluble Aluminium (Al)	70 000	mg/kg	50	ND	ND	ND	ND
2	Soluble Antimony (Sb)	560	mg/kg	5	ND	ND	ND	ND
3	Soluble Arsenic (As)	47	mg/kg	0.5	ND	ND	ND	ND
4	Soluble Barium (Ba)	56 000	mg/kg	50	ND	ND	ND	ND
5	Soluble Boron (B)	15 000	mg/kg	50	ND	ND	ND	ND
6	Soluble Cadmium (Cd)	17	mg/kg	0.1	ND	ND	ND	ND
7	Soluble Chromium (III) (Cr(III))	460	mg/kg	5	ND	ND	ND	ND
8	Soluble Chromium (VI) (Cr(VI))	0,2	mg/kg	0.005	ND	ND	ND	ND
9	Soluble Cobalt (Co)	130	mg/kg	0.5	ND	ND	ND	ND
10	Soluble Copper (Cu)	7 700	mg/kg	50	ND	ND	ND	ND
11	Soluble Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
12	Soluble Manganese (Mn)	15 000	mg/kg	50	ND	ND	ND	ND
13	Soluble Mercury (Hg)	94	mg/kg	0.5	ND	ND	ND	ND
14	Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
15	Soluble Selenium (Se)	460	mg/kg	5	ND	ND	ND	ND
16	Soluble Strontium (Sr)	56 000	mg/kg	50	ND	ND	ND	ND
17	Soluble Tin (Sn)	180 000	mg/kg	0.2	ND	ND	ND	ND
18	Soluble Organic tin	12	mg/kg	0.2	ND	ND	ND	ND
19	Soluble Zinc (Zn)	46 000	mg/kg	50	ND	ND	ND	ND

No	Element	Limit in scraped-off toy material	Unit	MDL	5	6	7	8
1	Soluble Aluminium (Al)	70 000	mg/kg	50	ND	ND	ND	ND
2	Soluble Antimony (Sb)	560	mg/kg	5	ND	ND	ND	ND
3	Soluble Arsenic (As)	47	mg/kg	0.5	ND	ND	ND	ND
4	Soluble Barium (Ba)	56 000	mg/kg	50	ND	ND	ND	ND
5	Soluble Boron (B)	15 000	mg/kg	50	ND	ND	ND	ND
6	Soluble Cadmium (Cd)	17	mg/kg	0.1	ND	ND	ND	ND
7	Soluble Chromium (III) (Cr(III))	460	mg/kg	5	ND	ND	ND	ND
8	Soluble Chromium (VI) (Cr(VI))	0,2	mg/kg	0.005	ND	ND	ND	ND
9	Soluble Cobalt (Co)	130	mg/kg	0.5	ND	ND	ND	ND
10	Soluble Copper (Cu)	7 700	mg/kg	50	ND	ND	ND	ND
11	Soluble Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
12	Soluble Manganese (Mn)	15 000	mg/kg	50	ND	ND	ND	ND
13	Soluble Mercury (Hg)	94	mg/kg	0.5	ND	ND	ND	ND
14	Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
15	Soluble Selenium (Se)	460	mg/kg	5	ND	ND	ND	ND
16	Soluble Strontium (Sr)	56 000	mg/kg	50	ND	ND	ND	ND
17	Soluble Tin (Sn)	180 000	mg/kg	0.2	ND	ND	ND	ND
18	Soluble Organic tin	12	mg/kg	0.2	ND	ND	ND	ND
19	Soluble Zinc (Zn)	46 000	mg/kg	50	ND	ND	ND	ND

No	Element	Limit in scraped-off toy material	Unit	MDL	9	10	11	12
1	Soluble Aluminium (Al)	70 000	mg/kg	50	ND	ND	200	ND
2	Soluble Antimony (Sb)	560	mg/kg	5	ND	ND	ND	ND
3	Soluble Arsenic (As)	47	mg/kg	0.5	ND	ND	ND	ND
4	Soluble Barium (Ba)	56 000	mg/kg	50	ND	ND	ND	ND
5	Soluble Boron (B)	15 000	mg/kg	50	ND	ND	ND	ND
6	Soluble Cadmium (Cd)	17	mg/kg	0.1	ND	ND	ND	ND
7	Soluble Chromium (III) (Cr(III))	460	mg/kg	5	ND	ND	ND	ND
8	Soluble Chromium (VI) (Cr(VI))	0,2	mg/kg	0.005	ND	ND	ND	ND
9	Soluble Cobalt (Co)	130	mg/kg	0.5	ND	ND	ND	ND
10	Soluble Copper (Cu)	7 700	mg/kg	50	ND	ND	ND	ND
11	Soluble Lead (Pb)	160	mg/kg	10	ND	ND	ND	ND
12	Soluble Manganese (Mn)	15 000	mg/kg	50	ND	ND	ND	ND
13	Soluble Mercury (Hg)	94	mg/kg	0.5	ND	ND	ND	ND
14	Soluble Nickel (Ni)	930	mg/kg	10	ND	ND	ND	ND
15	Soluble Selenium (Se)	460	mg/kg	5	ND	ND	ND	ND
16	Soluble Strontium (Sr)	56 000	mg/kg	50	ND	ND	ND	ND
17	Soluble Tin (Sn)	180 000	mg/kg	0.2	ND	ND	ND	ND
18	Soluble Organic tin	12	mg/kg	0.2	ND	ND	ND	ND
19	Soluble Zinc (Zn)	46 000	mg/kg	50	ND	ND	ND	ND

No	Element	Limit in scraped-off toy material	Unit	MDL	13
1	Soluble Aluminium (Al)	70 000	mg/kg	50	ND
2	Soluble Antimony (Sb)	560	mg/kg	5	ND
3	Soluble Arsenic (As)	47	mg/kg	0.5	ND
4	Soluble Barium (Ba)	56 000	mg/kg	50	ND
5	Soluble Boron (B)	15 000	mg/kg	50	ND
6	Soluble Cadmium (Cd)	17	mg/kg	0.1	ND
7	Soluble Chromium (III) (Cr(III))	460	mg/kg	5	ND
8	Soluble Chromium (VI) (Cr(VI))	0,2	mg/kg	0.005	ND
9	Soluble Cobalt (Co)	130	mg/kg	0.5	ND
10	Soluble Copper (Cu)	7 700	mg/kg	50	ND
11	Soluble Lead (Pb)	160	mg/kg	10	ND
12	Soluble Manganese (Mn)	15 000	mg/kg	50	ND
13	Soluble Mercury (Hg)	94	mg/kg	0.5	ND
14	Soluble Nickel (Ni)	930	mg/kg	10	ND
15	Soluble Selenium (Se)	460	mg/kg	5	ND
16	Soluble Strontium (Sr)	56 000	mg/kg	50	ND
17	Soluble Tin (Sn)	180 000	mg/kg	0.2	ND
18	Soluble Organic tin	12	mg/kg	0.2	ND
19	Soluble Zinc (Zn)	46 000	mg/kg	50	ND



