

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 – Fridge

 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

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

CONCLUSION:

| Tested Samples | <u>Standard</u> | <u>Result</u> |
|-------------------------------|---------------------------------------|-------------------|
| Fractiles Magnetic Tiling Toy | 1. ASTM F963-07 Physical & Mechanical | 1. Does Comply |
| Sets – Fridge | (Including Magnet Flux) | |
| | 2. ASTM F963-07 Flammability | 2. Does Comply |
| | 3. Total Lead in Substrates (CPSIA) | 3. Does Comply |
| | 4. Phthalates - 6 | 4. Did Not Exceed |

PAGE 1/TO BE CONTINUED

TOTAL 12 PAGES

PREPARED BY:

Kunderey V. Caper Ao

Kimberly Caputa Account Manager SIGNED FOR THE COMPANY BY:

John Nam 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.

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1. Mechanical Hazards: <u>Safety of Toys (ASTM F963-07^{ε 1</u>)</u>}

| Sample ID: | Fractiles Magnetic Tiling | | |
|--------------------------|---------------------------|-------------------------------|-----|
| | Toy Sets – Fridge | | |
| Labeled Age Group: | For Ages 6 to Adult | Appropriate Warning Labeling: | N/A |
| Recommended Age Grading: | For Ages 6 to Adult | Machine Washable Plush Toy: | N/A |
| Tested Age Grade: | For Ages 6 to Adult | Number of Samples: | 1 |

Procedure: The submitted samples were tested to the applicable sections of ASTM F963-07^{ϵ_1} requirements.

| P = Pass | | F = Fail | N/A = N | ot App | licable | ; |
|----------|--|--|---------|-------------|-------------|-----------|
| Clause | Description | | | Ρ | F | N/A |
| 4 | SAFETY RI | SAFETY REQUIREMENTS | | | | |
| 4.1 | Material | quality (visual check on cleanliness) | | \boxtimes | | |
| 4.3.7 | Stuffing n | naterials (visual check on contaminations) | | | | \bowtie |
| 4.5 | Sound pro | oducing toys | | | | |
| 4.5.1.1 | Continuou | us sound produced by close to the ear toys – L_{Aeq} | | | | \square |
| 4.5.1.2 | Continuou | us sound produced by all other toys – L _{Aeq} | | | | \square |
| 4.5.1.2 | Maximum | sound produced by pull along toys – L_{Amax} | | | | \square |
| 4.5.1.3 | Impulsive | Impulsive sound produced by close to the ear toys – L _{Cpeak} | | | | \square |
| 4.5.1.4 | Impulsive | Impulsive sound produced by all other toys - L _{Cpeak} | | | | \square |
| 4.5.1.5 | Impulsive | Impulsive sound produced by percussion caps and explosive – $L_{\mbox{\tiny Cpeak}}$ | | | | \square |
| 4.6 | Small obje | ects | | | | |
| 4.6.1 | Toys inter | nded for children under 36 months of age | | | | \square |
| 4.6.2 | Mouth ac | tuated toys | | | | \square |
| 4.6.3 | Toys and § | games for 36 months to 72 months—Small part wa | rning | | | \square |
| 4.7 | Accessible | Accessible edges (under 8 years of age) | | | | |
| 4.7.1 | Potential sharp metal and glass | | | | \square | |
| 4.7.2 | Functional sharp edge 48 to 96 monthswarning | | | | \boxtimes | |
| 4.7.3 | Metal toy | Metal toys | | | | \square |
| 4.7.4 | Molded to | bys | | \boxtimes | | |



| | P = Pass F = Fail N/A = Nc | | ot Applicable | | | |
|-------|--|--|---------------|-------------|---|-------------|
| | 4.7.5 | Exposed bolts or threaded rods | | | | \boxtimes |
| 4.8 | | Projections (under 8 years of age) | | | | \square |
| 4.9 | | Accessible points (under 8 years of age) | | | | |
| | 4.9.1 | Potential sharp point | | \square | | |
| | 4.9.2 | Functional sharp point 48 to 96 monthswarning | | | | \square |
| | 4.9.3 | Wood | | | | \square |
| 4.10 | | Wires or rods | | | | \boxtimes |
| 4.11 | | Nails and fasteners | | | | \square |
| *4.12 | | Packaging film | | \boxtimes | | |
| 4.13 | | Folding mechanisms and hinges | | | | |
| | 4.13.1 | Folding mechanisms | | | | |
| | 4.13.2 | Hinge line clearance | | | | |
| 4.14 | | Cords and elastics | | | | |
| | 4.14.1 | Cords, straps and elastics (less than 18 months of age) | | | | |
| | 4.14.1.1 | Break-away feature | | | | \square |
| | 4.14.2 | Self retracting pull cords (less than 18 months of age) | | | | \square |
| | 4.14.3 | Pull toys (less than 36 months of age) | | | | \square |
| | 4.14.4 | Strings and lines for flying devices | | | | \square |
| | 4.14.4 | Cords on toy bags intended for children up to 18 months | | | | \square |
| 4.15 | | Stability and overload requirement | | | 1 | |
| | 4.15.2 | Sideway stability requirements (60 months of age or less | 5) | | | \square |
| | 4.15.2.1 | Feet available for stabilization: | | | | \square |
| | 4.15.2.2 | Feet unavailable for stabilization: | | | | \square |
| | 4.15.3 | Fore and aft stability (60 months of age or less) | | | | \square |
| | 4.15.4 | Stationary floor toys | | | | \square |
| | 4.15.5 | Overload requirements for ride on toys and seat | | | | |
| 4.16 | | Confined spaces | | | | |
| | 4.16.1 | Ventilation | | | | \square |



