

**REPORT DATE: 02/06/2009** 

# **TEST REPORT**

**CUSTOMER:** Fractiles, Inc.

2525 Arapahoe Ave Ste E4-110

Boulder, CO 80302

**USA** 

Attn: Beverly Johnson

**Product Name:** Fractiles Magnetic Tiling Toy Sets – Large

Age labeling: 6 and Over Age grading: 6 and Over Supplier: Fractiles, Inc. Sample received date: 01/27/2009 Date of testing ended: 02/06/2009

#### **TEST CONDUCTED:**

### AS REQUESTED BY THE APPLICANT, FOR DETAILS REFER TO ATTACHED PAGE(S)

#### **CONCLUSION:**

**Tested Samples** Standard Result

Fractiles Magnetic Tiling Toy 1. ASTM F963-07 Physical & Mechanical 1. Does Comply

Sets – Large (Including Magnet Flux)

> 2. ASTM F963-07 Flammability 2. Does Comply 3. Total Lead in Substrates (CPSIA) 3. Does Comply 4. Phthalates – 6 (CPSIA) 4. Did Not Exceed

PAGE 1/TO BE CONTINUED

**TOTAL 12 PAGES** 

PREPARED BY: SIGNED FOR THE COMPANY BY:

**Kimberly Caputa** 

Kunderey V. Caper Ao

John Nam **Account Manager Technical Support Expert** 

The test results stated in this report relate only to the item(s) tested. This test report may not be reproduced except in full, without written approval of Intertek.

Tests identified with an asterisk (\*) have been subcontracted.



**REPORT DATE:** 02/06/2009

1. Mechanical Hazards: <u>Safety of Toys (ASTM F963-07<sup>€1</sup>)</u>

Sample ID: Fractiles Magnetic Tiling

Toy Sets – Large

Labeled Age Group:For Ages 6 to AdultAppropriate Warning Labeling:N/ARecommended Age Grading:For Ages 6 to AdultMachine Washable Plush Toy:N/ATested Age Grade:For Ages 6 to AdultNumber of Samples:1

<u>Procedure:</u> The submitted samples were tested to the applicable sections of *ASTM F963-07*<sup> $\epsilon$ 1</sup> requirements.

P = Pas	s F = Fail N/		N/A = No	I/A = Not Applicable		
Clause	Description			Р	F	N/A
4	SAFETY REQUIREMENT	S				
4.1	Material quality (visual check on cleanliness)					
4.3.7	Stuffing materials (visu	ual check on contaminations)				$\boxtimes$
4.5	Sound producing toys					
4.5.1.1	Continuous sound prod	uced by close to the ear toys – L <sub>Aeq</sub>				$\boxtimes$
4542	Continuous sound prod	uced by all other toys – L <sub>Aeq</sub>				$\boxtimes$
4.5.1.2	Maximum sound produ	ced by pull along toys – L <sub>Amax</sub>				$\boxtimes$
4.5.1.3	Impulsive sound produc	ced by close to the ear toys – L <sub>Cpeak</sub>				$\boxtimes$
4.5.1.4	Impulsive sound produc	ced by all other toys - L <sub>Cpeak</sub>				$\boxtimes$
4.5.1.5	Impulsive sound produc	ced by percussion caps and explosive	e – L <sub>Cpeak</sub>			$\boxtimes$
4.6	Small objects					
4.6.1	Toys intended for childr	en under 36 months of age				
4.6.2	Mouth actuated toys					$\boxtimes$
4.6.3	Toys and games for 36 r	months to 72 months—Small part w	arning			$\boxtimes$
4.7	Accessible edges (unde	r 8 years of age)				
4.7.1	Potential sharp metal ar	nd glass		$\boxtimes$		
4.7.2	Functional sharp edge 4	8 to 96 monthswarning				$\boxtimes$
4.7.3	Metal toys			$\boxtimes$		
4.7.4	Molded toys			$\boxtimes$		



