



# CURING & SEALING CONCRETE SOLUTIONS



- CURING COMPOUNDS
- SOLVENT BASED CURE & SEALS
- WATER BASED CURE & SEALS
- PENETRATING SEALERS
- FILM-FORMING SEALERS

# CURING & SEALING CONCRETE

THE CURING AND SEALING PERFORMANCE YOU DEMAND.  
THE ENVIRONMENTAL RESPONSIBILITY YOU EXPECT.

**Euclid Chemical** offers a full range of curing and sealing products that meet the toughest environmental and performance standards in the marketplace today. All of your concrete and masonry curing, sealing, and protection challenges can be met with Euclid Chemical's:

- Low VOC products - both solvent based and water based - that comply with clean air regulations in the U.S. and Canada
- Products that can contribute toward the LEED certification of a project
- Sealers that are uniquely formulated for enhancing and protecting decorative concrete
- Products guaranteed not to yellow in sunlight
- USDA approved products
- Penetrating sealers that protect concrete from the damaging effects of water and salt
- Liquid densifiers for dustproofing, sealing, and strengthening concrete surfaces

We encourage you to contact us with your questions and concerns.



## THE IMPORTANCE OF CURING AND SEALING CONCRETE

Curing is the action taken to maintain moisture and temperature conditions in a freshly placed concrete mixture to allow cementation to occur so that the potential properties of the concrete may develop. When concrete is not properly cured, its strength, durability, appearance, and resistance to freeze-thaw damage will suffer.

There are three general methods for curing new concrete. The first method is called water curing and involves keeping a continuous flow, ponding, or fog of water on the concrete surface for at least seven days. Often, this is not practical for concrete work as it makes it difficult to impossible for other trades to continue work on the project while the curing is taking place. The second method is the placement of moisture-retaining coverings such as plastic sheeting, wet burlap, or curing blankets over the freshly finished concrete surface. These coverings can be challenging to work and walk on, and can leave stains or marks on the concrete surface if placed improperly. The third method for curing is the application of liquid membrane-forming curing compounds or curing and sealing compounds. Curing and sealing compounds, besides retaining moisture in fresh concrete, have the added benefit of providing a longer-lasting protective and decorative seal on the surface.

By their nature, curing compounds and cure and seals leave a residue on the concrete surface that can interfere with the adhesion of other materials such as resilient floor coverings, protective coatings, sealers, or liquid densifying treatments. Because of this, it is tempting to use a silicate solution as the curing compound on new concrete, as silicates do not form a film that can interfere with adhesion. However, silicates do not retain moisture in new concrete, so they do not provide for appropriate curing. The use of a dissipating or removable curing compound is a much more appropriate option to cure new concrete that will later be coated with carpet or tile.

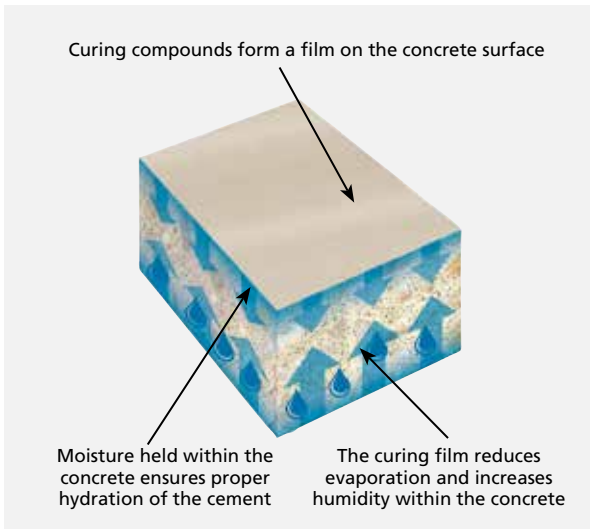
## BENEFITS OF KEEPING CONCRETE SEALED

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 sealers can also help prevent staining (if spills are cleaned up promptly), and they can act as a sacrificial layer to reduce abrasion and wear from traffic. Finally, some concrete sealers can enhance the colour and impart an attractive shine to concrete, which is especially beneficial on stamped, integrally coloured, and stained or dyed surfaces.

