



PRODUCT CATEGORY: FLOOR PREP

# DriSeal® ONYX™

ULTIMATE MOISTURE-VAPOR-BARRIER COATING AND PRIMER

## FREQUENTLY ASKED QUESTIONS

**DESCRIPTION:** DriSeal® ONYX™ is the ultimate moisture-vapor barrier coating and primer from XL Brands®. Below are a few questions that are commonly asked of our Technical Service team that may help you quickly find answers.

It is important to read and understand technical and safety data sheets completely before beginning installation. Follow industry standards and flooring manufacturer's recommendations for design, layout, and application of flooring materials, including test methods, jobsite temperature, and relative humidity. Always do a test area to ensure product satisfaction, including adhesion to substrate, and/or to become familiar with proper application techniques prior to use.

If you have further questions, please contact your XL Brands® Sales Representative, or XL Brands® Rapid Technical Response at (706) 508-5907.

### HOW STRONG IS THE BOND OF DRISEAL® ONYX™ TO THE SUBFLOOR?

Adhesion to the substrate will vary depending on the nature of the substrate and its surface preparation. Normal adhesion values to concrete (including green concrete) should be superior to 300 PSI, and can range between 200 and 500 PSI, depending on the concrete quality and environmental conditions, even after many months' aging over a 100% RH concrete slab. These results are supported by certified third-party test reports as measured per ASTM D7235.

### WHAT TYPE OF SURFACE PROFILE DO YOU NEED?

DriSeal® ONYX™ has demonstrated superior adhesion to a variety of concrete surface profiles. However, a minimum CSP of 1-3 is recommended to optimize coverage.

### WHEN CAN I INSTALL MY FLOORING?

After you have correctly installed one coat of DriSeal® ONYX™, the floor is walkable in 30 min and ready for flooring installation in 1 hour. After two coats of DriSeal® ONYX™, wait 2 hours before installing your flooring.

### HOW MANY COATS OF DRISEAL® ONYX™ DO YOU NEED TO APPLY?

For hardwood flooring or tile applications on concrete, DriSeal® ONYX™ is rated for unlimited moisture. Apply two coats at a total coverage rate of 100 square feet per gallon. For applications up to 90% RH, or over wood subfloors, apply one coat at 200 square feet per gallon. For applications up to 99% RH, apply two coats at a total coverage rate of 100 square feet per gallon. For sheet vinyl flooring applications, PVC-backed carpet tiles, and some resilient flooring adhesives, self-leveling underlayment or floor patches may be required for compatibility and to prevent telegraphing of substrate and surface imperfections. For more information, see the Technical Data Sheet or contact Technical Service.

### HOW DOES DRISEAL® ONYX™ COMPARE TO EPOXY?

The appeal of DriSeal® ONYX™ is multifaceted, with many benefits to your advantage.

- As an all-in-one product that serves as a primer, a moisture mitigation tool, and is alkali resistant, no additional steps are needed with DriSeal® ONYX™. For that alone, the labor and materials cost savings are significant.
- Epoxies are much more challenging to spread, may require sand broadcasting or primer to facilitate adhesion, have limited working times, and can be sensitizing to the user and applicator. Some epoxies require an installer to be on their knees to apply. DriSeal® ONYX™ can be applied at a standing position, using a long-handled, 3/8" nap roller.
- DriSeal® ONYX™ requires up to 1 hour of dry time before it is walkable compared to traditional epoxies, which often require 6 hours to a full day to cure. This is great news on the jobsite when time is money.
- DriSeal® ONYX™ does not contain any skin or respiratory sensitizer.
- DriSeal® ONYX™ is a one-component product. There is no limited pot life, and it doesn't require a highly specific mixing process.
- DriSeal® ONYX™ does not require sand broadcasting to accept cementitious products. (NOTE: DriSeal® ONYX™ is not suitable for situations where negative hydrostatic pressure is present.)

### **I NOTICE THAT DRISEAL® ONYX™ IS DRY AFTER 15 MINUTES. CAN FLOORING BE INSTALLED THEN?**

No. It is important to give each coat the full amount of drying time listed before applying additional coats or starting the next phase of your flooring installation.

### **DO YOU NEED TO INSTALL OTHER SURFACE PREPARATION PRODUCTS ON TOP OF DRISEAL® ONYX™**

The beauty of DriSeal® ONYX™ is that it serves as a primer and provides moisture mitigation and alkali resistance protection so no other products are needed. When DriSeal® ONYX™ is installed correctly, 2 hours after applying the second coat, you can safely install your self-leveling underlayment or flooring materials.

