



# PRODUCT DATA SHEET

## PROD. #2100 SERIES PART A & B

### GARAGE SHIELD

### WATERBORNE EPOXY FLOOR COATING



#### PRODUCT DESCRIPTION

**Garage Shield Semi-Gloss Waterborne Epoxy Floor Coating** is a high performance water-based, two component epoxy coating specially formulated for finishing interior concrete garage floors. It provides excellent coverage, superior chemical and stain resistance, a rich, durable semi-gloss finish that is abrasion resistant, and offers the same performance characteristics as solvent-based two component epoxy floor coatings. It is easy to apply, will not lift existing coatings, is low odor, VOC compliant and is excellent for application in commercial, institutional and industrial environments where a tough and durable floor coating is required.

PRODUCT FEATURES	PRODUCT USES	PERFORMANCE QUALITIES	VOC COMPLIANCE												
<ul style="list-style-type: none"> <li>Waterborne Polyamide Epoxy</li> <li>Rich Semi-Gloss Finish</li> <li>Excellent Coverage</li> <li>Excellent Durability</li> <li>Abrasion Resistant</li> <li>Chemical &amp; Stain Resistant</li> <li>Excellent Product Versatility</li> <li>VOC Compliant</li> <li>Easy To Apply</li> </ul>	<p><i>Suitable for the following properly prepared surfaces;</i></p> <p><b>INTERIOR</b></p> <table> <tr> <td>Garage Floors</td> <td>Office Buildings</td> </tr> <tr> <td>Basements</td> <td>Restaurants</td> </tr> <tr> <td>Warehouses</td> <td>Schools</td> </tr> <tr> <td>Processing Plants</td> <td>Hospitals</td> </tr> <tr> <td>Manufacturing Plants</td> <td>Government Buildings</td> </tr> <tr> <td>Industrial Flooring</td> <td>Commercial Flooring</td> </tr> </table> <p><b>For Interior Use Only!</b></p>	Garage Floors	Office Buildings	Basements	Restaurants	Warehouses	Schools	Processing Plants	Hospitals	Manufacturing Plants	Government Buildings	Industrial Flooring	Commercial Flooring	<p><b>Product Quality:</b> Premium</p> <p><b>Product Use:</b> Interior</p> <p><b>Application:</b> Brush, Roller Cover, &amp; Airless Spray</p> <p><b>Product System:</b> Water-Based</p> <p><b>Finish:</b> Semi-Gloss</p>	<p><b>AIM</b> Yes</p> <p><b>OTC</b> Yes</p> <p><b>CARB</b> No</p> <p><b>SCAQMD</b> No</p> <p><b>MPI #</b> No</p> <p><b>LEED® 09CI</b> No</p> <p><b>LEED® 09NC</b> No</p> <p><b>LEED® 09CS</b> No</p> <p><b>LEED® H</b> No</p>
Garage Floors	Office Buildings														
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Industrial Flooring	Commercial Flooring														

#### SURFACE PREPARATION

**General:** Sweep the floor to remove all excess dirt and debris. Any grease or oil spots should be cleaned first with a degreaser type cleaner. Clean the floor a section at a time (10' x 10') with a strong detergent using a stiff broom to scrub the surface. Thoroughly rinse with a hose and allow floor to dry completely. If necessary, use a squeegee to remove any standing water.

**Bare concrete:** All new concrete and masonry substrates should be at least 30 days old before painting! Test the floor for the presence of a sealer by sprinkling water onto several areas of the floor. If the water beads and does not soak in, a sealer is present and must be removed with a chemical paint stripper, a concrete floor sander, or shot blasting. All bare concrete floors should be etched with a 10% solution of Muriatic Acid. To etch the floor, use a mixture of one (1) part Muriatic Acid mixed with four (4) parts water. Be sure to wear personal protection gear (goggles, gloves, boots, etc.) and follow the manufacturer's instructions and safety precautions when working with Muriatic Acid. Working in sections (10' x 10'), apply a generous amount of the acid solution with a plastic sprinkling can, and allow the solution to effervesce until it stops reacting. Rinse the surface thoroughly with a garden hose, not allowing the acid to dry on the surface. This process should create a surface texture similar to that of 180 grit sandpaper, or the etching process must be repeated. Allow the floor to dry for at least 24 hours. Before painting, test the floor for excessive moisture by applying a 2' x 2' sheet of plastic to the floor with duct tape and allow it to set for 24 hours. If water droplets appear on the underside of the plastic, or the concrete appears wet (darker in color), the moisture content of the floor is too high and should not be painted.