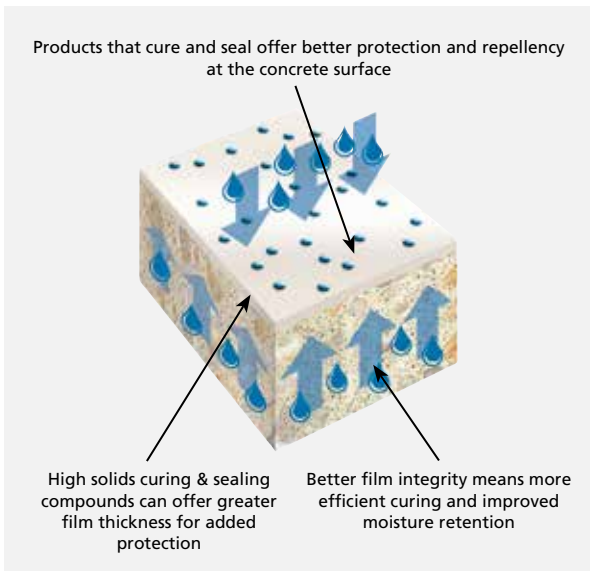
Penetrating sealers, based on silane or siloxane technology, are especially useful on concrete subjected to water and salt exposure and freeze-thaw cycling. They have a unique ability to prevent water and salt from soaking into concrete and corroding reinforcing steel. Liquid densifiers are most often used indoors to dustproof concrete floors, make the surface denser, and reduce dusting. Both penetrating sealers and densifiers typically do not change the appearance of treated concrete.

FEATURES	CURE & SEAL	PENETRATING SEALER / DENSIFIER
Provides Colour Enhancement & Gloss	•	
Longevity		•
Best Water & Salt Repellency		•
Most Economical Price	•	

## CURING PRODUCTS

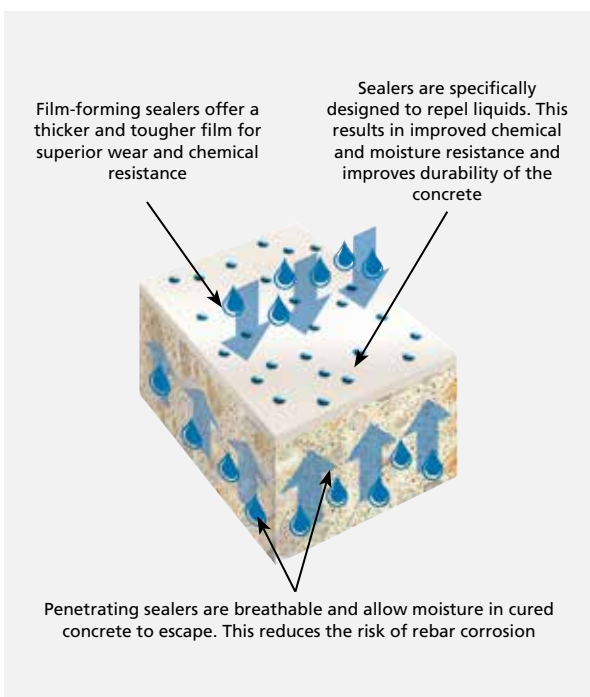


All Euclid Chemical curing compounds meet the requirements of ASTM C 309, are easy to apply, and provide a cost-effective method for initial curing of concrete. A proper cure is vital to full development of concrete's strength and durability. White pigmented curing compounds are available to help reflect sunlight and provide a visual inspection of coverage. Euclid Chemical also provides dissipating and removable curing compounds that are excellent choices for curing when a sealer, coating, or covering will be applied to the concrete at a later date.



## SEALING PRODUCTS

Concrete curing and sealing compounds have the added benefits of protecting the surface after the curing process is complete, and enhancing the surface appearance with a glossy shine. All Euclid Chemical products designed for curing and sealing meet the requirements of both ASTM C 309 and ASTM C 1315. Euclid Chemical's curing and sealing line includes traditional solvent based products, exempt solvent based products for highly VOC-regulated areas, as well as water based, low odour products for all application environments.



## SEALING PRODUCTS

There are two general types of concrete and masonry sealers: film-forming and penetrating. Film-forming sealers reduce penetration of water and contaminants by forming a barrier on the concrete surface; they also darken the concrete and provide varying levels of gloss, giving the substrate a "wet look".

Penetrating sealers and densifiers soak into the concrete or masonry surface and chemically react in the pores to produce a water and chloride repellent barrier. Penetrating sealers last longer than film-forming sealers, and provide protection without changing the appearance. Liquid densifiers are a type of penetrating sealer that both seal the concrete surface and increase the surface density and toughness. Euclid Chemical offers three types of concrete and masonry sealers:

- Penetrating **silane and siloxane** sealers, in water based, solvent based, and 100% active formulations.
- Film-forming **epoxy** sealers that give an enhanced, glossy appearance and protection against water and some mild chemicals.
- **Silicate and silicate** based liquid densifiers that penetrate and chemically react with the concrete to dustproof and improve the durability of the surface.