### **CAN YOU DIRECT-BOND RESILIENT FLOORING TO DRISEAL® ONYX™?**

- For wet set, water-based adhesive installations with resilient, or 'non-breathable floor coverings,' a blotter coat of a self-leveling underlayment or cementitious patch, must be installed at a minimum 1/8" layer on top of XL Brands® DriSeal® ONYX™ High-Performance Moisture Barrier Coating according to label instructions. Failure to apply this cementitious layer will result in the adhesive not drying and remaining wet/uncured.
- If using pressure-sensitive adhesives, a cementitious layer may be needed for a smooth finish to prevent telegraphing through the surface of certain flooring types. However, a cementitious layer is not always required to be placed over the XL Brands® DriSeal® ONYX™ if the products are used properly (according to label instructions) and allowed adequate time to "flash off" and dry to the touch prior to the installation of the floor covering, if telegraphing is not a concern. Failure to allow these adhesives to reach their intended high-tack states will result in the adhesives not drying and remaining wet/uncured. DriSeal® ONYX™ should be treated as a non-porous substrate installing product using the 'Dry Lay' method.

### **CAN YOU USE HARDWOOD FLOORING ADHESIVE OVER DRISEAL® ONYX™**

Absolutely! DriSeal® ONYX™ offers up to unlimited moisture protection under XL Brands hardwood adhesives.

### **CAN YOU INSTALL TILE OVER DRISEAL® ONYX™?**

Of course! Installing DriSeal® ONYX™ prior to the application of tile offers unlimited moisture protection for your ceramic, porcelain, or natural stone installations. DriSeal® ONYX™ will greatly improve grout color performance in environments where slab moisture may be high and will significantly reduce slab-moisture-driven efflorescence.

### **WHY IS ALKALI BLOCKING IMPORTANT?**

The alkalinity of new concrete is expressed numerically by pH readings. The pH of fresh concrete is 12 to 13. It takes approximately 30 days for fresh materials to drop to an approximate pH of 9. A pH of 9 is less alkaline than a pH of 13, and a coating has a greater assurance of success when applied to a less alkaline surface. Once these surfaces are cured, the introduction of moisture into these floors may reactivate the high pH alkalinity, resulting in efflorescence, blistering, and peeling of a primer; degradation of resilient flooring adhesives, or other adhesive product.

XL Brands® DriSeal® ONYX™ is uniquely formulated to be effective in blocking the surface alkalinity of concrete slabs, including 5-day-old green concrete. DriSeal® ONYX™ thus provides a surface pH level of 9 or lower, as recommended by the Carpet and Rug Institute and the Canadian Carpet Institute, making it ideal for bonding with most adhesive products.

### **WHY IS MOISTURE PROTECTION IMPORTANT?**

Simply put, when moisture penetrates your flooring, it can cause swelling or curling, mold, mildew, and have the potential for other types of water damage, like cupping and efflorescence. The innovative formula of DriSeal® ONYX™ offers moisture mitigation, proven to help control the water vapor's movement and help to protect your floors. Do not apply DriSeal® ONYX™ to surfaces with visible/standing moisture. Slab moisture testing is not required for the application of DriSeal® ONYX™ with XL Brands® hardwood flooring adhesives or cementitious products but may be required for resilient flooring applications. If testing of concrete moisture must be performed per the requirements of the flooring system, use either "Anhydrous Calcium Chloride" testing per ASTM F1869, or "In Situ Relative Humidity" testing per ASTM F2170. If water-vapor transmission rate is above 25 pounds per 1,000 square feet per 24 hours following ASTM F1869, or if RH is greater than 99% following ASTM F2170, please contact XL Brands® Technical Service.

### **HOW DOES DRISEAL® ONYX™ DIFFER FROM OTHER PREMIXED MOISTURE BLOCKERS/REDUCERS?**

In addition to DriSeal® ONYX™'s low-odor, one-component system with a quick drying time, the rich black color offers an excellent visual indication coverage identification of dust and debris contamination on the job, an attribute that is truly unique in the market. Debris removal is critical for achieving a proper bond with the subsequent system components. This product offers up to unlimited moisture protection for a variety of approved substrates.

