

Sections
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Concrete Curing

ISO-CURE™ C309

HIGH-PERFORMING, SOLVENT-BASED, PURE ACRYLIC RESIN CURE & SEAL THAT PRODUCES A CLEAR PROTECTIVE FILM THAT HOLDS IN MOISTURE AND HELPS CEMENT FULLY HYDRATE

Description

A commercial grade, non-yellowing, high quality 100% pure methyl/methacrylate acrylic cure and seal compound with a fast drying accelerator. Iso-Cure™ C309 penetrates into the surface of new or cured concrete where it produces a clear protective coating that highlights color and resists surface abrasions, salt, oil, grease, stains and UV rays. When applied to freshly troweled concrete, it forms a membrane to aid cement hydration during the curing process. Great on flat work, exposed aggregate, stamped and colored concrete surfaces.

Iso-Cure™ C309 was formulated to protect architectural concrete such

exposed aggregate, colored, and stamped concrete. A 26% solids, non-yellowing, cure and a seal made from pure 100% acrylic. It has been tested and approved by the (DOT) Department of Transportation for the curing of decorative concrete surfaces.

Iso-Cure™ C309 is suitable for interior or exterior use on new and existing surfaces. Ideal for exposed aggregate and colored concrete surfaces, paving block, patio stone, driveways, and garage floors.

Coverage*

125 ft²/gallon

Sizes

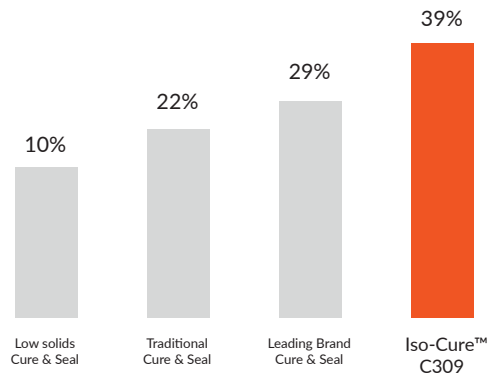
5 Gallon

*Surface texture, density, porosity, application conditions and type of equipment used will all vary consumption.

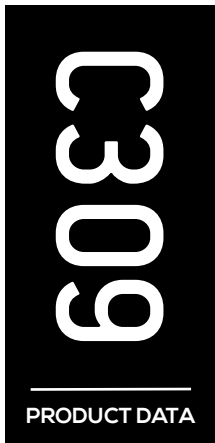
MOISTURE RETENTION / DIRECT SUN LIGHT

Performance Tested:

- ASTM C-1315, Type 1, Class A, B & C
- ASTM C-309, Type 1, Class A & B and Type 1D
- Fed. TTC-C-800A, Type 1, Class 1
- AASHTO Des. M-148., Type 1, Clear, DE CRD - C-300



Average Percentage Improvement vs. Control



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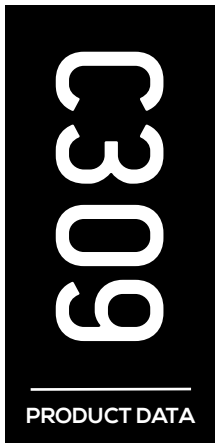
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TECHNOLOGY // ADVANTAGES

- **Composition** - Contains only pure premium methyl/methacrylate acrylic polymers
- **Retains Moisture** - Improves cement hydration for improved strength, durability and appearance while reducing shrinkage.
- **DOT Approved** - Meets C309, TTC-C-800A requirements
- **Maximizes Strength** - Adds durability to indoor and outdoor finishes.
- **Gloss Finish** - Enhances the color of the surface and adds sheen
- **Meets the VOC** regulatory compliance for AIM
- **Superior Penetration and Adhesion** - Utilizes advancements in nanotechnology to penetrate below the surface to provide deeper protection
- **Non-staining, Non-yellowing**
- **Ready-to-Use (no diluting)**
- **Minimizes Spalling and Aggregate Pops** - Penetrates into the surface of the concrete to fill gaps and voids
- **Easy-to-Clean** - Makes surfaces less dusty and easier to clean by resisting penetration of grease or rust stains on concrete surfaces
- **Easy-to-Apply** - Sprayer, roller, or long nap applicator
- **Protects** from effects of rain water penetration, chemicals, oils, salt, freeze-thaw, smog, and contaminants
- **Dries Quick** - 2-hour drying time to be open to traffic under normal conditions

PHYSICAL DATA

Composition:	A blend of 100% methyl/methacrylate acrylic polymers in a fast drying aromatic solvent
Solids:	26%
Flash Point:	105°F
Drying Time:	Tack Free: 1 hour Traffic: 2 hours
VOC Content:	< 700 g/l
A.I.M. Content:	Curing and Sealing Compound
Applicable Standards & Testing:	- ASTM C-1315, Type 1, Class A, B & C - ASTM C-309, Type 1, Class A & B and Type 1D - Fed. TTC-C-800A, Type 1, Class 1 - AASHTO Des. M-148, Type 1, Clear - DE CRD - C-300 - USDA Authorization for use in meat, poultry, and food processing plants. - Resilient Tile Institute approval for compatibility with most resilient tile, carpet adhesives, and paints.