| P = Pass F = Fail | | | N/A = N | | licable | 2 | |
|-------------------|-------|------------------------------|--|--------------|---------|---|-------------|
| 4.1 | 16.2 | Closures | | | | | \square |
| 4.1 | 16.3 | Toys that e | enclose the head | | | | \square |
| 4.17 | | Wheels, ti | res, and axles (aged 96 months or less) | | | | \square |
| 4.18 | | Holes, clea | arance, and accessibility of mechanisms | | | 1 | L |
| 4.1 | 18.1 | Accessible | clearances for moveable segments (under 96 mor | nths of age) | | | \square |
| 4.1 | 18.2 | Circular ho | oles in rigid materials (aged 60 months or less) | | | | \square |
| 4.1 | 18.3 | Chains and | d belts | | | | \square |
| 4.18 | 8.3.1 | Supporting | g chains (36 months or less in age) | | | | \square |
| 4.18 | 3.3.2 | Chains or I | belts for ride on toys | | | | \square |
| 4.1 | 18.4 | Inaccessib | ility of mechanisms (aged 60 months or less) | | | | \boxtimes |
| 4.1 | 18.5 | Winding k | eys (under 36 months of age) | | | | \boxtimes |
| 4.1 | 18.6 | Coil spring | Coil springs | | | | \boxtimes |
| 4.19 | | Simulated protective devices | | | | | |
| 4.1 | 19.1 | Eye protec | tion | | | | \square |
| 4.1 | 19.2 | Simulate s | afety protective deviceslabel | | | | \boxtimes |
| 4.20 | | Pacifiers (| under 36 months of age) | | | | |
| 4.2 | 20.2 | Small obje | octs | | | | \square |
| 4.2 | 20.2 | Nipple len | gth: | | | | |
| | | 16 CFR 15 | 11: APPLICABLE//NOT APPLICABLE | | | | X |
| *4.21 | | Projectile | toys | | | | |
| 4.21 | 1.1 | Sharp poir | nt/edge, small part | | | | \square |
| 4.21 | .1.2 | Tip radius | | | | | \boxtimes |
| 4.21 | 1.3 | Kinetic ene | ergy and resilient impact surface | | | | \boxtimes |
| 4.21 | 1.4 | Protective | tip | | | | \boxtimes |
| 4.2 | 21.2 | Discharge | mechanisms—improvised projectiles | | | | \square |
| 4.2 | 21.3 | Arrow | | | | | \square |
| 4.22 | | Teethers a | and teething toys | | | | |
| 4.2 | 22.1 | Rattle fixtu | ure | | | | \square |
| 4.2 | 22.2 | Suppleme | ntal fixture | | | | \boxtimes |

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| | | N/A = N | A = Not Applicable | | | |
|----------|------------------------------|---|--------------------|--|--|-------------|
| 4.23 | Rattles | | | | | |
| | 16 CFR 15 | 10 requirement and rattle fixture | | | | \square |
| 4.23.1 | Suppleme | ntal fixture | | | | \boxtimes |
| 4.24 | Squeeze t | oys (under age of 18 months) | | | | |
| 4.24.1 | Rattle fixtu | ure | | | | \square |
| 4.24.2 | Suppleme | ntal fixture | | | | \boxtimes |
| 4.25 | Battery o | perated toys | | | | |
| 4.25.1 | Marking o | f Battery compartment | | | | \square |
| 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 | Accessibility of batteries - small parts | | | | \boxtimes |
| 4.25.6 | Isolated c | ircuits | | | | \bowtie |
| 4.25.7 | Surface te | mperature of batteries (less than 71°C) | | | | \bowtie |
| 4.25.8 | No short o | circuits | | | | \bowtie |
| 4.25.9 | Instructio | ns | | | | \bowtie |
| 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 | 15 | | | | \bowtie |
| 4.26.2 | Crib mobil | e | | | | \boxtimes |
| 4.26.3 | Crib gyms | | | | | \boxtimes |
| *4.27 | Toy chests | 5 | | | | |
| 4.27.1 | Lid suppor | t | | | | \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 | t mechanism clearance | | | | \boxtimes |