# CURING & SEALING CONCRETE

## PERFORMANCE ADVANTAGES

PRODUCTS		ASTM C 309	ASTM C 1315	NCHRP 244	Non-Yellowing	LEED Points for Low-Emitting Materials	Low Odour	Dissipating / Removable	LADCO, OTC, Maricopa County VOC Compliant	California (SCAQMD) VOC Compliant	Chemical Resistance	USDA	Available With Fugitive Dye
CURING COMPOUNDS	Kurez DR VOX	•					•	•	•			•	•
	Kurez RC	•					•	•	•			•	
	Kurez W VOX	•			•	•	•		•	•		•	
	Kurez VOX White Pigmented	•			•	•	•		•	•		•	
	Kurez DR-100	•				•		•	•	•		•	
SOLVENT BASED CURE & SEALS	Rez-Seal	•	•									•	
	Super Rez-Seal	•	•									•	
	Diamond Clear	•	•		•							•	
	Super Diamond Clear	•	•		•							•	
	EverClear	•	•		•							•	
	BrownTone CS	•	•									•	
	Luster Seal 300	•	•		•							•	
EXEMPT SOLVENT CURE & SEALS	Diamond Clear 350	•			•				•			•	
	Super Diamond Clear 350	•	•		•				•			•	
	Luster Seal 350	•	•		•				•			•	
	EverClear 350	•	•		•				•			•	
	BrownTone CS 350	•	•						•			•	
WATER BASED CURE & SEALS	EverClear VOX	•	•		•	•	•		•	•		•	
	Diamond Clear VOX	•			•	•	•		•	•		•	
	Super Diamond Clear VOX	•	•		•	•	•		•	•		•	
	Aqua-Cure VOX	•					•		•			•	
	Super Aqua-Cure VOX	•	•				•		•			•	
	Eucocure VOX	•					•		•			•	
	BrownTone VOX	•	•				•		•	•		•	
FILM-FORMING SEALERS	Dural 50 LM					•	•		•	•		•	
	Euco #512 VOX					•	•		•	•	•	•	
PENETRATING SEALERS	Euco Diamond Hard				•	•	•		•	•		•	
	UltraSil Li+				•	•	•		•	•		•	
	Eucosil				•	•	•		•	•		•	
	Surfhard				•	•	•		•	•		•	
	Euco-Guard 100			•	•							•	
	Barcade Silane 40			•	•							•	
	Barcade Silane 100			•	•				•			•	
	Weather-Guard				•							•	
	Barcade WB 244			•	•	•	•		•	•		•	
	Chemstop WB (Regular & Heavy Duty)				•	•	•		•	•		•	
	Euco-Guard 350				•				•			•	
	Barcade M.E.			•	•		•		•			•	

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. Marking the Barcade, Dural, Euco, Eucon, Speed Crete and Tamms brands, we offer a full line of admixtures, repair and maintenance products based on the latest technologies. We provide complete assistance, 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 worldwide through international distributors.

# CURING & SEALING CONCRETE

## PRODUCT ADVANTAGES

CURING COMPOUNDS	ADVANTAGES
KUREZ DR VOX Dissipating curing compound	<ul style="list-style-type: none"> <li>Dissipates over time with exposure to UV light and traffic</li> </ul>
KUREZ RC Removable curing compound	<ul style="list-style-type: none"> <li>Removable curing compound</li> <li>No dissipation time necessary</li> </ul>
KUREZ W VOX General purpose, zero VOC	<ul style="list-style-type: none"> <li>Low odour</li> <li>Economical curing option for concrete pavement</li> </ul>
KUREZ VOX WHITE PIGMENTED Light reflective curing compound	<ul style="list-style-type: none"> <li>Efficient curing</li> <li>Keeps concrete cool</li> </ul>
KUREZ DR-100 Low VOC dissipating curing compound	<ul style="list-style-type: none"> <li>Less than 100 g/L VOC content</li> </ul>

