# BRICKFORM® Gem Cure & Seal 309 - 100 VOC



# Curing and Sealing Agent

#### PRODUCT DESCRIPTION

Gem Cure and Seal 309-100 VOC is a solvent based, clear acrylate co-polymer curing compound, dust proofer and sealer all in one. Gem Cure and Seal 309-100 VOC minimizes moisture loss from evaporation in newly placed concrete to provide maximum strength, hardness and protection. Reducing water evaporation loss will result is a stronger, denser, more durable concrete with higher compressive strength, and better crack and freeze-thaw resistance.

#### Uses

- Curing and sealing compound for freshly placed concrete.
- Sealer for existing concrete.
- Dust proofer.

#### PACKAGING

BRICKFORM Gem Cure and Seal is available in one-gallon (3.785 L) and five-gallon (18.92 L) cans.

#### **COVERAGE**

BRICKFORM Gem Cure and Seal covers approximately 250 to 300 square feet per gallon ( 6.13 -  $7.36\ m^2$  / L) depending upon porosity of the surface.

# **STORAGE**

Store in a safe place. Keep containers tightly sealed. Shelf life is approximately 36 months.

## **PRECAUTIONS**

Gem Cure and Seal 309-100 VOC should be applied when the air temperature is within 45°F and 85°F, applying it at temperatures above 85°F will cause the solvent to evaporate too fast not allowing the film to form properly possibly creating bubbles in the finish, blushing (turning white), flaking off and adhesion failure at a later time, at temperatures below 45°F the film it may not cure properly.

Direct sunlight and windy conditions during application will also affect how the cure n seal dries. If the upper layer of the cure n seal dries too fast it will form a skin that will not allow the solvent on the lower part of the film to escape properly, the solvent then may force its way up and out causing bubbles and a whitish film, this may not be immediately apparent and could become visible from 20 minutes after application to a few hours. This may also happen if the cure n seal is applied too thick thus not allowing the solvent to properly escape.

Application of Gem Cure and Seal 309-100 VOC during the warm months should be done early in the morning or late in the evening during the cooler part of the day.

#### **Features**

- Meet ASTM C-309
- Meet AASHTO M 148
- Water repellent.
- Non-yellowing
- Allows vapor passage.
- Dries water Clear
- Penetrating.
- Fast drying.
- Enhances color of decorative concrete
- Reduces alkali/efflorescence attack.
- Resistant to chemicals.
- Prolongs life of surface.
- Maintains surface cleanliness.
- Ease of application no mixing.
- Prevents mildew and fungi.

#### **CAUTIONS**

KEEP OUT OF REACH OF CHILDREN. Before using or handling, read the Material Safety Data Sheet and Warranty. DO NOT TAKE INTERNALLY. Do not breathe vapors or mist. Use only with adequate ventilation and use a respirator when levels are above applicable limits. Avoid contact with skin and eyes. Close container after each use. Use good hygiene when handling this product and wash and bathe after each use. Be sure to wash clothing after each use. NOT RECOMMENDED for dense surfaces. Apply in thin coats, only on surfaces textured for slip resistance. If applied too heavily or applied to dense surfaces, the sealer may become slippery, especially in areas where water accumulates. Heavy application may also result in bubbling and coating imperfections. If in doubt about penetrability, test the surface by sprinkling with water. If water beads up on the surface, additional cleaning and testing must be done. Do not use where hydrostatic pressure is present.

## **PREPARATION**

Surface Preparation Guidelines for applying Brickform Cure and Seal to **existing slabs**.

If applying to newly placed concrete, please skip to APPLICATION.

Surface preparation is the most important process when using any topically applied product available from Brickform. Brickform follows the surface preparation techniques recommended by the International Concrete Repair Institute outlined in its Guideline No. 03732 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, and Polymer Overlays. This Guideline is available at icri.org and Brickform highly recommends obtaining a copy and thoroughly familiarizing yourself with the various processes for accurately preparing concrete slabs.

Surface preparation requirements are different for every slab and the installer must determine what process is appropriate for the slab they are working on. The recommended surface profile for Brickform sealers is a CSP 1 or CSP2 as defined by the Guideline 03732 mentioned above. The application area must be profiled and then thoroughly cleaned. All grease, oil, stains, stain residues, rust, sealers, waxes and the like must be completely removed prior to application of the product.

