



**The Euclid Chemical Company**



# Concrete Cure and Seal

## **SELECTION AND APPLICATION GUIDE**

Attractive concrete driveways, walkways, and patios can greatly enhance the appearance and value of a property. Industrial and commercial building owners also count on their concrete floors to be durable and good-looking. Many factors contribute to producing strong and durable concrete, including a quality concrete mix, professional placement, and proper curing and sealing. This guide will help you understand concrete curing and sealing, product selection and application, and how choosing and applying the right product can protect and beautify concrete investments.

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# Part I

## BENEFITS OF CURING AND SEALING CONCRETE

### THE IMPORTANCE OF CURING NEW CONCRETE

Curing is the process of maintaining moisture and temperature in fresh, new concrete over a period of time long enough for the concrete to gain its designed strength. Properly cured concrete is stronger, more resistant to freeze-thaw damage, and less susceptible to dusting and scaling of the surface. There are several methods for curing concrete, from covering with plastic sheets or wet burlap to ponding with water, or by the application of a curing compound or cure and seal.

**CURING COMPOUNDS** A common method for curing new concrete is the use of a liquid membrane-forming product called a “curing compound”. A curing compound is sprayed or rolled on a concrete surface and upon drying, it forms a thin film that restricts the amount of water that can evaporate from the concrete. These membrane-forming products must be applied as soon as possible after the concrete is finished and the surface will not be marred by the application process. Waiting until the day after placement to apply curing products is not as effective.

**CURING AND SEALING COMPOUNDS** Another type of membrane-forming compound is called a “cure and seal”. Used in the same way as a curing compound, a cure and seal product has the extra benefit of remaining as a protective film on the concrete for a longer period of time. Cure and seals often add a glossy appearance to the concrete as well. These products are usually reapplied when traffic and weathering begin to wear away the protective film and diminish its effectiveness.

An alternative method for sealing cured concrete is by using a “penetrating water repellent sealer”. This type of product utilizes silane or siloxane polymers that soak into the surface and form an internal barrier that helps prevent both water and chloride from soaking into and damaging the concrete.

## Benefits of Sealing New or Old Concrete

Keeping concrete sealed will help prevent water from soaking into the concrete, where it can do damage either by freezing or by corroding the reinforcing steel in the slab. Concrete cure and seals and penetrating water repellent sealers can also minimize dusting, protect against damage from chloride (deicing salt) ingress, protect against some staining (if spills are cleaned up promptly), and they can act as a sacrificial layer to reduce abrasion and wear to the concrete from traffic. Finally, concrete cure and seals can enhance the color and impart an attractive shine to concrete – which is especially beneficial on stamped, integrally colored, or acid stained surfaces.



# Part II

## PRODUCT SELECTION AND EXPECTATIONS

An excellent option for new concrete is to apply a curing and sealing product as soon as the finishing operations are complete and the concrete can be safely walked on. Using a cure and seal provides for well-cured and protected concrete in one step. Alternately, a dissipating curing compound can be applied to the fresh concrete, then cleaned off after 4 to 6 weeks followed by application of a penetrating water repellent sealer. These products are more efficient water and salt repellents than concrete cure and seals, but penetrating sealers do not enhance the color or provide a shine to the concrete. Because they leave no membrane on the concrete surface that can be worn away by traffic or weather, penetrating water repellent sealers last longer than cure and seals.

On concrete that has already cured, or for older concrete slabs, the choices for sealing are 1) a film-forming cure and seal or 2) a penetrating water repellent sealer. Keep in mind that a penetrating sealer can only be applied to clean, bare concrete – it needs to be able to soak into the surface. If a film-forming curing compound or cure and seal has been applied previously, it must be removed or allowed to completely wear away before a penetrating sealer is applied.

Refer to Table 1 for a head-to-head comparison of concrete cure and seals and penetrating water repellent sealers based on key factors important to home or building owners, facility managers, designers, and specifiers.

