



# KEY EPOCON SL

## DESCRIPTION

**KEY EPOCON SL** is a moisture vapor control system utilizing **KEY EPOCOAT** technology, a unique water based epoxy which allows the contractor to install epoxy resin floor systems and other moisture sensitive floor coverings on new concrete (5 days old) without fear of moisture entrapment. **KEY EPOCON SL** is applied in a two coat application. **KEY EPOCOAT** is the primer/basecoat used in **KEY EPOCON SL**.

**KEY EPOCON SL** reduces the passage of water vapor and moisture through slabs on, above or below grade, thus eliminating delamination and blistering of adhesives, floor coverings, resin floor systems, epoxy terrazzo and coatings.

**KEY EPOCON SL** controls water vapor transmission levels for the installation of most floor covering systems, including VCT, sheet vinyl, carpets, wood, laminates, epoxy resin flooring and epoxy terrazzo.

## KEY ADVANTAGES

- Low VOC, water based.
- Vapor and water barrier.
- Barrier against radon and other gases.
- High moisture tolerance.
- Compatible with most flooring systems.
- Does not support mold.
- Easy to install.
- Minimal downtime.

## KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 50°F.
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials.
- Must be installed a minimum of 1/8" for use with moisture sensitive floor coverings.

## COLOR SELECTION

**KEY EPOCON SL** is available in selected colors using pigment packs. 1 to 2 quarts per 5 gallon unit.

## APPLICATION

### SURFACE PREPARATION

**Surface Preparation** is the most critical portion of any successful resinous flooring system application. All substrates must be properly prepared as outlined in **KEY RESIN COMPANY'S TECHNICAL BULLETIN #1**. Work must be performed by trained or experienced resin flooring or epoxy terrazzo contractors. Consult with **KEY RESIN COMPANY** regarding any questions. Shot blast or rough grind concrete slabs to create a coarse texture surface profile minimum CSP-3.

### INSTALLATION

#### Mixing

**KEY EPOCOAT** is a two-component material. Do not alter mixing ratios in any way. Part I and Part II are supplied in the correct mixing ratios. Always mix a complete unit in the proportions supplied.

Stir material for approximately 3-4 minutes to form a homogenous consistency using a slow speed drill and "Jiffy" blade. Do not entrap excessive air. Scrape all sides and bottom of container to ensure thorough mixing.

## PRIME

**PRIME** using **EPOCOAT** thinned 10% with one (1) pint of potable water per 1.25 gallon unit for good penetration. Apply with a squeegee and short nap roller to the properly prepared substrate. Back roll with the short nap roller to achieve a uniform coverage. Allow to cure hard enough for foot traffic, about 3-4 hours at 75 degrees F.

## BODYCOAT

Add one (1) part of **EPOCOAT PART I** to four (4) parts **EPOCOAT PART II**. Thoroughly mix with a low speed drill and Jiffy blade until uniform. Mix with low speed drill until uniform and no lumps.

Apply mixed material using a ¼ inch V-notched trowel or similar squeegee. Allow to self-level and backroll with a looped roller. A 1.25 gallon unit will cover 30 sq. ft. @ 1/16".

Broadcast surface with broadcast sand to excess (30-50 lbs./100 sq. ft.) to achieve 1/8 inch. Sweep and vacuum excess or loose sand after hardening (16-24 hours, depending on temperature).

## TOP COATING, OVERLAYS

Apply top coatings or resin floor system directly over broadcast surface. Prime surface with appropriate Key Resin primer as required. For vinyl flooring and other floor coverings consult with manufacturer of floor covering.

Material	2-component epoxy
Density	12.70 lbs/gallon
VOC Content, Mixed	< 1 g/L
Volume Solids	59%
Flash Point: Part A	>212°F
Part B	170 °F
Mixing Ratio	1:4 by Vol.
Pot Life, Approximate	60 minutes @ 75°F (24°C)
Open to Foot Traffic	After 16 hrs. at 73°F (23°C)
Curing Temperature	Minimum 50°F
Full Cure & Max. Resistance	7 days
Hardness, Shore D ASTM-D-2240	70-75
Compressive Strength ASTM-C- 579	6500 psi
Flexural Strength ASTM-C-580	2100 psi
Adhesion To:	
-New concrete (5 days)	110 psi
-Moist concrete (28 days)	550 psi
-Dry concrete (28 days)	580 psi
Temperature Resistance:	
a)Continuous:	
-Dry heat	140°F (60°C)
-Humid	113°F (45°C)
b)Intermittent:	
-High pressure water	185°F (85°C)
-Dry heat	149-185°F (65-85°C)

## AVAILABILITY

**Key Resins** are available throughout the United States, Canada, and a number of other countries. Contact the **KEY REPRESENTATIVE** in your area for details.

## MAINTENANCE

After completing the application of **EPOCON SL** and the topcoats or floor covering system, the installer should provide the owner with maintenance instructions relevant to the specific topcoats or floor covering. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly.

## TECHNICAL SERVICE

**Key Resin Company** and **KRC Associates, Inc.** provide services and consultations on material selection, specifications, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **KEY REPRESENTATIVES** and **KEY RESIN TECHNICAL SERVICES** are available to assist you, CALL (888) 943-4532 or visit [www.Keyresin.com](http://www.Keyresin.com).

## WARRANTY

**Key Resin Company ("Key")** warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed, and applied in accordance with recommendations of **Key**. If any product fails to meet this warranty, the liability of **Key** will be limited to replacement of any non-conforming material if notice of such non-conformity is given to **Key** within (1) one year of delivery of materials. **Key** may in its discretion refund the price received by **Key** in lieu of replacing the material. No customer, distributor, or representative of **Key** is authorized to change or modify the published specifications of this warranty in any way. No one is authorized to make oral warranties on behalf of **Key**. In order to obtain replacement or refund the customer must provide written notice containing full details of the non-conformity. **Key** reserves the right to inspect the non-conforming material prior to replacement. EXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. **KEY'S** OBLIGATION SHALL NOT EXTEND BEYOND THE OBLIGATIONS EXPRESSLY UNDERTAKEN ABOVE AND **KEY** SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.