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The use of Brickform E-Etch, a mild etching and cleaning compound, followed by Brickform's Neutra-Clean and clean water rinses may be appropriate for the slab. Please refer to the TIS for these Brickform products for proper use. See also the Brickform E-Etch video online at www.brickform.com.

Acid etching with Muriatic (Hydrochloric) Acid solutions may be appropriate for slabs that require more aggressive etching and cleaning. Solutions as light as 1:20 (acid:water) to as heavy as 1:1 may be necessary depending on the slab finish. When acid washing, it is very important to protect surrounding areas from damage. Plant and animal life, certain finishes on houses, metals, and the like can all be negatively impacted if acid solutions are not used responsibly. Be sure and wear proper personal protective equipment when acid washing. Always pre-wet slabs that are to be acid washed and always neutralize the slab with Brickform's Neutra Clean following the acid wash. Do not allow acid solutions to dry on the slab as dried residues will prevent the sealer from bonding. See www.brickform.com for a video on How to Acid Wash Concrete.

Other mechanical techniques such as grinding, scarifying, shotblasting or sandblasting may be necessary to prepare the slab. See www.brickform.com for other surface preparation techniques using mechanical methods.

Old sealers and cure and seal products must be removed as well. Brickform's Strip-It is an alternative to mechanical methods for their removal. Please review the TIS for Strip It prior to using this product.

The application area must be completely clean and free of grease, oils, dirt, rust, waxes, and organic stains. Mechanical removal of these may prove aesthetically displeasing. There are a number of stain and wax removers and enzymatic cleaners available either commercially or via the internet that work well in these situations.

When using pressure washers to clean slabs, use equipment with a minimum of 3000 psi at 4 gallons per minute. Rotary floor scrubbers with black or red pads are effective for cleaning flat floors. When using rotary floor scrubbers on stamped slabs, nylon bristle brush attachments are necessary to reach imprinted areas effectively.

Once the slab has been profiled, all contaminants and potential bond breakers removed, and thoroughly cleaned, allow the slab to complete dry prior to application of the product.

NOTE: Brickform strongly recommends jobsite samples or mock ups with these products. Individuals who will be performing the work should test different sections of the concrete to determine suitability, coverage, coverage rates and final appearance.

This product is not recommended for pre-sealed or dense surfaces such as glazed tile, marble or granite, dense brick, dense slate, or terrazzo. Dense, power trowelled concrete slabs MUST be properly profiled and cleaned for proper adhesion of this product. Properly prepared surfaces will readily absorb water. Water beading up or remaining on the surface indicates additional preparation and cleaning is required.

Do not use this product where hydrostatic pressure is present.

#### APPLICATION

Gem Cure and Seal 309-100 VOC should be applied to fresh concrete immediately after final finish and all surface water has completely evaporated, the surface can be damp but not wet or with puddles. Apply with a quality concrete cure n seal pump sprayer as soon as possible without marring the finish. Apply

uniformly at a rate of 250-300 square feet per gallon, avoid heavy spray, puddling and over saturation. If a second coat is desired it can be applied after the first coat is tack free.

#### **Integral Color Concrete**

It is imperative to wait until all the water has evaporated from the concrete surface, even if it delays the curing for a short time, applying cure and seal over integrally colored concrete with excessive moisture at the surface may create discoloration, splotchy areas, blushing and uneven color.

#### **MAINTENANCE**

The sealed surface should be inspected periodically for areas of thin or traffic-worn sealer. Brickform recommends the the reapplication of Gem Cure & Seal. Reapply as needed, according to the appropriate Technical Information Sheet. If traces of efflorescence are present, this should first be eliminated with a gentle cleaner such as BRICKFORM E-Etch<sup>TM</sup>, according to the BRICKFORM E-Etch Technical Information Sheet.

#### WARRANTY

This product is not intended for public use and is intended for use by licensed contractors and installers, experienced and trained in the use of these 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 material proven defective. The end user shall be responsible for determining product's suitability and assumes all risks and liability.

Gem Cure and Seal 309-100 VOC CA Solvent Base – 18% solids

Item Number: GCS-10018

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