**TABLE 1: CURE & SEAL AND PENETRATING SEALER COMPARISON**

	Cure & Seal	Penetrating Sealer
Provides Color Enhancement & Shine	✓	
Longevity		✓
Best Water & Salt Repellency		✓
Economical Price	✓	
Ease of Application		✓
Available in Both Solvent Based and Water Based Formulations	✓	✓

It is important to note that no cure and seal or penetrating water repellent sealer will prevent problems with concrete that result from a poor mix design, improper finishing techniques, aggregate pop-outs, carbonation, excessive use of deicing salts, or lack of curing. Simply put, a concrete cure and seal or penetrating sealer is meant to protect good quality concrete, not to repair or prolong the life of poor quality concrete.







## What to Expect: **APPEARANCE**

When considering penetrating water repellent sealers, the discussion of concrete appearance is simple: these sealers do not permanently alter the appearance of concrete. During application, while the concrete is wet with a penetrating sealer, the concrete will look darker. Upon drying, the concrete will lighten to its pre-sealed color. Penetrating sealers do not leave a shine or gloss on the concrete.

Concrete cure and seals **will darken concrete** and leave a glossy shine, giving the concrete a “wet look”. The concrete will lighten back to its unsealed color only when the cure and seal wears off or is removed. The photo below shows concrete that has had water spilled on it next to an area sealed with EverClear, a concrete cure and seal. Notice how the two areas look very similar. The amount of gloss depends on the specific cure and seal used as well as the number of coats applied.



Because every concrete slab is unique in its color and texture, the color of concrete after an application of a cure and seal is difficult to predict. The type of cement and sand used, the concrete mix design and use of chemical admixtures, surface finishing techniques and porosity are just a few factors that will affect the color of a concrete surface. A concrete cure and seal will deepen the “true” color of concrete, and will highlight all the differences in the surface texture that result from floating and finishing. Concrete cure and seals bring out the “grain” in concrete just like a varnish does on wood. If changing the concrete

color after sealing is a concern, use a penetrating water repellent sealer or do a small test application of a cure and seal to make sure the color change will be acceptable.

Please note that water based cure and seals are a milky white color as supplied, but will dry clear if applied properly (see Part V).

Although concrete penetrating sealers and cure and seals are formulated specifically for concrete, most can successfully be used to seal natural and cultured stone, pavers, brick, and masonry units as well. On these substrates, a small test area of the product should be applied to ensure that the appearance is acceptable.

## What to Expect: **DURABILITY**

By far, the durability of a penetrating water repellent sealer surpasses that of a cure and seal. This is because penetrating sealers soak into the concrete and chemically bond within the surface, leaving no film or membrane on top of the concrete that can wear off under traffic and weathering. Most penetrating water repellent sealers are formulated with a “beading agent” that causes water to bead up on the concrete surface like on a freshly waxed car. Over time, the beading agent dissipates and water may no longer bead like it once did. This does not indicate failure of the penetrating sealer – the silane or siloxane is still bonded within the concrete surface, repelling water and salt. When the beading agent is no longer active, water will “sheet” off the concrete instead of beading. Under normal use conditions on a concrete driveway, the protection provided by a penetrating sealer will last 5-10 years before requiring reapplication.



Concrete cure and seals are affected by the environment and traffic, and generally will begin to show wear patterns after a year or two, and will completely wear away in 3 to 4 years. This wear will be accelerated if the sealed concrete is exposed to heavy applications of rock salt or other ice melting agents, or is frequently subjected to spills of other chemicals or heavy abusive vehicle traffic.

Many people will re-seal their concrete with a cure and seal every year, when they can no longer see the glossy shine of the initial application. But loss of surface gloss does not always mean that the cure and seal has entirely disappeared; the product is likely still in the pores of the surface, unseen, but still capable of sealing and protection. Although the intention of a yearly re-seal is to maintain a well-sealed surface, applying another coat of cure and seal year after year can lead to a heavy buildup of product, which in turn causes bubbling, peeling, and discoloration. Please refer to Part VII for more information on re-application of cure and seals.