**Previously Painted Floors:** Remove any loose, cracked or peeling paint by hand scraping, sanding, wire brushing, or by power tool cleaning. Any glossy surface areas should be sanded to dull the finish. Cracks, holes, and damaged concrete must be filled with a suitable concrete based patching material, carefully following the manufacturer's instructions. Test the adhesion of the remaining paint by cutting an X in the paint with a single edge razor blade. Apply a 5" piece of duct tape firmly over the X. Remove the tape with one quick pull. If more than 25% of the paint comes off with the tape, the old coating must be completely removed. Do not acid etch previously painted floors. Test the floor for moisture as previously outlined before painting.

**Mildew -** Surface areas affected by mildew should be treated with a commercial mildew removal and/or wash product carefully following manufacturer's application and safety directions. Rinse thoroughly with clean water, and allow a minimum of 24 hours to dry thoroughly

**WARNING!** If you scrape, sand or remove old paint, you may release lead dust. LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE. Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how you can protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-Lead, or log onto [www.epa.gov/lead](http://www.epa.gov/lead).

#### PRODUCT ANALYSIS DATA

**PIGMENT: 46.07%**

**VEHICLE: 53.93%**

*MORE DETAILED PRODUCT ANALYSIS DATA IS AVAILABLE UPON REQUEST.*

#### TECHNICAL DATA

- COLORS:** White, Base & 2 Stock Colors  
2100 Tinting Wht. 2102 Deep Base  
2113 Sahara Tan 2120 Sussex Gray
- TINTING:** Universal Colorants
- VEHICLE TYPE:** Amine Adduct Epoxy
- VISCOSITY:** 102 KU ± 3
- GLOSS @ 60°:** Semi-Gloss / 45 units ± 5
- FLASH POINT:** 214° F
- VOC:** Not to Exceed 250 g/l – 2.10 lb/gal  
(Meets AIM & OTC Standards)
- SOLIDS:** By Volume: 56.03% ± 2%  
By Weight: 71.00% ± 2%
- COVERAGE:** 250 – 350 Sq. Ft. / Gal.  
(Coverage will vary significantly depending on application method, surface porosity and condition of the surface.)
- MIL FILM:** Estimated @ 300 Sq. Ft. / Gal.  
**Wet:** 5.3 mils **Dry:** 3.0 mils
- DRY TIME:** (@ 70° F & 50% Relative Humidity)  
To Touch: 4 – 6 hours  
Recoat: 24 hours, or after overnight dry.  
Light Foot Traffic: 24 – 48 hours  
Full Cure: 7 Days  
(Dry times listed may vary according to relative humidity, temperature, film build, color and air movement.)
- CLEAN UP:** Warm Soapy Water
- THINNING:** Clean Water

## RECOMMENDED PRIMER COATINGS

Although formulated to be self-priming on properly prepared painted surfaces in good condition, the following Richard's products are recommended primer coatings for this finish coating material. However, recommended Richard's primer coatings are not limited to the products listed below;

- **New Masonry & Concrete Floors**
  - 4450, Floor-Tite Waterborne Epoxy-Ester Bonding Surfacers.
- **Previously Painted Surfaces:**
  - Self-Priming

## APPLICATION EQUIPMENT

- **Brush Application:** Apply using a quality nylon, polyester, or combination nylon/polyester bristle brush.
- **Roller Application:** Apply using a smooth - medium nap synthetic or lamb's wool roller cover, depending on the texture and surface porosity.
- **Spray Application:**
  - **Pump:** Gas or Electric Airless Sprayer
  - **Pressure:** Minimum 1500 – 2000 PSI
  - **Tip:** 0.017 – 0.019 Reversible
  - **Hose:** ¼ inch (6.3 mm) - ¾ inch (10 mm)

## PACKAGING & WEIGHT PER GALLON

- **Packaging:** Quarts – N/A      Gallon/Quart Kit – Each  
2 Gallons – N/A      5 Gallons – N/A
- **Weight per Gallon:** 12.50 lbs.

## PRODUCT LIMITATIONS

- Not for exterior use.
- Not for immersion services.
- Not for use in corrosive or chemical environments.
- Not for use in areas subject to intense heat.
- Not for use on below grade substrates.