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TESTING INFORMATION

ASTM C-1315, Type 1, Class A, B & C

Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete

ASTM C-309, Type 1, Class A & B and Type 1D

Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete

Federal Specification TTC-C-800A, Type 1, Class 1

AASHTO Des. M-148, Type 1, Clear - DE CRD - C-300

American Association of State Highway and Transport Officials Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete

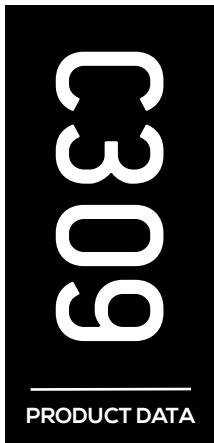
APPLICATION

Newly Placed Concrete

Surrounding areas, landscaping, and adjacent surfaces must be masked or protected from overspray, spills, tracking, and equipment contact. The work area should be roped off, nearby vehicles removed, and appropriate sections closed to traffic. All open flames, pilot lights, sparking equipment, or any other source of ignition must be extinguished or removed. The surface should be divided into work sections using walls, joint lines, or other stationary features as natural stopping points. This allows for easier control of coverage, wet edge, and overlap.

Iso-Cure™ C309 must be applied uniformly as soon as the surface of the concrete has sufficiently set so it can be walked on gently without marring, the surface moisture has evaporated, and no condensation or sweating can occur. During application, all surfaces must be in approximately the same state of hardening.

During cold, foggy, or damp weather or periods of significantly falling temperatures, the concrete may sweat or condensation may form on the surface, thereby preventing the curing compound from drying and adhering properly. Application of the compound should be made after condensation ceases, and when temperatures will not fall below 40° F (4° C). When interior heat is required, air heaters that do not have open flames or other sources of ignition and that vent exhaust flue gases to the outside should be used to avoid concrete carbonation resulting from carbon dioxide buildup. Temperatures and humidity should be moderate and consistently maintained.



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After application is finished, tools should be cleaned with an aromatic solvent following the solvent manufacturer's instructions and safety requirements. For sprayers, pump the solvent through the spray equipment to remove the residue. The curing surfaces should not be walked on for at least 2 hours after application. Freshly placed concrete should not be covered with plastic sheets or waterproof paper. If additional protection is absolutely required, the curing surfaces should remain uncovered for a minimum of 4 days, after which time new and unwrinkled, nonstaining, reinforced, kraft curing paper may be used. The use of plastic sheeting for protection is never recommended. When protection from plastering is required, the kraft paper should be removed at the end of each day, the concrete cleaned of all plaster and plaster-water residue, and the paper reinstalled the next morning if necessary.

In most applications the use of one coat of Iso-Cure™ C309 as a curing compound is satisfactory. If a gloss finish is desired, surfaces should receive an additional seal coat of Iso-Cure™ C309. The seal coat should be applied 30 days after the concrete has been placed and cured.

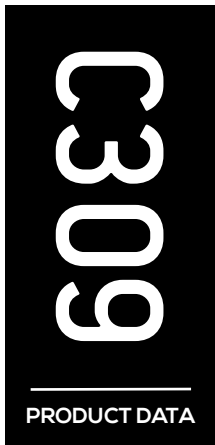
Sealer / Seal Coat

Immediately prior to applying the seal coat, the concrete must be thoroughly cleaned by sweeping or vacuuming. Significantly stained, mottled, or damaged sections should be stripped. Mottled areas may also require acid washing after stripping to remove alkali deposits. These may form under the cure coat when application is made to concrete that contained excessive water when placed or where there was an unusual subsurface moisture condition. The surface must be

rinsed after cleaning until the rinse water is completely clean. After drying, the surface should be inspected closely, and additional general or spot cleaning and rinsing should be performed if necessary.

Before sealing concrete surfaces that have not been previously sealed with Iso-Cure™ C309, all dirt, oil, grease, previously applied curing compounds, sealers, and coatings must be completely removed. Failure to remove all contaminants and coatings that impede the penetration of Iso-Cure™ C309 into the concrete will cause appearance defects, adhesion loss or peeling, and reduced durability. Concrete not previously cured or sealed with Iso-Cure™ C309 must be cleaned completely so that the surface is penetrable. Acid washing may be required when the above surface preparation does not yield adequate penetration or if there are excessive alkali deposits or surface discoloration. If acid washing is required, be sure to neutralize the surface by washing with a solution of baking soda (sodium bicarbonate) and water, using 1 pound of baking soda per 5 gallons of water (454 g/19 L). Apply the solution until it stops fizzing. After neutralization, the surface must be rinsed thoroughly with clean water several times to remove soluble salts. Rinsing must continue until the rinse water is clean. Rinse water must be removed with a wet vacuum; rinse water left on the surface to evaporate may cause efflorescence.

Particular care must be taken to completely remove any release agent that may have been applied. The presence of most release agents will adversely affect the physical properties of Iso-Cure™ C309 and cause adhesion loss between the sealer and the concrete.