	P = Pass		F = Fail	N/A = Not Appl	icable	)	
	4.7.5	Exposed b	oolts or threaded rods			$\boxtimes$	
4.8		Projection	Projections (under 8 years of age)				
4.9		Accessible	e points (under 8 years of age)				
	4.9.1	Potential	sharp point				
	4.9.2	Functiona	l sharp point 48 to 96 monthswarning			$\boxtimes$	
	4.9.3	Wood				$\boxtimes$	
4.10		Wires or r	ods			$\boxtimes$	
4.11		Nails and	fasteners			$\boxtimes$	
*4.12		Packaging	; film				
4.13		Folding m	echanisms and hinges				
	4.13.1	Folding m	echanisms			$\boxtimes$	
	4.13.2	Hinge line	clearance			$\boxtimes$	
4.14		Cords and	l elastics				
	4.14.1	Cords, str	aps and elastics (less than 18 months of age)			$\boxtimes$	
	4.14.1.1	Break-awa	ay feature			$\boxtimes$	
	4.14.2	Self retrac	ting pull cords (less than 18 months of age)			$\boxtimes$	
	4.14.3	Pull toys (	less than 36 months of age)			$\boxtimes$	
	4.14.4	Strings an	d lines for flying devices			$\boxtimes$	
	4.14.4	Cords on t	toy bags intended for children up to 18 months			$\boxtimes$	
4.15		Stability a	nd overload requirement				
	4.15.2	Sideways	tability requirements (60 months of age or less)			$\boxtimes$	
	4.15.2.1	Feet avail	able for stabilization:			$\boxtimes$	
	4.15.2.2	Feet unav	railable for stabilization:			$\boxtimes$	
	4.15.3	Fore and a	aft stability (60 months of age or less)			$\boxtimes$	
	4.15.4	Stationary	floor toys			$\boxtimes$	
	4.15.5	Overload	requirements for ride on toys and seat			$\boxtimes$	
4.16		Confined	spaces				
	4.16.1	Ventilatio	n			$\boxtimes$	



P = P	ass	F = Fail N/A = N				
4.16.	2 Closures					$\boxtimes$
4.16.	3 Toys that	enclose the head				$\boxtimes$
4.17	Wheels, ti	res, and axles (aged 96 months or less)				$\boxtimes$
4.18	Holes, clea	arance, and accessibility of mechanisms				
4.18.	1 Accessible	clearances for moveable segments (under 96 mor	nths of age)			$\boxtimes$
4.18.	2 Circular ho	oles in rigid materials (aged 60 months or less)				$\boxtimes$
4.18.	3 Chains and	d belts				
4.18.3.	1 Supporting	g chains (36 months or less in age)				$\boxtimes$
4.18.3.	2 Chains or	belts for ride on toys				$\boxtimes$
4.18.	4 Inaccessib	ility of mechanisms (aged 60 months or less)				$\boxtimes$
4.18.	5 Winding k	eys (under 36 months of age)				$\boxtimes$
4.18.	6 Coil spring	gs				$\boxtimes$
4.19	Simulated	protective devices				
4.19.	1 Eye proteo	ction				$\boxtimes$
4.19.	2 Simulate s	safety protective deviceslabel				$\boxtimes$
4.20	Pacifiers (	under 36 months of age)				
4.20.	2 Small obje	ects				$\boxtimes$
4.20.	2 Nipple len	gth:				
	16 CFR 15	11: APPLICABLE//NOT APPLICABLE				
*4.21	Projectile	toys				
4.21.1.	1 Sharp poir	nt/edge, small part				$\boxtimes$
4.21.1.	2 Tip radius					$\boxtimes$
4.21.1.	3 Kinetic en	ergy and resilient impact surface				$\boxtimes$
4.21.1.	4 Protective	tip				$\boxtimes$
4.21.	2 Discharge	mechanisms—improvised projectiles				$\boxtimes$
4.21.	3 Arrow					$\boxtimes$
4.22	Teethers a	and teething toys				
4.22.	1 Rattle fixt	ure				$\boxtimes$
4.22.	2 Suppleme	ntal fixture				
<u> </u>	1			1	1	



P = Pass F = Fail		N/A = N	ot App	licable	;		
4.23		Rattles					
		16 CFR 15	10 requirement and rattle fixture				$\boxtimes$
	4.23.1	Suppleme	ntal fixture				$\boxtimes$
4.24		Squeeze t	oys (under age of 18 months)				
	4.24.1	Rattle fixt	ure				$\boxtimes$
	4.24.2	Suppleme	ntal fixture				$\boxtimes$
4.25		Battery o	perated toys				
	4.25.1	Marking o	of Battery compartment				$\boxtimes$
	4.25.1.1	Toys conta with 5.15	aining non-replaceable batteries shall be labeled	in accordance			$\boxtimes$
	4.25.2	Maximum	DC potential				$\boxtimes$
	4.25.3	Unable to	charge non-rechargeable batteries				$\boxtimes$
	4.25.4	Accessibil	ity of batteries (under 3)				$\boxtimes$
	4.25.5	Accessibil	ity of batteries - small parts				$\boxtimes$
	4.25.6	Isolated c	ircuits				$\boxtimes$
	4.25.7	Surface te	emperature of batteries (less than 71°C)				$\boxtimes$
	4.25.8	No short o	circuits				$\boxtimes$
	4.25.9	Instructio	ns				$\boxtimes$
	4.25.10	Battery O	perated Ride On Toys				$\boxtimes$
4.26		Toys inter	nded to be attached to a crib or playpen				
	4.26.1	Protrusion	ns				$\boxtimes$
	4.26.2	Crib mobil	le				$\boxtimes$
	4.26.3	Crib gyms					$\boxtimes$
*4.27		Toy chests	S				
	4.27.1	Lid suppor	rt				$\boxtimes$
	4.27.1.1	0.5 inch dı	rop				$\boxtimes$
	4.27.1.2	after 7000	open close cycles				$\boxtimes$
	4.27.1.3	Not requir	re adjustment				$\boxtimes$
	4.27.1.4	Lid suppor	support mechanism clearance				$\boxtimes$