**Prolonged exposure to direct sunlight will cause finish to fade & chalk. When applying to concrete floors strong cleaning chemicals, brake fluid, and animal waste may cause staining or discoloration of the paint film. Discoloration or staining will not diminish the protective qualities or durability of coating. As with most epoxy coatings, some yellowing of the paint film may occur.**

## CLEAN UP & THINNING INSTRUCTIONS

**Clean Up:** Clean up any minor spills and spatters immediately with warm soapy water, as well as all painting tools and airless equipment. More serious spills should be contained and removed with inert absorbent material. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state and federal regulations.

**Thinning:** Stir thoroughly and apply as it comes from the container. Thinning is not necessary. However, if thinning is required, you may add clean water up to ½ pint per gallon.

## WARRANTY & LIMITATIONS

The technical information contained herein is accurate to the best of our knowledge. All warranties are excluded, whether expressed or implied, by operation of law or otherwise, including all implied warranties of merchantability or fitness for a particular purpose. Seller shall not be liable, directly or indirectly, under any circumstances for consequential, incidental, special or any other type of damages arising or resulting for any reason under the sale, handling, or use of goods sold. Seller's liability hereunder, and buyer's exclusive remedy hereunder, for negligence or any other reason, is expressly limited to reimbursement of the purchase price of the materials sold after proof of purchase is provided to the seller. Notice of any alleged failure or defect in the material must be given to the seller in writing by certified U.S. mail within 15 days of noticing the problem. Failure to give the required notice within the time provided constitutes a waiver of any claim. The Manufacturer is not responsible for any misrepresentation made by the Dealer.

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## PRODUCT APPLICATION – General

**Garage Shield Waterborne Epoxy Floor Coating** may be easily applied with a quality brush, roller cover, or airless spray equipment as follows;

- After properly mixing Part A & B components, (see mixing instructions), stir thoroughly in a spiral up and down motion before and during application to keep product completely mixed.
- For best results, it is recommended to apply two (2) finish coats to bare concrete floors.
- If decorative chips are to be applied, limit work area to 6' x 6' sections, to make sure chips are applied to wet paint.
- When applying by brush, apply a smooth and generous coat on smaller surface areas, such as cutting-in larger surfaces and painting trim.
- When applying by roller cover, it is recommended to apply with a ½ nap roller, applying an even and generous coat in a "W" or crisscross motion, avoiding any excessive respreading or reworking.
- When applying by airless spray equipment, use a unit with a minimum of 2000 psi of pressure, with a 0.015 – 0.017 fluid spray tip.
- During spray application, it is recommended to back-roll the surface area to ensure proper adhesion, and an even coat application.
- Maintain a wet edge during application by brushing, rolling or spraying into previously applied coating area.
- Apply when surface and ambient temperatures are above 55° F and below 90° F. **KEEP FROM FREEZING!**

## MIXING INSTRUCTIONS

**Garage Shield Waterborne Epoxy Floor Coating** is formulated as a 3 - 1 ratio mix, (1 partially filled gallon and a full quart). Thoroughly stir part A and part B before combining. Pour the total contents of Part B into the Part A container. Be certain to incorporate all of Part B into Part A as this effects the color and hiding. **After thorough mixing, allow product to stand for 30 minutes (induction time) before starting to paint.** Mixed material has a 1 to 2 hour pot life after combining, and should be applied during this time period. When tinting, use 888 Universal Colorant. **Tint part A only.**

## PRECAUTIONARY & SAFETY INFORMATION

**CAUTIONS:** Avoid prolonged contact with skin, and breathing of dust, vapors and/or spray mists. Causes eye irritation. **USE WITH ADEQUATE VENTILATION!** Ensure fresh air entry during application and drying. If you experience eye water, headache or dizziness, or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriately fitted respirator, (NIOSH approved), during and after application. Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes, skin and clothing. Use chemical safety glasses, goggles or a face shield for proper eye protection. Wash thoroughly after handling and before eating or smoking. Close container after each use. **DO NOT TAKE INTERNALLY!**

**FIRST AID:** In case of skin contact, wash thoroughly with plenty of warm soapy water. For eye contact, flush with plenty of water for 15 minutes and get medical attention immediately. If you experience difficulty breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately. If swallowed, do not induce vomiting, get medical attention immediately.

**KEEP OUT OF REACH OF CHILDREN!**