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Exposed Aggregate Application Preparation

When applying to exposed aggregate as a curing compound, the surface should be washed with a mild acid solution to remove the thin film of cement dust, then flushed with water and allowed to dry before applying Iso-Cure™ C309. An inconspicuous location to test the compatibility of the coating with the prepared substrate is recommended. Allow the coating to dry and cure fully, then inspect for proper film formation, gloss, and adhesion. Confirm that the film is free from whitening or any other defects.

Mixing

The material is ready for use and requires no mixing or dilution. It is unlawful to further dilute with non-exempt solvents.

For Vertical Surfaces

For best results, apply with an airless sprayer and back roll. Apply in a uniform manner at the specified application rate, taking care to avoid lap marks. Use natural break points, such as cuts and joints, as stopping points whenever possible. **DO NOT OVER APPLY.** Note that concrete must be fully cured (looks uniform in color) and dry at the time of application. This eliminates the potential for moisture to trap between the curing compound and the concrete slab, resulting in a white haze on the surface. If a white haze develops, a second application of Iso-Cure™ C309 will emulsify the film and allow trapped moisture to escape. The coating will then be able to re-harden clear.

Maintenance

Minimal maintenance is required, other than occasional sweeping,

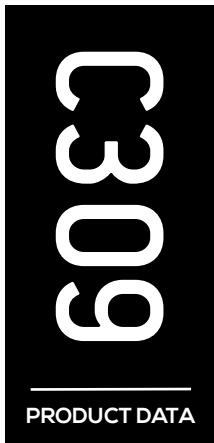
dusting, or mopping. If wear patterns do occur or if spillage removes the coating, Iso-Cure™ C309 may be reapplied to the affected area(s).

Limitations

- Apply in temperatures above 40°F. Colder weather applications may be made under prescribed conditions and procedures specified by KreteTek Industries.
- Not for use on asphalt or surfaces subjected to hydrostatic water pressure, or as a waterproofer on below-grade surfaces.
- Sprayers must be equipped with neoprene hose, washers, and gaskets as rubber or other materials will disintegrate from the solvent.
- Product will not freeze and may be stored in cold weather; however, it must be allowed to warm to approximately 50°F before use.

Note 1. Concrete containing calcium chloride will remain dark longer when sealed. Extenders and additives (concrete admixes, fly ash) are now being added to some ready mixed concrete, which can cause inconsistency in the porosity of the concrete. Some areas of the finished concrete may then appear darker than others. To compensate for these variations, coverage ratios should be adjusted.

Note 2. Pop out problems can occur anytime. However, concrete in certain regional areas, concrete applied in extremely hot conditions (90°F+), and heavily steel-troweled concrete can aggravate pop out problems. These deficiencies are the result of a heat-caused reaction, called Alkali Silica Reactivity (ASR), between the silica in the shale particles of the fine aggregate with the sodium and potassium alkali



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in the Portland cement. Where this type of shale is present and extremely hot weather conditions prevail, it is recommended that liquid membrane curing compounds should not be used until the concrete has been completely cured by water ponding, continuous water spray mist, or wet burlap covering for a period of three days. A seal coat can then be applied.

First Aid

In case of eye contact, flush immediately with large amounts of water for at least 15 minutes and get medical attention immediately. If swallowed, do not induce vomiting. Give conscious victim 1 to 2 glasses of water and get medical attention immediately. If on skin, wash thoroughly with soap and water. If you experience difficulty breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately. If symptoms persist or develop, get medical attention.

Storage

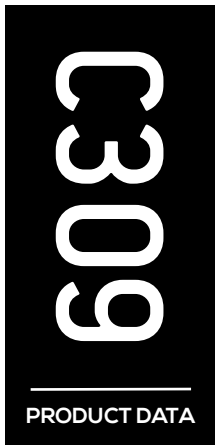
When stored in the original unopened containers and protected from extreme heat, the shelf life of Iso-Cure™ C30 is at least 1 year. Keep container closed when not in use. If spilled, eliminate all sources of ignition. Contain spilled material and remove with inert absorbent using non-sparking tools. Dispose of contaminated absorbent, container, and unused contents in accordance with all applicable regulations. Do not reuse empty container. Before using or handling, read the Safety Data Sheet located on www.ghostshield.com

Warranty

KreteTek Industries Inc. warrants our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. No warranty is made, expressed or implied, regarding such other information, the data on which it is based or the results you will obtain from its use. We shall have no liability for incidental or consequential damages, direct or indirect. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products.

Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sales of our products. Our products contain chemicals that may cause serious physical injury. Before using, read the Safety Data Sheet and follow the precautions to prevent bodily harm.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection



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therewith. This information and all further technical advise are based on KreteTek Industries Inc. present knowledge and experience. However, KreteTek Industries Inc. assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. KreteTek Industries Inc. reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.

For professional use only.

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KreteTek Industries Inc.
66 River Road
Hudson, NH 03051

www.Ghostshield.com

Customer Service and Technical Support

1-855-KreteTek (1-855-573-8383)