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| P = Pass F = Fai | | F = Fail | N/A = N | ot App | licable | ; |
|------------------|----------------|---|---------|-----------|---------|-------------|
| 4.27 | 7.2 Hinge line | clearance | | | | \boxtimes |
| 4.27 | 7.3 Closures | | | | | \square |
| 4.2 | 7.4 Ventilatio | n | | | | \boxtimes |
| 4.2 | 7.5 Safety lab | eling and instruction | | | | \boxtimes |
| 4.28 | Stuffed ar | nd beanbag type toys | | | | \boxtimes |
| 4.29 | Stroller ar | nd carriage toys | | | | \boxtimes |
| 4.30 | Art mater | ials | | | | \boxtimes |
| *4.31 | Toy gun n | narking | | | | \square |
| 4.32 | Balloons- | -safety labeling | | | | \square |
| 4.33 | Certain to | ys with spherical ends | | | | |
| 4.33 | 3.1 Spherical | ends attached to a shaft (up to the age of 18 month | ns) | | | \boxtimes |
| 4.33 | 3.3 Preschool | Preschool play figures (under 3 years of age) | | | | \boxtimes |
| 4.34 | Marbles (| Marbles (3 years of age or older) | | | | |
| 4.34 | 4.1 Toys and § | Toys and games contain marble (at least 3 but less than 8 years of age) | | | | \square |
| 4.35 | Balls | | | | | |
| 4.35 | 5.1 Balls/loos | e balls in toys for children under 36 months of age | | | | \square |
| 4.3 | 5.2 Toys conta | ain loose small ball (at least 3 but less than 8 years o | of age) | | | \boxtimes |
| 4.36 | Pompoms | s (under 3 years of age) | | | | \boxtimes |
| *4.37 | Hemisphe | erical shaped objects (under 3 years of age) | | | | \boxtimes |
| | Have at le | ast 2 opening: YES/NO | | | | \boxtimes |
| | Interrupte | ed at center: YES/NO | | | | \boxtimes |
| | Have 3 op | enings: YES/NO | | | | \boxtimes |
| | Scalloped | Scalloped edge: YES/NO | | | | \boxtimes |
| | One big o | One big opening: YES/NO | | | | \boxtimes |
| *4.38 | Yo Yo ela | stic tether toys (3 years and older) | | | | \boxtimes |
| 4.39 | Magnets | | | | | |
| 4.39 | 9.1 Safety lab | eling | | | | \square |
| 4.39 | 9.2 After abu | se testing | | \square | | |

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| | P = Pas | P = Pass F = Fail N/A = No | | |
|------|---------|---|--|---|
| 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 | |] |

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REPORT DATE: 02/06/2009

| P = Pass | | F = Fail N/A | | Not Applicable | | |
|----------|------------|-------------------------|--|----------------|---|-----------|
| 6.7 | Toys in co | ntact with food | | | | \square |
| 7 | PRODUCE | R'S MARKING | | | • | |
| 7.1 | | Name YES Address YES | | | | |
| 7.2 | Toy chests | 5 | | | | \square |
| 7.3 | Battery po | owered ride on toys | | | | \square |

<u>Conclusion</u>: When tested as specified, the submitted sample **does comply** with the ASTM F963-07^{ϵ_1} requirements for Mechanical Hazards.

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2. Flammability: Federal Hazardous Substances Act and ASTM F963-07^{ε_1}

<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*^{ϵ_1} 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.

Sample ID: Fractiles Magnetic Tiling Toy Sets – Fridge

| | Area of Initial <u>Flame Contact</u> | Burn Length <u>(inches)</u> | Time <u>(seconds)</u> | 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^{ϵ_1} , Section 4.2.



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.

<u>Requirement:</u> 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.

Sample ID: Fractiles Magnetic Tiling Toy Sets – Fridge

Sample Utilized: Complete Product Digested

Test Results:

| Parameter | | Limit (ppm) | | | |
|------------|-----|-------------|-----|-----|-----|
| | 1 | 2 | 3 | 4 | |
| Total Lead | <10 | <10 | <10 | <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.



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

PHTHALATE BAN: - Beginning February 10th, 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 10th, 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).

<u>PROCEDURE</u>: 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%

Sample ID: Fractiles Magnetic Tiling Toy Sets – Fridge

| | <u>RESULT (% (w/w))</u> | | | | | Limit(% (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-(<i>n-</i> 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 |

**ND=Not Detected (<0.005%)

*Failed Item

Conclusion: 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.

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End of Report

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