Р				$\frac{06/2009}{N/A} = N_0$	ot App	licable	<u> </u>
4.	.27.2	Hinge line clearance					$\boxtimes$
4.	.27.3	Closures					$\boxtimes$
4.	.27.4	Ventilation			$\boxtimes$		
4.	.27.5	Safety labeling and instruction					$\boxtimes$
4.28		Stuffed and beanbag type toys					$\boxtimes$
4.29		Stroller and carriage toys					$\boxtimes$
4.30		Art materials					$\boxtimes$
*4.31		Toy gun marking					
4.32		Balloons—safety labeling					$\boxtimes$
4.33		Certain toys with spherical ends					
4.	.33.1	Spherical ends attached to a shaft (up to the age of 18 m	onths)				
4.	.33.3	Preschool play figures (under 3 years of age)					$\boxtimes$
4.34		Marbles (3 years of age or older)					
4.	.34.1	Toys and games contain marble (at least 3 but less than 8	8 years of ag	ge)			
4.35		Balls					
4.	.35.1	Balls/loose balls in toys for children under 36 months of	age				
4.	.35.2	Toys contain loose small ball (at least 3 but less than 8 ye	ears of age)				$\boxtimes$
4.36		Pompoms (under 3 years of age)					$\boxtimes$
*4.37		Hemispherical shaped objects (under 3 years of age)					$\boxtimes$
		Have at least 2 opening: YES/NO					$\boxtimes$
		Interrupted at center: YES/NO					
		Have 3 openings: YES/NO					$\boxtimes$
		Scalloped edge: YES/NO					
		One big opening: YES/NO					$\boxtimes$
*4.38		Yo Yo elastic tether toys (3 years and older)					$\boxtimes$
4.39		Magnets					
4.	39.1	Safety labeling					$\boxtimes$
4.	39.2	After abuse testing			$\boxtimes$		



	P = Pass	Pass F = Fail N/A = Not Applica			
5		LABELING REQUIREMENTS			
5.4		Aquatic toys			
5.5		Crib and playpen toys			
	5.5.1	Age grading			
	5.5.2	Safety labeling			
5.6		Mobile			
	5.6.1	Age grading			
	5.6.2	Safety labeling			
5.7		Stroller and carriage toys			
5.8		Toys intended to be assembled by an adult			
5.9		Simulated protective devices			
5.10		Toys with functional sharp edges or points			
5.11		Small objects, small balls, marbles, and balloons			
5.12		Toy caps			
5.13		Art materials			
5.14		Electric toys			
5.15		Battery operated toys			
	5.15.1	Battery powered ride on toys			
5.16		Promotional materials			
5.17		Magnets			
6		INSTRUCTIONAL LITERATURE			
6.1		Definition and description			
6.2		Toy chests			
6.3		Crib and playpen toys			
6.4		Mobiles			
6.5		Toys intended to be assembled by an adult			
6.6		Battery operated toys			
	6.6.3	Battery powered ride on toys			



**REPORT DATE:** 02/06/2009

	P = Pass	F = Fail	N/A = N	ot App	licable	)
6.7	Toys in co	ntact with food				$\boxtimes$
7	PRODUCE	R'S MARKING				
7.1	Name YES Address Y			$\boxtimes$		
7.2	Toy chests	3				$\boxtimes$
7.3	Battery po	owered ride on toys				$\boxtimes$

<u>Conclusion</u>: When tested as specified, the submitted sample **does comply** with the *ASTM F963-07*<sup> $\epsilon_1$ </sup> requirements for Mechanical Hazards.



**REPORT DATE: 02/06/2009** 

2. Flammability: Federal Hazardous Substances Act and ASTM F963-07<sup>€1</sup>

<u>Procedure:</u> The method of testing was that described in **16** *CFR* **1500.44** of the *Federal Hazardous Substances Act and ASTM F963-07*<sup> $\epsilon_1$ </sup> for rigid and pliable solids.

