

KEY EPOCOAT

Product Data Sheet



DESCRIPTION

KEY EPOCOAT consists of a unique water based epoxy technology 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 EPOCOAT** is typically applied in a two coat application. **KEY EPOCOAT** is the primer/basecoat used in various **KEY EPOCOAT** and **KEY EPOCON Systems** including **KEY EPOCON SL**. **KEY EPOCOAT** is a moisture tolerant, chemically enhanced epoxy resin which reduces the potentially adverse affects of moisture migration through and from concrete slabs on, above or below grade. Refer to the **KEY EPOCON SL System** Technical Data Sheet for additional information on the use of this moisture mitigation system to eliminate the potential for elevated levels of soluble salts and moisture in the concrete to cause osmotic activity and blister or delaminate polymer resin floor systems, epoxy terrazzo, floor coatings, and protecting other floor covering materials and adhesives including VCT, sheet vinyl, carpets, wood, laminates, etc. **KEY EPOCOAT** and **KEY EPOCON SL** are not solutions for concrete affected by ASR (alkali silica reaction) or NSAR (near surface alkali reaction), contact Key Resin Technical Service for details.

KEY ADVANTAGES

- Reduces moisture vapor emission rate through concrete
- High to unlimited concrete moisture tolerance*
(*varies by thickness, type of system installed)
- May be used on vertical wall surfaces
- Low odor for use in occupied areas
- Meets USGBC LEED criteria for low VOC
- Compatible with most flooring systems
- Easy to install
- Does not support growth of mold
- Meets USDA requirements

KEY CONSIDERATIONS

- Substrate temperature should be a minimum of 60°F and maximum of 85°F
- Concrete surface must be in sound condition, free of dirt, curing compounds, densifiers, oil or wax-based sweeping compounds, dry shake hardeners, hydrocarbons, sulfurous compounds, and other foreign materials
- Substrate must be free of actively seeping water during installation and until full cure is achieved

COLOR SELECTION

KEY EPOCOAT is available in Off-White only. Consult with **Key Resin Technical Service** on use of Key UPP pigment packs when necessary.

COVERAGE

KEY EPOCOAT coverage varies by system, consult with **Key Resin Technical Service**.

CURE/DRY TIME

Working Life, Approximate	30 min @ 75°F, 50% RH
Curing Temperature	Minimum 60°F
Min./Max. Recoat Time	16-48 hrs @ 75°F, 50% RH
Heavy Traffic Service	7 days @ 75°F, 50% RH

APPLICATION

SURFACE PREPARATION

Surface Preparation is the most critical portion of any successful resinous flooring system application. All concrete substrates must be in sound condition and comply with ACI 201 Guide to Durable Concrete. All substrates must be properly prepared as outlined in **Key Resin Technical Bulletin #1**. Work must be performed by trained or experienced contractors or maintenance personnel. Contact the **Key Resin Technical Service Department** with any questions.

MIXING INSTRUCTIONS INSTALLATION

Mixing: **KEY EPOCOAT** is a two-component material. Part I and Part II are supplied in the correct mixing ratios. Always mix full or half units in the proportions supplied. Add one (1) part of **EPOCOAT PART I** to four (4) parts **EPOCOAT PART II**. Do not add additional mix water. Thoroughly mix with a medium speed drill and Jiffy mixer for 3-4 minutes (create a vortex) until uniform. Do not entrap excessive air. Scrape all sides and bottom of container to ensure thorough mixing.

Primer: Prime using **KEY EPOCOAT**. Apply to the properly prepared substrate with a squeegee at coverage rate of 160-200 ft² per gallon and backroll with medium nap roller to achieve uniform coverage. Allow to cure hard enough for light foot traffic, about 3-4 hours at 75°F and 50% RH.

Body Coat: Mix and apply **KEY EPOCOAT** as required for the specific **KEY EPOCOAT SYSTEM** or **KEY EPOCON SYSTEM**. Refer to the appropriate detailed system installation instructions document and consult with **Key Resin Technical Service** for further information.

CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with xylene or lacquer thinner. Consult Safety Data Sheet (SDS) for safety and health precautions.

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TECHNICAL DATA

Mixing Ratio	1 Parts A: 4 Parts B by Volume
Solids Content	59% Solids by Volume
Volatile Organic Content (VOC) (EPA Method 24)	1 g/L, compliant to low VOC Rule 1113 in all 50 states
Weight/gal	12.70 pounds per gallon, mixed
Flash Point	Part A: >212°F Part B: 170°F

AVAILABILITY

Key Resin materials are available throughout the United States and a number of other countries. Contact the **Key Resin Representative** in your area for details.

PHYSICAL PROPERTIES

Hardness, Shore D	ASTM D2240	50-60
Compressive Strength	ASTM C579	5,500 psi
Flexural Strength	ASTM C580	2,100 psi
Adhesion to Concrete (New concrete 7 days old @ 73°F)	ASTM D7234	300-400+ psi (Concrete Failure, varies by concrete strength)
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)

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.

Rev 7/11/2024 v1.2

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MAINTENANCE

KEY EPOCOAT is typically used as a primer or bodycoat underneath other **Key Resin** materials. Refer to the appropriate **Key Resin System** Technical Data Sheet for maintenance instructions, or **Key Resin Technical Bulletin #3** and **#3-A** for additional recommendations.

TECHNICAL SERVICE

Key Resin Company provides services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **Key Resin Sales/Technical Representatives** are available to assist you. Telephone 888.943.4532 or visit www.keyresin.com.