

CRYSTAL GARD 0800™

Revision: September 2011
Supersedes all previous publications



Product Description

CRYSTAL GARD 0800™ is the highest resin solids concrete cure, seal, and dustproofer Lambert Corporation manufactures. It has excellent adhesion to cementitious surfaces both exterior as well as interior and when cured, forms a tough impervious film. It is a 30% solids styrene and acrylic resin product that offers superior curing, sealing, dustproofing qualities, while also hardening concrete by assuring proper concrete design strength development. A CRYSTAL GARD 0800™ treated surface provides a long lasting finish that has good resistance to most chemicals, oils, greases, and abrasion.

When applied to fresh concrete CRYSTAL GARD 0800™ meets the Federal Specification TT-C-0800A and the specification requirements ASTM C 309-94 for "Liquid Membrane Forming Compounds for Proper Curing of Concrete". When applied to aged concrete it will penetrate into the concrete pores filling them with a hard resin so dirt, dust, and grime can no longer collect.

CRYSTAL GARD 0800™ when used on old concrete seals and dust proofs the surface. When used on new concrete it acts as curing compound for proper cement hydration. Due to its transparent quality, properly prepared aluminum, copper and steel can be sprayed with the CRYSTAL GARD 0800™ to help protect it from concrete stains.

CRYSTAL GARD 0800™ may be ordered red tinted with a fugitive dye for uniform application aid purposes. The tinted product requires direct sunlight exposure for 7 days to become inconspicuous after application.

Installation

Before using this product, please refer to the Material Safety Data Sheet for additional information. Proper handling precautions MUST be followed. The conditions of use, handling, and application of this product and information (whether verbal or written), including any suggested formulations and recommendations, are beyond Lambert Corporation's control. Therefore, it is imperative that testing be performed to determine satisfaction and suitability for intended use and health, safety, and environmental issues. The following information is meant as a guideline of best industry practices. While Lambert Corporation does suggest adherence to these guidelines, unforeseeable variables and/or developed successful installer practices may cause variation in methods and/or results.

Surface Preparation

Most adhesion problems are not the fault of the product applied but the result of poor surface preparation. Test should be conducted to determine bondability before actual application is made if the surface is questionable.

New Concrete

Surface must be sound and properly finished. Remove all dirt, droppings, and foreign matter. Concrete surface is application ready when it is damp (not wet or "puddled") and can no longer be marred when walked on.

Old Concrete

The surface must be clean and dry. Remove contaminants and stains such as grease, oil and waxes with strong soaps or caustics. Use acid only as a last resort.

Old Smooth Concrete

Surface must have an etched profile to achieve proper bond. This profile is one that has miniature ridges and valleys that give concrete "teeth" to form a successful bond. This is best accomplished by shot blasting, sandblasting, acid etching or scarifying. CRYSTAL GARD 0800™ must be able to penetrate the surface to which it is applied. If it can not penetrate, its wearing qualities are lessened and it may peel.

Method

Apply with spray, brush, roller, or lambs wool applicator. On smooth concrete use spray, lambs wool applicator or short-nap roller. On broomed or textured concrete use spray, brush, or long-nap roller. Apply uniformly to form a continuous film on the surface without thick or ponded areas. A power airless sprayer will give best results for large areas. Industrial low-pressure type pump sprayer with neoprene hose and gaskets may be used for small areas. Caution - rollers tend to incorporate air into product during application especially with excessive rolling.

Newly Placed Concrete

Curing compounds only work if they are on top of the concrete surface and do not penetrate. The timing of application is important. CRYSTAL GARD 0800™ should be applied after setting of cement, immediately after evaporation of the surface water sheen and the concrete surface will not be marred by walking workmen. It is during this time that the concrete is most vulnerable to spalling, hair checking and other surface defects. If surface is dry, it should be completely dampened (no puddles) before applying CRYSTAL GARD 0800™. Application rate is 300 sq. ft. per gallon (7.4m²/liter).

Sealing New Concrete

Apply a second coat after 28 days of curing. Area to be sealed must be clean and free of dirt, oil, tire marks, etc. Square foot coverage is approximately 300 square feet per gallon (7.4m²/L) for the second coat but may vary depending upon the porosity and texture of the surface.

Dustproofing and Sealing Old Concrete

Surface should be structurally sound and free of foreign matter and have an etched profile. Best penetration is to a dry substrate. Thinning with lacquer thinner 1 quart per gallon (0.946 liter) on the first coat to achieve better penetration into old concrete is permissible. A second coat (straight CRYSTAL GARD 0800™) is necessary for maximum protection. Apply second coat after 4 hours dry time at 300 to 400 square feet per gallon (7.4 - 9.8 m²/L).

	Packaging:
	5-gal (18.9L) Pails
	55-gal (209L) Drum



Texturing Additive

Lambert's texturing additive is a micronized crystalline polymer that is specially machined to provide a unique texturizing (slip resistant) aggregate for **CRYSTAL GARD 0800™**. The particle size is carefully controlled to produce a uniform moderate textured type surface. The rounded shape of the texturing additive's particles will provide optimum abrasion resistance without irritating sharp edges thus allowing for easier surface cleaning than other aggregate textured surfaces. Lambert's texturing additive is gentle to bare feet when compared to silica texturing type aggregates making it a high priority item for pool decks and patio areas.

