

KEY #540 INDUSTRIAL COATING

Product Information Sheet



DESCRIPTION

KEY #540 is a 100% solid epoxy coating for use as an industrial coating and chemical resistant liner for interiors of wastewater treatment tanks, structures, lift stations, pipes, manholes and secondary containment of dilute, acids and alkalis. **KEY #540** protects concrete and steel from chemicals and wastewater in immersion, splash and spillage conditions. **KEY #540** is specifically designed for lining manholes, large diameter sewer pipe, lift stations and other structure. When applied over prepared concrete, **KEY #540** produces a seamless, monolithic liner.

KEY ADVANTAGES

- Meets USGBC LEED criteria for low VOC
- No offensive odors
- Chemical and stain resistant
- Easy application
- Bonds well to cool, damp substrates
- Suitable for immersion and wet process flooring applications

KEY LIMITATIONS

- Do not apply in temperatures less than 40°F or greater than 85°F
- Store in dry conditions at 55°F - 75°F
- Slabs on grade require heavy duty vapor barrier directly under slab
- Must have a properly prepared substrate
- Substrate temperature must be 5°F above the dew point
- Confirm product performance in specific chemical environment prior to use

COLOR SELECTION

KEY #540 is available in Gray or as approved.

COVERAGE

KEY #540 – Can be applied between 50-100 ft²/gallon to achieve 16-32 mils DFT

CURE/DRY TIME

| | |
|-------------------|--|
| Working Life | 55-65 minutes |
| Tack Free | 6 hours @ 77°F 2 1/2 - 3 hours @ 90°F |
| Recoat | 6-24 hours @ 75°F |
| Return to Service | 36 hrs @ 77°F |

APPLICATION

SURFACE PREPARATION

Surface Preparation is the most critical portion to 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. The **Key Resin Technical Service Department** is available to answer any questions.

Surface profile shall be CSP-3 to CSP-5 for coating concrete; produce a profile equal to 60 grit sandpaper or coarser. Moisture vapor transmission readings should be 3 lbs. or less per 1000 ft² per 24 hours per ASTM F1869 or less than 80% RH as taken per ASTM F2170. All surface irregularities, cracks, control joints and expansion joints must be properly addressed prior to application. Concrete outgassing must be avoided and substrate primed (twice if necessary) with a recommended primer such as **KEY #502, KEY #532, or KEY EPOCOAT**.

MIXING INSTRUCTIONS

1. Priming is usually not required. If needed, use **KEY #502, KEY #532, or KEY EPOCOAT** for concrete outgassing. Consult with **Key Resin Technical Service** for recommendations.
2. Mix components A & B separately until consistent. Combine Part A & Part B in equal volumes and mix thoroughly using a Jiffy-type mixer until uniform. Scrape all sides and bottom of container during mixing.
3. Apply by brush, roller, or spray. Material should be tack free within 6 hours @ 75°F. Multiple coats can be applied between 10-24 hours. If spraying, use a 45:1 Airless Spray with a reverse-a-clean tip with an opening of .020-.025 inch. Beware of gel time when using spray equipment.

CLEAN UP

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

KEY #540 INDUSTRIAL COATING

Product Information Sheet



TECHNICAL DATA

| | |
|---|---|
| Mixing Ratio | 1 Part A: 1 Part B by Volume |
| Solids Content | 100% |
| Volatile Organic Content (VOC) (EPA Method 24) | 0 g/L, compliant to low VOC Rule 1113 in all 50 states |
| Weight | 9.5-10 lbs per gallon, mixed |
| Viscosity | 8,000-9,000 cps |

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.

CHEMICAL RESISTANCE

KEY #540 is chemical resistant to dilute acids and alkalis. For detailed chemical resistance contact **Key Resin Technical Service**.

PHYSICAL PROPERTIES

| | | |
|----------------------|------------|--|
| Adhesion to Concrete | ASTM D7240 | 300-400+ psi (Concrete Failure, varies by concrete strength) |
| Compressive Strength | ASTM D695 | 10,000-12,000 psi |
| Hardness, Shore D | ASTM D2240 | 78 |
| Tensile Strength | ASTM D638 | 7,000 psi |

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.