# DriSeal® ONYX™ Quick Reference By Application Type

Type of Application	Primer or Prime Coat	Vapor Retarder	Moisture-Vapor Barrier	
<b>Application Tools</b>	3/8" nap roller or split-tip broom	3/8" nap roller	3/8" nap roller	
<b>Substrate Type</b>	Concrete and Highly Porous Concrete	Plywood, High-Performance Subflooring Panels	Concrete	
<b>Flooring / Adhesive Types</b>	Self-leveling underlayments, floor patches, tile mortars, or prior to applications of DriSeal® ONYX™	Glue-assist, Floating Floors, Click-together Floors	Self-leveling underlayments, floor patches, tile mortars, hardwood flooring adhesives, and resilient adhesives***	
<b>Dilution Ratio</b>	1 to 1 (with water by volume)	Undiluted	Undiluted	
<b>Working Time</b>	2-4 hours	1-3 hours	1-3 hours	
<b>Shelf Life</b>	12 months	12 months	12 months	
<b>Resealed Shelf Life</b>	–	1 year	1 year	
<b>Coats Required</b>	One	One	<b>One coat</b> Required for 90% RH	<b>Two coats</b> Required for 99% RH
<b>Dry Film Thickness</b>	–	4.1 mils	4.1 mil	8.2 mil
<b>Moisture Limit</b>	–	Wood substrate <15% per NWFA guidelines*	Up to 90% RH**	Up to 99% RH**
<b>Coverage</b>	500-800 ft <sup>2</sup> per gallon (of concentrate)	200 ft <sup>2</sup> per gallon	200 ft <sup>2</sup> per gallon	100 ft <sup>2</sup> per gallon
<b>Dry Time</b>	30 minutes	30 minutes	First coat: 30 minutes, Second coat: 1 hour	
<b>Install Surface Preparation</b>	1 hour	< 1 hour	2.5 hours	
<b>Install Wood</b>	–	1 hour	2.5 hours	
<b>Install Resilient</b>	–	1 hour***	2.5 hours***	
<b>Install Tile</b>	1 hour	< 1 hour	2.5 hours	

Read and understand technical and safety data sheets prior to installation. \*Moisture content of wood substrate must not exceed 15% per NWFA guidelines. \*\*See flooring types on technical data sheet. \*\*\*SLU or floor patch may be required for compatibility with resilient adhesives and to prevent telegraphing of substrate and surface imperfections. Contact Technical Service for more information.

**IS DRISEAL® ONYX™ ENVIRONMENTALLY FRIENDLY?  
DOES IT MEET LEED® OR RED LIST FREE REQUIREMENTS?**

Based on a review of the product composition, this product is not known to contain substance(s) identified as ILFI Red List Chemicals above the reporting threshold and does not contain any substance listed in Proposition 65. Also, the low-VOC formulation of DriSeal® ONYX™ (<15 g/L, as calculated per SCAQMD Rule 1113) may contribute toward LEED® credits under Low-Emitting Materials - Coatings. A CDPH (California Department of Public Health) Standard Method for VOC Emissions certification is available upon request.

**WILL THERE BE ANY BUBBLES OR OFF-GASSING  
FROM DRISEAL® ONYX™?**

Off-gassing occurs in epoxy-based products due to their slow cure times. DriSeal® ONYX™ cures very quickly resulting in virtually no bubbles or off-gassing. Any bubbles you might see could be attributed to slab moisture, and so this is where the second coat of DriSeal® ONYX™ is most common.

**CAN YOU INSTALL FLOATING FLOORS OVER  
DRISEAL® ONYX™?**

Yes. DriSeal® ONYX™ has a durable finish that allows for use underneath both floating floors that do not require additional surface preparation products and floating floors that need additional patching or leveling.

**DO WE NEED TO WORRY ABOUT SKIN IRRITATION  
WITH DRISEAL® ONYX™?**

No. Epoxy-based products can yield skin irritation and sometimes can require respiratory equipment for installation. DriSeal® ONYX™ is water based, low odor, easy to clean, and nonhazardous for the applications listed on the technical and safety data sheets.

**WILL DRISEAL® ONYX™ PEEL OR SCRAPE OFF ONCE IT  
HAS DRIED?**

DriSeal® ONYX™ will not be easy to remove as the bond is extremely tenacious. Use caution or protect adjacent surfaces when working with DriSeal® ONYX™. The innovative technology of DriSeal® ONYX™ makes it highly resistant to gouges or scraping from troweling, gauge-raking, and flooring installation.

When applying self-leveling underlacements or additional coats of DriSeal® ONYX™, we recommend wearing rubber or plastic cleats, NOT metal cleats.

**HOW LONG CAN YOU LEAVE DRISEAL® ONYX™ BEFORE  
INSTALLING THE NEXT LAYER?**

Installed DriSeal® ONYX™ can be left uncovered for up to 3 days. After 3 days, an additional application of DriSeal® ONYX™ is necessary. Make sure the surface of DriSeal® ONYX™ is clean, protected from traffic, and protected from contamination to ensure bond ability between DriSeal® ONYX™ and the additional components of the flooring systems.

**IF YOUR FLOOR GETS CONTAMINATED AFTER  
DRISEAL® ONYX™ HAS DRIED, HOW CAN YOU CLEAN IT?**

For dust and footprints, generally a damp cloth can be used to “damp-tack” the floor by wiping the debris and contamination from the surface. Let dry before proceeding. If the DriSeal® ONYX™ is left for more than 3 days after the initial application, an additional coat of DriSeal® ONYX™ will be necessary prior to flooring installation.