Limitations

Application to colored concrete will give the colored surface a wet look and will deepen the color. It will accentuate any color variation or trowel burns. **DO NOT APPLY TO WHITE CEMENT SUBSTRATES. CRYSTAL GARD 0800™ WILL AMBER SLIGHTLY WHEN EXPOSED TO THE ULTRA VIOLET SUN RAYS. THIS IS GENERALLY NOT NOTICEABLE ON GRAY CONCRETE SUBSTRATES.** Consult Lambert Corporation on curing or sealing light colored concrete.

Concrete overlays and toppings will not bond to **CRYSTAL GARD 0800™** treated surfaces. Ceramic tiles that will be bonded with a cement base mortar grout will not adhere to treated slabs.

CRYSTAL GARD 0800™ is compatible with many carpet, composition tile, and other floor covering adhesives. A test section however is recommended prior to use because of the variety of new adhesives being introduced to the market. Complete removal of **CRYSTAL GARD 0800™** may be required for certain adhesives.

Open foods, meats, vegetables and dairy products may pick up the solvent odors when applied **CRYSTAL GARD 0800™** is drying. All foodstuffs should be removed prior to application and until the sealer has had time to dry.

Concrete sealers do not promote slippage in traffic areas however water or other liquids which remain on top of sealed concrete will increase the slip potential of the surface. Consider type of finished surface, type of traffic and the other conditions when specifying sealers for exposed surfaces.

DO NOT OVER APPLY. Do not apply heavier than 300 square feet per gallon (7.4m²/L). Thin coats are better than heavy, thick coats.

To ensure proper application with sprayers, use only a clean or new industrial grade sprayer equipped with a non-adjustable fan tipped nozzle, neoprene hose and gaskets. Maintain sufficient pump pressure throughout application. Uniform surface coverage is essential, avoid puddling in low areas. If material starts to come out in a stream, versus a fog, or starts to come out in spits and sputters, the nozzle has become clogged. Stop immediately and clean nozzle with lacquer thinner before proceeding. Clean the sprayer after use with a lacquer thinner flush.

Apply at temperatures above 50°F (10°C). Use adequate ventilation for interior applications. Ventilation system should be capable of exchanging total air volume in application area in 30 minutes or less. Avoid prolonged or repeated breathing of vapor or spray mist. Contains a petroleum distillate. Keep away from heat or open flame.

Technical Data

Applicable Standards:

Fed. Spec. TT-C-800A
 ASTM C-309, Type I, Class A & B
 ASTM C-156 (Test Method)
 AASHTO M-148, Type I, Clear
 NAVDOCK 13 YF

Engineering Data		Chemical Resistance	
Color	Gardener Scale No 1	10% Sulfuric Acid	Excellent*
Solids by Weight	30%	10% Hydrochloric Acid	Excellent*
Dry Time	70°F (21.1°C) 50% Humidity	10% Nitric Acid	Excellent*
Light Traffic	70 Minutes	40% Sodium Hydroxide	Excellent*
Normal Traffic	4 – 8 Hours	100% Vegetable Oil	Excellent*
Maximum Hardness	7 Day	100% Mineral Oil	Excellent*
Flash Point	108°F (42.2°C)	Aliphatic Solvents	Good*
		Hydraulic Oil	Poor
		Aromatic Solvents	Poor
		Gasoline	Poor

*Good maintenance is essential in areas where chemical spillage is likely to occur. It is especially important that such chemical spillage should not be allowed to dry as higher concentrations of chemicals become involved. **CRYSTAL GARD 0800™** will offer temporary protection to aliphatic solvent spillages but is not designed for areas where continuous spillages of petroleum products (gasoline, hydraulic oils, etc.) may be expected.

Coverage

300 to 500 square feet per gallon (7.4-12.3m²/L) depending upon usage. ASTM-C-309 specification is written on the basis of an application rate of 300 square feet per gallon (7.4m²/liter). Coverage will vary with texture and porosity of surface.

Clean-Up

Clean brushes, tools, sprayers, rollers and other equipment with lacquer thinner, toluol, or xylol.

First Aid

Eye Contact: Hold eyelids open and immediately flush with plenty of lukewarm water for at least 15 minutes and call a physician. Skin Contact: Wash thoroughly with soap and water. If irritation persists, seek medical aid. Inhalation: Remove from exposure; administer oxygen if breathing is difficult. Ingestion: Do not induce vomiting. Small amounts of liquid aspirated into lungs may cause serious pulmonary injury.

Safety Equipment

Solvent resistant gloves, goggles and if applied in areas of poor or inadequate ventilation, use mine safety mask and canister (Organic Vapor Canister No. 77705 GMA).

KEEP OUT OF REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY.

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CURE AND SEAL PRODUCTS

CRYSTAL GARD 0800™

MASTER FORMAT: 03 39 23