If a longer lasting, more durable glossy sealer is desired, the application of an epoxy or urethane coating system should be considered – especially on interior residential, commercial, or industrial floors where traffic and abrasion will be heavier than what is typical for a driveway or patio. While cure and seals will scratch and scuff under foot traffic, wheels, furniture, etc., epoxies and urethanes are much more resistant to this type of wear. Although the cost of preparing a floor for epoxy or urethane coatings is more involved and expensive, and the material cost is higher, epoxies or urethanes are worthwhile options for protecting concrete floors where long-term durability is the goal. Keep in mind, however, that using epoxy or polyurethane coatings can be problematic on exterior concrete if moisture is actively moving through the slab or if the concrete is in a freeze-thaw climate. Always consult the manufacturer regarding exterior application of an epoxy or urethane coating before its use.

### What to Expect: **CHEMICAL AND STAIN RESISTANCE**

Neither penetrating silane or siloxane sealers nor concrete cure and seals provide much chemical or stain resistance to the concrete. Penetrating sealers, unless otherwise noted in product literature, will repel water and chlorides – but not oil or other chemicals. Concrete treated with a penetrating sealer can still be stained or damaged by chemicals, fallen tree leaves, tire marks, etc. Cure and seals can also be stained and will deteriorate if exposed to gasoline, oil, and most other chemicals. Again, for more durability and resistance to chemicals and staining, consider an epoxy or urethane coating system.

### What to Expect: **SLIP RESISTANCE**

Because penetrating sealers soak into the concrete, leaving no membrane on the surface, they do not alter the slip resistance of the concrete. Smooth concrete remains smooth; broom textured concrete will retain its texture.


Cure and seals are typically applied at thicknesses ranging from 1 to 3 mils, or 0.001 to 0.003 inch (0.002 to 0.008 cm). This is very thin – a sheet of copy paper is about 0.004 inch (0.01 cm) thick. As a result, a cure and seal will not significantly change the texture of concrete. However, when the concrete is wet, the combination of water on top of a cure and seal can result in a slicker surface. Around swimming pools, on stairs, or anywhere where slip resistance is critical, Euclid Chemical recommends the addition of a non-skid additive to the cure and seal product before application. These additives provide positive footing without affecting the appearance of the sealer.



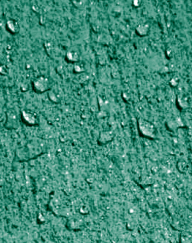


# Part III

## CONCRETE SURFACE PREPARATION



When applying a curing and sealing compound to fresh concrete (immediately after finishing), no surface preparation is necessary. After the bleed water is gone, simply spray on the cure and seal using the methods discussed in Part V.



Before sealing or re-sealing concrete that has already hardened, the surface must be well cleaned to ensure good product performance. Removal of dirt, oil, and other contaminants is necessary; to accomplish this, a pressure wash is recommended. Read all the equipment instructions and precautions before using a pressure washer to clean concrete. Following are just a few tips for successful concrete cleaning.

- Test the pressure washer on a small area to adjust the spray; the water should come out in a small fan pattern rather than a straight jet. Hold the nozzle about six to ten inches (15 to 25 cm) from the surface and do not exceed the equipment manufacturer's instructions for the pressure required to clean concrete. Overlap the fan pattern 50% to reduce striping.
- Work slowly and steadily. Clean one section at a time before moving to the next. Following a random washing pattern may result in uneven streaks after the concrete dries.

If a pressure washer is not available, hosing off the concrete and/or scrubbing with a concrete cleaner is usually sufficient. Spot clean stains or oil-soaked areas, as sealing over these spots may result in poor adhesion or inadequate penetration of the product.

Most penetrating water repellent sealers can be applied to concrete that is slightly damp, but a dry surface will result in better product penetration. Allow the concrete to dry thoroughly before applying a cure and seal. Following a pressure wash, there may be a significant amount of water left in the concrete even though the surface may look dry. One or two days of post-pressure wash drying out of the concrete in warm, dry weather is recommended before application of a cure and seal.

Acid etching or other mechanical preparation of the concrete is not required before application of a cure and seal or penetrating water repellent sealer; however, any residual curing compounds or cure and seals may need to be chemically stripped or mechanically removed before sealing.





