

**Subject to change. Contact Solomon Colors/Brickform for most up-to-date information***001: Product Description**

Lythic Protector is a colloidal silica-based, breathable concrete sealer that protects and enhances polished concrete floors. It is a unique product that improves surface hardness through colloidal silica reaction during application. It is specially formulated to reduce liquid penetration, enhance color, increase gloss reading and improve traction of polished concrete surfaces.

Lythic Protector is packaged under the red label concentrate formula and, in most cases, will be mixed 1:1 with clean potable water. In some cases when the concrete porosity is more severe, **Lythic Protector** can be used directly in the concentrate state without dilution.

002: Features & Advantages

Lythic Protector is specifically designed to be applied to hard troweled concrete or polished concrete surfaces.

- Extends stain resistance
- Enhances color
- Provides durable traffic-wear resistance
- Improves traction
- Works well burnished or not
- Simplifies maintenance
- Concentrate formula
- Multiple applications over prolonged periods

003: Sustainability

Lythic Protector increases the performance and protection of a polished concrete surface, extending its service life and minimizing materials and energy consumption for its replacement.

- South Coast Air Quality Management District compliant
- Low VOC formula
- Ships as concentrate to lower environmental impacts
- Reduced shipping and storage costs
- No hazardous waste created
- Qualifies for LEED credits

004: Materials Packaging

Lythic Protector 1:1 (Red Lythic Logo)

- 1 gallon / 3.78 liter jug
- 5 gallon / 19 liter pail
- 55 gallon / 208 liter drum
- 270 gallon / 1021 liter tote (IBC)



Note: **Lythic Protector concentrated product will yield 2 times the volume when mixed 1:1 with clean potable water. **Lythic Protector** can be used as a ready-to-use formula for concrete surface with high porosity.*

005: Coverage Rates

Lythic Protector will yield different coverage results depending on the porosity of the floor. Test on a small sample area to determine appropriate application rate and technique before applying to entire project area.

**(See Section 009: Project Testing)*

Use these coverage rates as a starting point to determine necessary application rate.

Lythic Protector	Coverage Rate (US, per gallon)	Coverage Rate (Metric, per liter)
Mixed 1:1	1200 - 1800 ft ²	37 - 49 m ²
Used As Concentrate	600 - 900 ft ²	18.5 - 24.5 m ²

006: Storage & Shelf Life

Lythic Protector should be kept in the original container when possible, with the lid fastened tightly. **Lythic Protector** concentrate has an optimized shelf life of 24 months from the date of manufacture.

- Keep in a dry place
- Temp range of 40-100°F or 4-38°C
- Do not allow to freeze

MIXING & APPLICATION**007: Mixing & Dilution**

Lythic Protector is designed to be mixed 1:1 with clean potable water. In some cases **Lythic protector** can be applied as a concentrate for surfaces that have a higher porosity.

Lythic Protector 1:1 Ratio

- 1) Before opening, agitate **Lythic Protector** concentrate.
- 2) Use clean potable water to mix with **Lythic Protector**.
- 3) Mix in a container or directly into sprayer.
- 4) Ratio: one part **Lythic Protector** to one part water.
- 5) Mix, agitate or stir well.

Lythic Protector Concentrate

- 1) Before opening, agitate **Lythic Protector** concentrate.
- 2) Pour **Lythic Protector** directly into sprayer.



PROTECTOR

Concentrate Formula

LYTIS-PRO-2016.09

Lythic Protector - TIS

P2

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008: Equipment

Apply **Lythic Protector** using a low-pressure pump sprayer. Use either a fan tip or a cone tip for even spraying. Automatic low pressure sprayers can also be used for larger projects. Micro-fiber or flat cotton pad applicators are recommended for material placement.

009: Project Testing

To assure that desired performance and appearance specifications are met, test a sample area of each slab to be treated, using the proposed treatment methods and techniques, coverage rates, and equipment, with the work performed by the same installation personnel who will do the project.

A test section should be large enough to properly represent the overall slab. Check whether coverage rate is appropriate, that concrete accepts the product, and that product is reacting with slab. **NOTE:** Grinding and polishing operations may significantly alter slip-resistance of surface. To determine that safe levels of wet and dry slip-resistance are achieved, it is necessary to apply the complete treatment, **Lythic Densifiers**, **Lythic Protector** or **Lythic SPD Protector**, which will increase slip resistance.

010: Pre-Application

Advanced planning is critical to all successful concrete work. Notations worth considering when using **Lythic Products**:

- Any adjacent areas, surfaces, or objects not intended to be treated with **Lythic Protector** should be protected from overspray or drift with plastic sheeting or other proven protective material.
- Surface must be clean and structurally sound, and must be clear of membrane forming curing compounds, oils, dust and other surface contaminants that will prevent **Lythic Products** from having full contact with the concrete. Do not use acidic or aggressive detergents when cleaning before or after application of **Lythic Products**. Use **Lythic Cleaner** or other pH neutral cleanser.
- Measure area (*square feet: ft² / square meter: m²*) that will require **Lythic Products**.

- Mix an appropriate quantity of **Lythic Products** for job-size, per instructions in Section 007: Mixing & Dilution, using estimated coverage rates in Section 005: Coverage Rates or the coverage chart on page 1.

- Check that sprayers and tips are in working order.

- Designate trained operator(s) to apply **Lythic Products** throughout project, to ensure consistent application.

