

# Child Guard®

## Lead-Based Paint Encapsulant



### 1. Product Name

**Child Guard® Lead-Based Paint Encapsulant**  
Type III - Interior/Exterior Encapsulant/Encasement Coating for lead-based paint (#5600 - tinteable white)

### 2. Manufacturer

Fiberlock Technologies, Inc.  
150 Dascomb Road  
Andover, MA 01810 USA  
Toll Free: 800-342-3755  
Internet: [www.fiberlock.com](http://www.fiberlock.com)

### 3. Product Description

#### BASIC USE

- Child Guard is a high-solids, thermoplastic-elastomeric water-based copolymer blended specifically to form a durable yet flexible barrier between lead-based paint and the environment.
- Child Guard is an encapsulant for lead-based paint formulated to offer unparalleled coverage, economics and paint-like aesthetics while preserving historic and architectural detail.
- Child Guard contains Bitrex®, a very bitter-tasting, non-toxic anti-ingestant to discourage oral contact with lead paint.

#### COMPOSITION & MATERIALS

Child Guard is a water-based elastomeric thermoplastic.

#### SIZE

Packaged in 1 gallon cans and 5 gallon pails.

#### YIELD

Child Guard will yield as much as 120 ft<sup>2</sup> per gallon at the required thickness of 7 dry mils (14 wet mils) in ideal conditions.

#### COLORS

Child Guard is available in white, or can be tinted to a wide array of colors. Contact the manufacturer for more details.

### LIMITATIONS

Do not use Child Guard on friction surfaces or movable closures such as door and window jambs. Do not dilute or thin Child Guard. Some states require a surface assessment by a licensed lead inspector before application. Contact your state Department of Health, or Fiberlock for more information. The minimum application surface temperature is 50°F. If applying on wood substrate, ensure moisture content is 11% or below.

### 4. Technical Data

#### APPLICABLE STANDARDS

- ASTM E-1795 Standard Specification for Non-Reinforced Liquid Coating Encapsulation Products for Leaded Paint in Buildings.

#### PHYSICAL/CHEMICAL PROPERTIES

Refer to Table 1 for physical and chemical properties of Child Guard.

#### APPROVALS

- Child Guard has been independently tested at DL Laboratories, and met or surpassed the ASTM E-1795 Standard Specification for Non-Reinforced Liquid Coating Encapsulation Products for Leaded Paint in Buildings. Refer to Table 2 for ASTM E-1795 results.
- Child Guard satisfies all HUD and EPA requirements which define encapsulation as a permanent abatement method.
- Child Guard has been certified by the Massachusetts Department of Public Health (No. DL-12362), approved by the State of Ohio Department of Health, is accepted by the New York State Department of Health, and meets or exceeds the abatement requirements of all 50 states.

#### FIRE RATING

Child Guard has been tested by UL Laboratories with a Class "A" fire rating when tested in accordance with ASTM E84, with a Flame Spread of "5" and Smoke Developed of "0".

### Properties

#### Product Specifications

Solids by Weight ± 2%:	59.0%
Solids by Volume ± 2%:	45.0%
Viscosity at 70°F:	95-120 Krebs Units
Specular Gloss:	5.5° ± 1 @ 60°
Flash Point:	Non-combustible
Shelf Life:	36 Months Min. (Original Sealed Containers)
Calculated VOC:	88 grams/liter

Child Guard complies with the requirements for LEED® EQ Credit 4.2, low-emitting materials: paints and coatings.

#### Coverage

Smooth Surfaces:	120 ft <sup>2</sup> /gal
Porous Surfaces:	80-120 ft <sup>2</sup> /gal

#### Drying Times (@ 70 - 77°F , 50% R.H.)

To Touch:	1-2 hours
To Recoat:	8-16 hours
Minimum Application Temperature:	50°F (10°C)

#### Available Package Sizes

5 gallon containers	
Weight Per Gallon ± 0.5 lbs:	11.24 lbs/gal

#### Product Testing

Meets Standard:	ASTM E-1795
Certified For Use:	All 50 States

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Lead-painted steel coated with Child Guard, National Gallery of Art, Washington, DC

## ENVIRONMENTAL CONSIDERATIONS

Child Guard has been designated non-toxic by a certified toxicologist.