# Part IV

## IDEAL CONDITIONS FOR APPLICATION

Concrete cure and seals and penetrating water repellent sealers are sensitive to the environmental conditions during application and drying, including air temperature and humidity, concrete moisture content and temperature, wind, direct sunlight, possibility of rain, etc. This is especially true for water based products, because their proper drying is highly dependent on temperature and humidity. There is not much of a choice when curing and sealing fresh concrete, since the cure and seal should be applied right after finishing for best results. But when sealing concrete that has already cured, it is best to choose a day for product application when the conditions are ideal, even if this means waiting a few days or weeks to seal the concrete.

Applying a concrete cure and seal to wet concrete can cause it to “fog up” or “blush”, which means it turns white. If pressure washing or hosing off the concrete in preparation for sealing, allow it to completely dry before application. Pressure washing can push a great deal of water deep into the concrete, so it is best to wait 1 to 2 days after washing before applying the sealer.

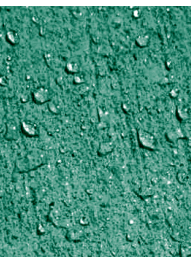
### TEMPERATURE

Water based cure and seals and penetrating sealers must be applied when the air and concrete temperature is 45°F (7°C) and rising, but not higher than 90°F (32°C). This is critical for proper film formation or reaction with the concrete. Application when the temperature is outside this range can cause the sealer to bubble, turn white and/or dry chalky instead of as a clear, strong film.

Solvent based products are less sensitive at the low end of the temperature range; they will dry when the temperature is as low as 40°F (4°C) but application at low temperatures will be difficult since solvent based sealers thicken considerably as they get cold. The product containers should be kept at room temperature before application so that the material stays viscous and easy to spray or apply by roller.

As the temperature approaches 85°F (29°C) and above, applying a solvent based cure and seal becomes difficult, since the solvent in the product will evaporate much faster at those temperatures. Application during warm weather is best done early in the morning or late in the evening, during the coolest part of the day. Using a solvent based cure and seal in hot weather or in direct sunlight can result in bubbling of the product, which in turn leads to peeling or flaking off. Solvent based cure and seals formulated with the VOC-exempt solvents tertiary-butyl acetate (TBAC) or acetone are especially affected by temperature, as these solvents dry as much as nine times faster than standard xylene-based cure and seals. Applying a TBAC or acetone-based cure and seal in hot weather will greatly increase the chances of bubbling and failure of the sealer to adhere to the substrate.





## **HUMIDITY**

In high humidity conditions, above 70% R.H., any type of concrete cure and seal or penetrating sealer will take longer to dry. If the humidity is very high, or the product is applied in a location with little air flow, it can take weeks for a concrete sealer to dry or cure thoroughly. Additionally, high humidity during application and drying of a water based cure and seal may cause the product to dry to a white appearance or chalky consistency. It is best to wait until the weather offers normal humidity conditions, below 70% R.H. (or use dehumidifiers on interior projects) before applying a water based cure and seal. Cure and seals used on interior projects with little or no cross-ventilation or air exchange can also experience delayed dry times.

## **SUN, WIND AND RAIN**

Direct sunlight and windy conditions during application can cause a solvent based cure and seal to bubble or turn white (applying a cure and seal too thick can also cause bubbling; see Part V for details). This is because the cure and seal will “skin over”, or dry on its surface before the solvent has fully evaporated, if it is applied when the concrete is in hot sunlight and/or strong wind conditions. Over time, the pressure of the solvent vapor trying to evaporate will cause blisters or bubbles in the cure and seal. This can be prevented by applying a cure and seal in cool weather, or on a calm, overcast day. The product needs to dry from the bottom up, not the top down.



# Part V

## PROPER APPLICATION METHODS

### SPRAYING

Application of a cure and seal or penetrating water repellent sealer with an industrial, hand-held pump-up sprayer is the best way to achieve even coverage and appearance. Chapin Manufacturing's Concrete Sprayer Model 1949 (or 19049 for spraying exempt solvent cure and seals) or Hudson's Industro® sprayer all work very well. Be sure to wear protective clothing, gloves, and eyewear and protect any surrounding buildings, vehicles, etc. from overspray.