SOLVENT BASED CURING AND SEALING COMPOUNDS	ADVANTAGES
REZ-SEAL Acrylic co-polymer, low viscosity	<ul style="list-style-type: none"> <li>Good initial cure</li> <li>Seals surface to dustproof and protect</li> </ul>
SUPER REZ-SEAL High solids acrylic polymer blend	<ul style="list-style-type: none"> <li>High viscosity formulation provides greater coverage</li> <li>Excellent curing, durable seal</li> </ul>
DIAMOND CLEAR Non-yellowing acrylic blend, low viscosity	<ul style="list-style-type: none"> <li>Non-yellowing</li> <li>Excellent for initial curing and sealing of concrete</li> </ul>
SUPER DIAMOND CLEAR High solids, non-yellowing acrylic blend	<ul style="list-style-type: none"> <li>Highest performance non-yellowing cure and seal</li> <li>Excellent for architectural concrete</li> <li>Good for re-sealing</li> </ul>
EVERCLEAR Breathable, 100% acrylic	<ul style="list-style-type: none"> <li>Excellent sealer for decorative concrete</li> <li>Non-yellowing</li> <li>Enhances colour and texture</li> </ul>
BROWNTONE CS Pigmented cure & seal for exposed aggregate concrete	<ul style="list-style-type: none"> <li>Highlights tone of exposed aggregate concrete surfaces</li> <li>Excellent seal for exposed aggregate precast panels</li> </ul>
LUSTERSEAL 300 Pure acrylic sealer	<ul style="list-style-type: none"> <li>Non-yellowing</li> </ul>

LOW VOC, EXEMPT SOLVENT BASED CURING AND SEALING COMPOUNDS	ADVANTAGES
EVERCLEAR 350 Exempt solvent, pure acrylic cure & seal	<ul style="list-style-type: none"> <li>Low VOC</li> <li>Enhances decorative concrete</li> <li>Non-yellowing, breathable formula</li> </ul>
LUSTERSEAL 350 Exempt solvent, pure acrylic cure & seal	<ul style="list-style-type: none"> <li>Low VOC</li> <li>Non-yellowing</li> <li>Quick dry time is helpful in cool weather</li> </ul>
SUPER DIAMOND CLEAR 350 Exempt solvent, cure & seal	<ul style="list-style-type: none"> <li>Low VOC</li> <li>Non-yellowing</li> </ul>
DIAMOND CLEAR 350 Low solids, non-yellowing	<ul style="list-style-type: none"> <li>Cures new concrete</li> <li>Easy to apply</li> </ul>
BROWNTONE CS 350 Pigmented cure & seal for exposed aggregate concrete	<ul style="list-style-type: none"> <li>Enhances colour</li> <li>Provides a glossy appearance</li> </ul>

WATER BASED CURING AND SEALING COMPOUNDS	ADVANTAGES
EVERCLEAR VOX Pure acrylic, low VOC cure & seal	<ul style="list-style-type: none"> <li>VOC compliant nationwide</li> <li>Blush resistant</li> </ul>
DIAMOND CLEAR VOX Non-yellowing acrylic polymer blend	<ul style="list-style-type: none"> <li>Non-yellowing</li> </ul>
SUPER DIAMOND CLEAR VOX Non-yellowing, high solids	<ul style="list-style-type: none"> <li>High solids, best curing and gloss</li> <li>Non-yellowing</li> </ul>
AQUA-CURE VOX Low odour cure & seal	<ul style="list-style-type: none"> <li>Good for interior use</li> </ul>
SUPER AQUA-CURE VOX High solids, low odour	<ul style="list-style-type: none"> <li>High solids formula</li> </ul>
EUCOCURE VOX Acrylic co-polymer cure & seal	<ul style="list-style-type: none"> <li>Economical</li> <li>Good initial cure &amp; protection</li> </ul>
BROWNTONE VOX Brown pigmented cure & seal	<ul style="list-style-type: none"> <li>Low VOC</li> <li>Highlights colour</li> </ul>

