

KEY #510 EPOXY

Product Data Sheet



DESCRIPTION

KEY #510 is a multi-purpose epoxy body coat/binder and top coat for a variety of **Key Resin Systems**. This epoxy resin is characterized as an excellent general purpose material with good chemical resistance, clarity and color retention. Its 100% solids zero VOC formulation makes it essentially odorless for installation in occupied facilities.

KEY ADVANTAGES

- Good clarity & color retention
- Low odor during application & cure - can be applied in occupied buildings
- Low viscosity - good troweling & wetting properties
- Meets USGBC LEED criteria for low VOC
- Meets USDA requirements

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 50°F (Contact **Key Resin Company** for low temperature cure)
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials
- Pigmented version should not be used as a topcoat

COLOR SELECTION

KEY #510 is available in Clear and **Key Resin Standard Colors**. Clear may be tinted with **Key Epoxy Color Packs**. Custom colors are available subject to laboratory approval, minimum quantity, lead time for production, and possible increased cost.

COMPOSITION

100% solids epoxy resin with aliphatic amines.

COVERAGE

KEY #510 when applied at 160 ft² yields 10 mils. Coverage varies by system.

CURE/DRY TIME

Working Life	30-40 min @ 75°F
Initial Cure	10-14 hrs @ 75°F
Recoat (Regular Cure)	14-16 hrs @ 75°F
Recoat (Fast Cure)	7-8 hrs @ 75°F
Full Cure & Max. Resistance	5 Days @ 75°F

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 Technical Bulletin #1**. Work must be performed by trained or experienced contractors or maintenance personnel. **Key Resin Company Technical Service** is available to answer any questions.

INSTALLATION

Installation of **KEY #510** varies with your application needs. For complete installation instructions, contact **Key Resin Technical Service**.

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.

MAINTENANCE

After completing the application of **KEY #510**, the installer should provide the owner with maintenance instructions. **KEY #510** is easily cleaned with neutral soaps or detergents. Refer to **Key Resin Technical Bulletin #3** and **#3A** 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 Representatives** are available to assist you. Telephone 888.943.4532 or visit www.keyresin.com.

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TECHNICAL DATA

Viscosity @ 75°F	550-700 cps
Mixing Ratio	4 Parts A:1 Part B by Volume
Solids Content	100% Solids by Volume
Volatile Organic Content (VOC) (EPA Method 24)	0 g/L, compliant to low VOC Rule 1113 in all 50 states
Gloss, 60°	100-110
Weight/gal	9.00-9.50 lbs/gal, Mixed

AVAILABILITY

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

PHYSICAL PROPERTIES

Tensile Strength	ASTM D638	8,500 psi
Adhesion to Concrete	ASTM D7234	300-400+ psi (Concrete Failure, varies by concrete strength)
Hardness, Shore D	ASTM D2240	80
Flexural Strength	ASTM D790	8,000 psi
Compressive Strength	ASTM D695	11,000 psi
Service Temperature		150°F (wet) 160°F (dry)
Water Absorption	ASTM D670-73	0.10% maximum

CHEMICAL RESISTANCE

REAGENT	RATING
Acetic Acid - 5%	L
Acetone	L
Ammonia Hydroxide - 10%	R
Beer	R
Bleach	L
Brake Fluid	L
Citric Acid - 30%	R
Citric Acid - 40%	L
Crude Oil	R
Diesel Fuel	R
Ethylene Glycol	R
Fatty Acids	L
Gasoline	L
Hydrochloric Acid - 15%	R
Lactic Acid - 15%	R
Lactic Acid - 50%	L
Methyl Ethyl Ketone	L
Nitric Acid - 10%	L
Orange Juice	L
Peroxide - 35%	L
Phosphoric Acid - 85%	L
Skydrol	L
Sodium Hydroxide - 50%	R
Sulfuric Acid - 20%	R
Toluene	L
Urea	L
Vinegar	L
Xylene	L

R - Recommended for continuous splash/spill service

L - Limited recommendation (occasional spills, may cause slight stain or discoloration)

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.

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