When spraying, the product should exit the nozzle in a fine and even fan pattern. If there are streams of material coming out of the nozzle, the sprayer either needs to be pumped up with more pressure, or a nozzle with a larger orifice size should be used. Most sprayers come equipped with a 0.5 gallon per minute (1.9 liters per minute) spray nozzle, but for higher solids materials, a 1 gallon per minute (3.8 liters per minute) nozzle may be required to produce an even spray pattern.

When spraying a cure and seal, do not leave areas of heavy overlap. A good practice is to have one person applying the cure and seal by sprayer, and another person immediately backrolling over the applied areas to even out the coverage and eliminate any overlapped areas of material. A cure and seal that has been allowed to puddle or is overlapped will dry with a darker color, resulting in a blotchy appearance. ALWAYS FOLLOW THE RECOMMENDED COVERAGE RATE for the product. Applying a cure and seal heavier than what is recommended by the product manufacturer will lead to the product turning white, bubbling, or peeling.

Be sure to follow the manufacturer's directions regarding sprayer cleaning and maintenance, as a dirty or clogged sprayer will produce uneven coverage and poor results. Also, do not spray water based and solvent based cure and seals with the same sprayer without thorough cleaning before the product changeover. Water based and solvent based materials are not compatible with each other and comingling will cause clogging of the sprayer.

### ROLLING

Most do-it-yourselfers will choose to apply a concrete cure and seal or penetrating water repellent sealer with a paint roller on an extension pole. The roller must have a short nap, 3/8 inch (0.95 cm) is preferred, and all equipment including the roller and paint tray must be solvent resistant.

Again, applying a cure and seal according to the recommended coverage rate is critical to product performance and appearance. Do not saturate the roller with the product, as this can cause dripping and heavy areas, which will discolor the concrete. While rolling, keep a wet edge and do not create heavy overlapped areas. Rolling too vigorously can cause bubbling.





If it is necessary to “cut in” with sealer around landscaping, structures, etc., be sure to keep a wet edge between the cut in parts and the main area application. If a section is cut in and allowed to dry, there will likely be a visible line between the cut in area and the rest of the sealed concrete.

### **APPLICATION THICKNESS AND NUMBER OF COATS**

It may be tempting to apply one heavy coat of cure and seal in order to achieve the thickness and shine desired in one step. However, over-application of cure and seals is the most common cause of product failure including bubbling, turning white, flaking, and peeling. It is best to apply a cure and seal or sealer in two THIN coats rather than one heavy coat. This will take more time, but the results will be worth the investment.

To estimate the amount of sealer that is required for a project, first determine the area of concrete to be sealed. This is done by multiplying the length of the area by its width. For example, a rectangular concrete driveway that is 12 feet (3.6 meters) wide by 80 feet (24 meters) long has an area of  $12 \times 80 = 960$  square feet (89 square meters). A typical application rate for a concrete cure and seal is 300 square feet per gallon (7 square meters per liter). For the driveway example, the amount of sealer required for one coat would be 960 square feet divided by 300 square feet per gallon, which equals 3.2 gallons (or 89 square meters divided by 7 square meters per liter = approximately 13 liters of product). The first thin coat of cure and seal is likely to soak into the concrete and disappear, leaving little or no sheen. The second coat, which can be applied anywhere from 2 to 24 hours later (when the first coat has dried tack-free), will provide the gloss and the protective seal coat on the surface.

### **SOLVENT ODOR CONCERNS**

The solvent in a solvent based cure and seal or penetrating sealer will evaporate into the air as the product dries. However, just because the solvent evaporates doesn't mean it disappears – the solvent will be dispersed throughout the air. This can be a concern on interior applications. Eventually, as “clean” air enters the room and the dispersed solvent vapor flows out, there will be no odor remaining. However, if a cure and seal or penetrating sealer is applied too heavily, or in closed conditions with little or no air movement in and out, the time for the solvent odor to disperse can be very long. The best preventative measure to take before applying the product is to create conditions in the building that will encourage more favorable drying conditions of the sealer.