<u>Requirement:</u> A material is considered "flammable" if it ignites and burns with a self-sustained flame at a rate greater than 0.1 inches per second along its major axis.

# NOTE:

It is our understanding that a sample is considered as having passed the test requirement if it self-extinguishes before burning 6 inches and prior to the lapse of 60 seconds.

<u>Sample ID:</u> Fractiles Magnetic Tiling Toy Sets – Large

	Area of Initial Flame Contact	Burn Length (inches)	Time (seconds)	Burn Rate (inches/second)
Burn 1	One Tile			IBE
Burn 2	One Board			DNI

- All components were tested; the above result represented the strictest burn-rate.

DNI = Did Not Ignite IBE = Ignited, But Extinguished

<u>Conclusion</u>: Based upon the results of the test reported above, the submitted sample **does comply** with the requirements of the U.S. Federal Hazardous Substances Act, 16 CFR 1500.44 and ASTM F963- $07^{\epsilon_1}$ , Section 4.2.



**REPORT DATE:** 02/06/2009

3. Chemical Analysis: Total Lead in Substrates

<u>Procedure:</u> Acid digestion per **EPA 3050B/3051** was used and the total lead content was determined by Inductively Coupled Argon Plasma Spectrometry.

Requirement: The lead content shall not exceed 600 ppm of any part of the product as required by the Consumer Product Safety Improvement Act of 2008 (CPSIA 2008).

However, as of August 14, 2009, the limit for total lead content will be lowered to 300 ppm.

<u>Sample ID:</u> Fractiles Magnetic Tiling Toy Sets – Large

<u>Sample Utilized:</u> Complete Product Digested

Test Results:

Parameter		Limit (ppm)			
	1	2	3	4	
Total Lead	12.76	13.29	10.39	<10	600

Component	Description
1	Red Magnetic Tile
2	Yellow Magnetic Tile
3	Blue Magnetic Tile
4	Black Board

## \*Failed Item

<u>Conclusion</u>: When tested as specified, the submitted sample **does comply** with the requirements set forth in the **Consumer Product Safety Improvement Act of 2008** (CPSIA 2008/H.R. 4040), Title I, Section 101 for total lead content in substrates.



**REPORT DATE:** 02/06/2009

**4. Chemical Analysis:** Consumer Product Improvement Act of 2008 – Sec. 108 Phthalate Content:

PHTHALATE BAN: - Beginning February 10<sup>th</sup>, 2009 it shall be unlawful for any person to manufacture for sale, offer for sale, distribute in commerce, or import into the United States any children's toy or child care article that contains concentrations of more than 0.1 percent of di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), or benzyl butyl phthalate (BBP).

INTERIM PROHIBITION: - Beginning February 10<sup>th</sup>, 2009 and until a final rule is promulgated, it shall be unlawful for any person to manufacture for sale, offer for sale, distribute in commerce, or import into the United States any children's toy that can be placed in a child's mouth or child care article that contains concentrations of more than 0.1 percent of diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), or di-n-octyl phthalate (DnOP).

PROCEDURE: Sample extraction by Soxhlet (ASTM D3421); Ultrasonic; or Microwave method

Analysis: Gas Chromatographic-Mass Spectrometric (GC-MS)

## **REQUIREMENTS:**

DEHP, DBP, or BBP – not to exceed 0.1%

• Interim Prohibition - DINP, DIDP, or DnOP - not to exceed 0.1%

<u>Sample ID:</u> Fractiles Magnetic Tiling Toy Sets – Large

		RESULT (% (w/w))				
	1	2	3	4	5	
Dibutyl Phthalate (DBP)	ND	ND	ND	ND	ND	0.1
Diethyl Hexyl Phthalate (DEHP)	ND	ND	ND	ND	ND	0.1
Butyl Benzyl Phthalate (BBP)	ND	ND	ND	ND	ND	0.1
Di-(n-octyl) Phthalate (DnOP)	ND	ND	ND	ND	ND	0.1
Di-(iso-decyl) Phthalate (DIDP)	ND	ND	ND	ND	ND	0.1
Di-(iso-nonyl) Phthalate (DINP)	ND	ND	ND	ND	ND	0.1

Component	Description
1	Red Magnetic Tile
2	Yellow Magnetic Tile
3	Blue Magentic Tile
4	Black Board
5	Clear Plastic Bag

<sup>\*\*</sup>ND=Not Detected (<0.005%)

<u>Conclusion:</u> The submitted toy and / or Childcare article(s) **did not exceed** the limit for the Phthalates specified in the Section 108 (a) and (b) of the Consumer Product Safety Improvement Act of 2008.

<sup>\*</sup>Failed Item





End of Report