011: Application Guidelines

Application may vary depending on the type of project and other jobsite specifics. The information provided is best practice guidelines for **Lythic Protector**. Every project will present variables that may require adjustment of application procedures during the job. These guidelines are based on terminology used within the concrete and flooring industry sector.

**(See coverage chart on page 1)*

- Agitate the premixed product before application.

- Pour **Lythic Protector** into the sprayer. Keep the sprayer at optimized levels, allowing even distribution when applying to the concrete surface.

- Dampen the micro-fiber or flat cotton pad with **Lythic Protector** before spreading material around.

- Spray-apply **Lythic protector** in circular motions with the sprayer tip approximately 18" (45 cm) away from the concrete surface.

- Use the micro-fiber or flat cotton pad applicator to spread the **Lythic Protector** in a thin film across the surface. Using a figure eight motion with the applicator helps to ensure even material distribution.

- Keep a wet edge between the sprayer and application pad at all times. Do not allow dry lines or puddling.

- Allow **Lythic Protector** to become tack-free before applying a second application or high speed burnishing.

- For each application follow the same steps.



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011: Application Guidelines (Continued)

High speed burnishing using a diamond-impregnated or hogs-hair pad will enhance the gloss and clarity of the surface. Allow 12 hours before light foot traffic and 24 hours before heavy traffic. Do not allow standing water to remain on the surface for a minimum of 72 hours.

012: Limitations & Important Notes

- **Lythic Protector** is a breathable penetrating sealer that should be considered a sacrificial layer requiring periodic re-application when needed.

- **Lythic Protector** provides temporary protection from staining and etching agents, but it will not seal or prevent staining indefinitely. Spills must be removed in a timely manner to assure complete protection of the floor finish. For optimal stain and chemical resistance use **Lythic SPD Protector**.

- Floors treated with **Lythic Protector** should not be cleaned with acidic or abrasive cleaning fluids. Medium to long-term exposure to aggressive cleaning products will cause damage. **Lythic Cleaner** or other pH neutral cleansers should be used for continuous maintenance of concrete that has been treated with **Lythic Products**.

- During application of **Lythic Protector** and until dry, treated surface will be slippery. Use extreme care when walking on wet **Lythic Protector**.

- Jobsite samples are strongly recommended prior to application of all **Solomon/Brickform** and **Lythic products**.

013: Industry Compliance

- VOC Compliant
- National Floor Safety Institute
- LEED-Green Building Rating System
- GreenSpec listed
- OSHA & ADA non-slip requirements

014: Lythic System Products:

- **Lythic DAY1**(Troweling aid)
- **Lythic Densifier**(Smaller particle densifier)
- **Lythic Densifier XL**(Larger particle densifier)

- **Lythic Protector**(Color enhancer & protector)
- **Lythic SPD Protector**(Color enhancer & protection)
- **Lythic Cleaner**(Colloidal silica cleaning agent)
- **Pro-Dye**(Penetrating colorant concentrate)
- **Stealth Seal**(Penetrating sealer)
- **Solomon Colors**.....(Integral color for concrete)
- **Brickform**(Sealers and processes for concrete)

HEALTH & SAFETY

015: Precautions

WARNING: FOR PROFESSIONAL USE ONLY. Before using product, read product SAFETY DATA SHEET (SDS) and instructions on packaging. ALKALINE CONCENTRATE: Contact can damage eyes, skin, and other body tissues. HANDLE WITH CARE. Eye and skin irritant. Digestive tract irritant; DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. Spray mist is respiratory tract irritant. Use only with adequate ventilation. Do not breathe vapors or spray mist. Avoid contact with eyes, skin, clothing. Observe appropriate safety and jobsite controls. Wear appropriate protection including eye protection and chemical-resistant gloves. Ensure fresh air-flow during application and until dry. If you experience headaches, dizziness, eye watering, or if air monitoring shows vapor/mist levels above applicable limits, wear a properly fitted P100/organic vapor respirator (NIOSH TC-84A approved), used according to manufacturer's directions, during application and drying. SLIP/FALL DANGER: During application of **Lythic Protector** and until dry, treated surface will be slippery. Use extreme care when walking on wet **Lythic Protector**.

016: First Aid

Ingestion: Not expected to be toxic. Never give an unconscious person anything to ingest. If swallowed, immediately give two glasses of water, seek medical attention if ill effects develop.



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Inhalation: May cause irritation. Remove to fresh air and provide oxygen. If not breathing, give artificial respiration. Seek medical attention if irritation persists.

Eye Contact: Flush with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

Skin Contact: May cause irritation. Wash affected area with soap and water. Remove contaminated clothing and shoes. Seek medical attention if irritation persists.

017: Physical Properties

Appearance	Milky white tinted liquid
VOC Content.....	25 g/l (Low- VOC)
Active Ingredients.....	100% of total solids
Material pH	apx 10-11
Freeze point	32°F - 0°C

018: Warranty

Lythic Products are intended for use by licensed contractors and installers, experienced and trained in the use of these types of products. It is warranted to be of uniform quality, within manufacturing tolerances. The manufacturer has no control over the use of this product, therefore, no warranty, expressed or implied, is or can be made either as to the effects or results of such use. In any case, the manufacturer’s obligations shall be limited to refunding the purchase price or replacing **Lythic Products** proven defective. The end user shall be responsible for determining product’s suitability and assumes all risks and liability.

Additional Information & Technical Support:

This document covers the basic guidelines and instructions for the use of **Lythic Products**. Further instruction or technical information related to specifying **Lythic Products** or systems are available upon request. Contact Solomon Colors or your local distributor.