It is best to apply a cure and seal or penetrating sealer when the humidity is low. When the humidity is high, air has a harder time picking up excess solvent from the product, thus slowing the drying process. If it is not possible to wait until there is less humidity, you could purchase or rent a dehumidifier and place it in the room where the product is to be applied. Fans can also be used to help dry the product. Fans serve several purposes: 1) air that is moving has a greater capacity to pick up the evaporated solvent; and 2) in conjunction with open windows, fans help move the inside air to the outside where it can disperse even more rapidly, and they can help bring in fresh air from the outside. The process of moving air through a room is called “air exchange,” and the more air exchanges accomplished, the faster you will remove the irritating solvent odor. To remove the solvent odor as fast as possible, open all windows and set up fans to push the evaporated solvent out and move fresh air in. The time it will take to remove the odor cannot be predicted and will depend on the air exchange rate as described above.



## SPECIAL APPLICATION DETAILS FOR EXEMPT SOLVENT CURE AND SEALS

In January 2005, several East coast and mid-Atlantic states enacted regulations that made traditional xylene solvent cure and seal and penetrating water repellent products illegal to sell or use in those states. These regulations are currently in effect in Maryland, New York, New Jersey, Delaware, the District of Columbia, Pennsylvania, Maine, New Hampshire, and the northern counties of Virginia. Similar regulations are slated for Ohio, Michigan, Wisconsin, Indiana, Illinois, Connecticut, Massachusetts, Rhode Island, and Vermont. As a result, cure and seal products are now being offered in “exempt solvent” formulations; solvents such as acetone and tertiary-butyl acetate (TBAC) have “low photochemical activity” – they do not react in the atmosphere to produce ozone, a ground level pollutant. For this reason, the EPA and most state air quality boards consider one or both of these solvents to be “exempt”, which means that they do not count toward the VOC content of a product.

With exempt solvent cure and seals, consumers in regulated areas once again have options for curing and sealing concrete in conditions or applications where water based products are unusable (in cold weather, for example) or when the predictable and reliable results of a solvent based product are desired.

TBAC and acetone have evaporation rates that are five and nine times as fast as xylene, respectively. As a result, cure and seals formulated with acetone and TBAC dry much faster than standard cure and seals that use xylene-type solvents as the carrier and the application methods must be altered slightly to ensure a successful end result.

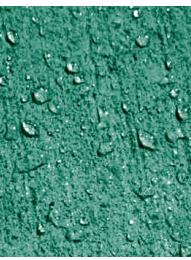
Exempt solvent cure and seals can be applied with an industrial, hand held pump-up sprayer equipped with a 0.5 gallon per minute (1.9 liters per minute) brass spray tip with a fan pattern. Additionally, contractors must be sure that the sprayer is equipped with neoprene gaskets, o-rings, and hoses, as standard rubber fittings will deteriorate upon contact with acetone or TBAC. Chapin Manufacturing offers their Xtreme Industrial Concrete Sprayer, which is specifically resistant to acetone and tertiary-butyl acetate.

Because exempt solvent cure and seals dry quickly, the nozzle of the sprayer must be held close to the concrete surface – no more than 6" (15 cm) above. The contractor cannot wave the sprayer nozzle around at waist level. This can lead to flash drying of the product before it even hits the ground. These products can also be roller-applied, although a more even application is accomplished by spraying on the product then immediately back rolling over the applied area to re-distribute any heavy or puddled spots. If backrolling is to follow spraying, it must be done immediately behind the spray application. Do not overwork the roller; this can cause bubbling, stringing, and roller nap pull-out.

The fast dry times of these products mean that application during the coolest times of the day (early morning or late evening, not in direct sunlight) is especially critical to good results. Applying exempt solvent products in hot weather or direct sun will result in severe bubbling.







## Part VI

### **MAINTENANCE OF SEALED CONCRETE**

Concrete should be cleaned or rinsed off routinely. Certain chemicals, oils, and tree debris that are allowed to sit on the concrete surface may stain or deteriorate the sealer and concrete finish. Early clean up of spills and contamination will reduce the degree of staining and prolong the life of any cure and seal or penetrating water repellent sealer that has been applied. A diluted alkaline detergent (no acids) or a concrete degreaser can be used to spot clean stubborn stains. Home improvement stores typically carry cleaners specifically for concrete.