## 5. Installation

### PREPARATORY WORK

Before using Child Guard, it is important to determine if the existing paint system is stable and well-adhered. This is done by performing an adhesion tape test on the surface to be coated. Perform this test at least once on each different type of surface to be coated. Clean a small area, rinse with clean water, and allow to dry. Apply a 6-10" strip of pressure-sensitive tape (packing tape). Press the tape down with the rubber end of a pencil. After 90 seconds, remove (do not yank) the tape by pulling smoothly and slowly away from the surface. If more than one square inch of paint is removed along with the tape, the adhesion of the existing paint system is poor. When this occurs, additional preparation (i.e., wet sanding, scraping, cleaning, etc.) must be done to remove poorly adhered paint. If less than one square inch of paint is removed from the substrate, the surface is sound and can be encapsulated.

### SURFACE PREPARATION

**Wood:** Remove or mask electrical plates, hardware, light fixture trim, and similar fittings prior to beginning encapsulation operations. Correct defects and clean surfaces affecting work in this section. Remove existing coatings that are flaking or unacceptable condition to receive coating. (All scraping and sanding should be done wet in order to avoid creating lead dust. Check local, state, and federal regulations and guidelines regarding specific lead-based paint abatement

practices.) Seal any marks or defects that might bleed through encapsulant with an appropriate primer. Clean mold-contaminated surfaces with IAQ 1000, or use an EPA Registered antimicrobial disinfectant cleaner such as Fiberlock IAQ 2000, Fiberlock IAQ 2500, Shockwave or Shockwave RTU. Rinse with clean water and allow surface to dry.

**Concrete and masonry:** Remove dirt, chalk, loose mortar scale, salt alkalis, oil and grease with a lead-specific detergent. Rinse well and allow surface to dry. Apply masonry conditioner, such as Powerstone Plus, to prevent future chalking.

**Plaster, Gypsum Wallboard:** Fill all surface defects, wet sand smooth and spot prime with stain blocking primer, such as PowerBlock. Glossy surfaces must be wet sanded or otherwise deglossed prior to application of encapsulant.

**Ferrous Metal:** Remove rust and scale by wire brushing. Remove dust, dirt, oil and grease with lead specific detergent. When dry, immediately apply a rust-inhibiting direct to metal primer, such as Power Rust Stop, to prevent flash rusting.

**Galvanized Metal:** Remove dust, dirt, oil and grease with a lead-specific detergent. For areas where the galvanization has been damaged, apply a rust-inhibiting direct-to-metal primer, such as Power Rust Stop, to prevent flash rusting.

**Aluminum:** Remove dust, dirt, oil and grease with a lead-specific detergent. Etch the surface using an etching type metal prep, or apply a tie-coat once the aluminum surface is clean and dry.

## MIXING

Mix Child Guard thoroughly prior to application.

## APPLICATION METHODS

Apply Child Guard Type III only after the existing paint system has been rendered clean, dry, sound and dull. Child Guard Type III can be applied using a brush, roller or airless sprayer. One application by airless spray, or two applications by brush/roller are typically sufficient to achieve the required minimum dry film thickness of 7 mils. When applying Child Guard by airless sprayer the best results can generally be achieved by using a tip size of 0.019 to 0.025 at 1800- 2500 psi. Spray in a "crosshatch" pattern (see figure 3) to achieve the greatest film thickness in a single coat. Clean up tools and drippings with warm, soapy water before Child Guard Type III dries.

## PRECAUTIONS

Child Guard must be applied when the atmosphere and surface temperatures during application and for 12 hours thereafter are above 45°F. Protect from freezing. Keep container tightly sealed when not in use.

## 6. Availability and Cost

### AVAILABILITY

Child Guard is available through a network of authorized distributors and paint stores. Contact Fiberlock Technologies, Inc. at 1-800-342-3755 for distributor information or visit [www.fiberlock.com](http://www.fiberlock.com).

### COST

Material cost per square foot can be estimated by dividing the price per gallon from an authorized distributor by 120 ft<sup>2</sup> per gallon.

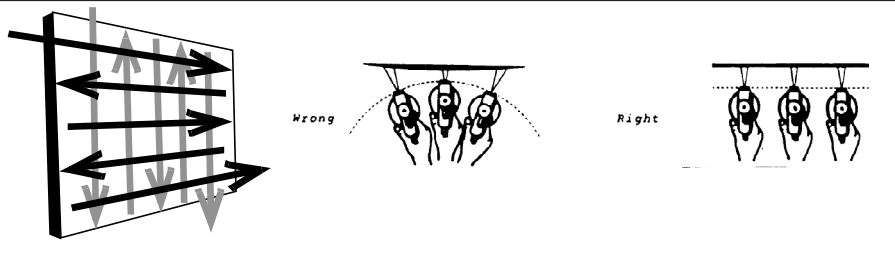
## 7. Warranty

Fiberlock Technologies, Inc., warrants Child Guard for a minimum of 20 years from the date that the product is applied to form an effective barrier from the hazards of the encapsulated lead-based paint. The warranty described in this paragraph, expressed or implied, is including but not limited to the implied warranties of the salability and fitness for a particular purpose. User shall determine the suitability of Child Guard's use and assume any and all risks and liabilities which may arise in connection with the application of Child Guard. This warranty is extended only to the purchaser of Child Guard and does not apply to any damages which are a direct result of improper surface preparation and/or application, including, but not limited to:

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**Proper spray application of Child Guard Lead Barrier Compound**

1. The failure to properly apply Child Guard to a sound surface, which has been cleaned of foreign matter and dry at the time of application.
2. The failure to apply Child Guard above the recommended minimum application temperature.
3. The failure to apply Child Guard in full accordance with Fiberlock Technologies' written application instructions and guidelines.

This warranty does not extend to, nor shall Fiberlock Technologies be liable for any damage resulting from any abuse of the encapsulated surface by the tenants or occupants, improper maintenance, water damage, or other conditions beyond Fiberlock Technologies' control. The sole and only liability under this warranty shall be, at Fiberlock Technologies' option, either to replace the product if proved defective or to refund the purchase price paid. Fiberlock Technologies shall not be held liable for any incidental damages, or for any consequential damages to property, or any losses of revenue which may have been caused by a defect or failure of the product. The purchaser of this product must notify Fiberlock at 150 Dascomb Road, Andover, Massachusetts 01810 (800-342-3755) within 45 days to advise of any suspected manufacturing defects. This warranty gives the purchaser specific legal rights and possible additional rights which may vary from state to state.

## 8. Maintenance

If surfaces coated with Child Guard are damaged, repair and re-apply Child Guard immediately. Inspect for damage periodically.

## 9. Technical Services

Fiberlock Technologies, Inc. employs a knowledgeable factory trained team of field representatives. In addition, technical questions can be answered by one of our full time technical service representatives by calling 1-800-342-3755. Complete specifications and technical information can also be obtained online at [www.fiberlock.com](http://www.fiberlock.com).

## 10. Filing System

Additional information is available upon request.



**Child Guard over wood door frames at Fort Knox, KY.**



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**For Technical Information call 800.342.3755**

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of this product are beyond our control. Neither Fiberlock Technologies, Inc., nor its agents shall be responsible for the use or results of use of this product or any injury, loss or damage, direct or consequential. We recommend that the prospective user determine the suitability of this product for each specific project and for the health and safety of personnel working in the area.

# 10 POINT SPECIFICATION

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### ASTM E-1795 RESULTS FOR Child Guard

Requirement	ASTM Test	Result
Adhesion	D 3359	5A
Chalking	D 4214	8
Density or weight per gallon	D 1475	11.5 lbs./gal.
Dry abrasion resistance	D 4060	7.9%
Dry-film thickness	D 1005, D 1186	7 mils
Flexibility	D 522	conforms
Impact resistance	D 2794	160+ in. lbs.
Mildew resistance	D 3273, D 3274	10
Paintability	D 3359	5A
Scrub resistance	D 2486	1350 cycles
Surface burning characteristics	E 84	
	flame spread	5
	smoke developed	0
Tensile properties	D 2370	
	tensile strength	565 psi
	elongation	48.9%
	elongation at 100 psi	1.2%
VOC content	D 3960	
	grams/liter	85
	pounds/gallon	0.7
Water and chemical resistance	D 1308	
	50% ethanol	conforms
	5% acetic acid	conforms
	5% sodium hydroxide	conforms
	5% hydrochloric acid	conforms
	5% citric acid	conforms
	corn oil	conforms
	2% phosphoric acid	conforms
	5% trisodium phosphate	conforms
	distilled water	conforms
Water vapor transmission (perms)	D 1653	0.28 grains/ft <sup>2</sup> /hr.
Weathering/aging	G 53	
	Weathering 1000 Hrs.:	
	chalking	8
	adhesion	5A
	flexibility	conforms
	tensile strength	695 psi
	elongation	-34.4%
	Aging 12 cycles:	
	adhesion	5A
	flexibility	conforms
	tensile strength	635 psi
	elongation	-22.7%
	Aging 2 weeks at 40°C:	
	adhesion	5A
	flexibility	conforms
	tensile strength	633 psi
	elongation	-5.5%

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