PENETRATING SEALERS	ADVANTAGES
EUCO DIAMOND HARD Silicate/siliconate densifier & sealer	<ul style="list-style-type: none"> <li>Improves surface durability</li> <li>Dustproofs and seals</li> <li>Reduces tire marking</li> </ul>
ULTRASIL LI+ Lithium silicate densifier	<ul style="list-style-type: none"> <li>Seals and densifies floors</li> <li>Easy to apply</li> </ul>
EUCOSIL Sodium silicate densifier	<ul style="list-style-type: none"> <li>Densifies and dustproofs</li> <li>Economical</li> </ul>
SURFHARD Fluorosilicate remedial dustproofers	<ul style="list-style-type: none"> <li>Improves surface durability of dusting floors</li> </ul>
EUCO-GUARD 100 Solvent based siloxane	<ul style="list-style-type: none"> <li>Water and salt repellent for concrete pavement</li> </ul>
BARACADE SILANE 40 Solvent based silane	<ul style="list-style-type: none"> <li>Deep penetrating formulation</li> <li>Excellent water and chloride barrier</li> <li>Available in an IPA formulation</li> </ul>
BARACADE SILANE 100 100% silane	<ul style="list-style-type: none"> <li>Highest performance</li> <li>Prevents damage from water and chloride</li> <li>Low VOC formulation</li> </ul>
WEATHER-GUARD Economical solvent based siloxane	<ul style="list-style-type: none"> <li>Water repellent especially suited for vertical concrete and masonry</li> </ul>
BARACADE WB 244 High performance water based silane/siloxane blend	<ul style="list-style-type: none"> <li>Water and salt repellent for concrete pavement and floors</li> <li>Low VOC, low odour</li> <li>Meets NCHRP 244 standards</li> </ul>
CHEMSTOP WB REGULAR, HEAVY DUTY Water based silane/siloxane	<ul style="list-style-type: none"> <li>Low VOC water and salt repellents</li> <li>Two formulations for customised performance</li> </ul>
EUCO-GUARD 350 Low-VOC solvent based siloxane	<ul style="list-style-type: none"> <li>Water and salt repellent for concrete and masonry</li> </ul>
BARACADE M.E. Concentrated siloxane water repellent	<ul style="list-style-type: none"> <li>Dilute with water on the jobsite</li> <li>Customisable for specific applications</li> </ul>

FILM-FORMING SEALERS	ADVANTAGES
EUCO #512 VOX EPOXY SEALER Water based epoxy sealer	<ul style="list-style-type: none"> <li>Low VOC, low odour</li> <li>Provides chemical resistance</li> </ul>
DURAL 50 LM Low viscosity epoxy sealer	<ul style="list-style-type: none"> <li>Heals hairline cracks; seals surfaces</li> <li>100% solids formula</li> </ul>



# CURING & SEALING CONCRETE

## TROUBLESHOOTING GUIDE

When a film-forming concrete sealer does not perform properly, or the appearance is not what was expected, the cause can usually be traced back to improper product selection or application. Most problems can be avoided by carefully reading the product's technical data sheet before use. For step-by-step application instructions, watch Euclid Chemical's solvent based sealer application video on YouTube or at [euclidchemical.com](http://euclidchemical.com).

**NOTE:** This information is supplied as a general guide to troubleshooting concrete sealer issues. Each situation is different, and results may vary. Whatever remediation method is chosen should be performed on a small test section before addressing the entire area to determine if the results are acceptable.

### Why did the sealer bubble?

**Cause:** Product was applied too heavily, or in hot weather/direct sun.

**Prevention:** Carefully follow manufacturer's recommended coverage rate and apply during the coolest part of the day when concrete is not in direct sun. Two thin coats should be applied rather than one heavy coat.

### Why did the sealer turn white?

**Cause:** Product was applied too heavily or there are too many coats of sealer on the concrete, and moisture trapped underneath the sealer has caused it to lose adhesion from the concrete.

**Prevention:** Follow manufacturer's recommended coverage rate; do not re-seal concrete until previous coat(s) have worn away or have been stripped off.

### Why is the sealer peeling or flaking off?

**Cause:** Product was applied too heavily or there are too many coats of sealer on the concrete OR concrete was not prepared properly before application. Since concrete cure and seal products last 1 to 3 years, some peeling and flaking should be expected as the product wears away, especially in areas of high traffic or direct sunlight.

**Prevention:** Follow manufacturer's recommended coverage rate and preparation methods; do not re-seal concrete until previous coat(s) have worn away.

### Why did a water-based sealer turn milky-white or powdery?

**Cause:** Product was applied in low temperature or high humidity conditions or where air flow is low (basement, closed garage, etc.) OR product was applied too heavily.

**Prevention:** Follow manufacturer's recommended coverage rate and application conditions.

### Why are oil, leaves, tyres, fertiliser, etc. staining the sealer?

**Cause:** Most concrete sealers will not prevent stains.

**Prevention:** Prevent oil and other chemical drips from cars and equipment. Sweep tree debris and fertiliser granules from concrete as often as possible.

### Why is the concrete dark and blotchy after the sealer was applied?

**Cause:** Uneven application or wrong product choice.

**Prevention:** Follow the application methods on the product's technical data sheet.

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for the world at your feet



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