## Part VII

### **REAPPLICATION OF CURE AND SEALS AND PENETRATING SEALERS**

Penetrating water repellent sealers can last five or more years before requiring reapplication. The exact life expectancy of the seal is impossible to determine, since it is dependent on the quality of the concrete and the amount of traffic and weathering the concrete receives.

Traffic, weather, and sunlight will degrade a concrete cure and seal much faster, and reapplication is required every 2 to 3 years. Again, the exact life expectancy of a cure and seal cannot be predicted. When the sheen of the cure and seal can no longer be seen and water soaks readily into the concrete, it is time for a light re-seal. Preparation for re-sealing concrete is detailed in Part III of this guide, and the application methods in Parts IV and V should be followed.

Care must be taken to avoid re-applying a cure and seal year after year before previous coats have worn off. This will lead to heavy build-up and discoloration of the concrete, and can cause problems like bubbling and peeling of the cure and seal. Sometimes, it can look as though the cure and seal is completely gone; however, the product remains in the surface pores of the concrete and may only need a simple "solvent wash" to pull the cure and seal back to the surface and bring the gloss and color back to life. A solvent wash is done by rolling xylene (sometimes called xylo) onto the concrete with a 3/8 inch (0.95 cm) nap roller, using the same techniques as described in Part V. The xylene will re-wet any cure and seal in and on the concrete surface, bring it back to the surface and make it glossy again.



# The Euclid Chemical Company

## EXPERTS IN CONCRETE CURING, SEALING & PROTECTION

With a comprehensive line of concrete construction products, The Euclid Chemical Company is ready to provide the curing or sealing solution for all your new construction and renovation projects. Whether you need a basic curing compound for new concrete pavement, or a high performance, decorative cure and seal for architectural work, or a penetrating water repellent to seal roadways and bridges, Euclid Chemical will supply the product with a pledge of unparalleled service and support. Contact us today and let us put nearly 100 years of concrete industry experience to work for you.

### NEW CONCRETE CURING

**Kurez DR VOX:** Dissipating curing compound

### NEW CONCRETE CURING AND SEALING

**Rez-Seal:** General purpose, economical cure and seal

**Super Diamond Clear:** Non-yellowing, high performance cure and seal

**Aqua-Cure VOX:** Low odor, water based cure and seal

**Luster Seal WB:** Non-yellowing, water based cure and seal available in low, medium, and high gloss sheen formulations

### DECORATIVE CONCRETE SEALING

**EverClear:** Breathable acrylic cure and seals for stamped, stained, and colored concrete surfaces

**BrownTone CS:** Brown pigmented cure and seal for exposed aggregate concrete

### EXEMPT SOLVENT CURE AND SEALS FOR THE OTC REGION

**Rez-Seal AC:** General purpose, economical cure and seal with exempt acetone solvent

**Super Diamond Clear TB:** Non-yellowing, high performance cure and seal with exempt tertiary-butyl acetate solvent

**EverClear TB and Lusterseal 350:** Breathable acrylic cure and seal for decorative concrete with exempt tertiary-butyl acetate solvent

### PENETRATING SILANE/SILOXANE CONCRETE SEALERS

**Euco-Guard 100:** Solvent based siloxane water and salt repellent for concrete pavement

**Barcade Silane 100:** Pure silane water and salt repellent, compliant with OTC VOC regulations

**Barcade WB 244:** Heavy duty water based, ready to use silane/siloxane blend for concrete pavement, parking decks, bridges

**Chemstop WB:** Water based, ready to use silane/siloxane for concrete and masonry walls and horizontal surfaces





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An **RPM** Company

**The Euclid Chemical Company** serves the global building market as an ISO 9001:2000 supplier of specialty products and support services for the concrete and masonry construction industry. Marketed under the Baracade, Dural, Euco, Eucon, Speed Crete and Tamms name, we offer a full line of admixtures, repair, coatings and maintenance products based on the latest technologies. We provide complete specification assistance and laboratory support as well as on-site service for guidance on proper product usage. EUCO materials are warehoused in over 200 locations in the USA and are available world-wide through international affiliates.