

# **KEY #540 INDUSTRIAL COATING**

## 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.

## ADVANTAGES

- Zero VOC
- No offensive odors
- Chemical and Stain Resistant
- Easy Application
- Bonds Well to Cool, Damp Substrates
- Suitable for Immersion and Wet Process Flooring Applications

#### LIMITATIONS

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

#### COLOR

Gray or as approved

#### **TYPICAL APPLICATION & PERFORMANCE PROPERTIES\*\***

Compressive Strength	10,000 – 12,000 psi
ASTM-D-695	
Tensile Strength	7,000 psi
ASTM-D-638	
Bond Strength Concrete	>400 psi, 100% Concrete
ASTM-4541	Failure
Hardness	Shore D - 78
Mixing Ratio by Volume	1 part A to 1 part B
Pot Life @ 77 °F	55 – 65 minutes
Tack Free Time @ 77 °F	6 hours
Tack Free Time @ 90 °F	2 <sup>1</sup> / <sub>2</sub> - 3 Hours
Return to Service @ 77 °F	36 Hours

Coverage - Can be applied between 50-100 sq.ft./gal. to achieve 16-30 mils DFT

\*\*Data reflects typical results based on laboratory controlled conditions. Reasonable variations may result from changes in product thickness and other on site application variables.

# CHEMICAL RESISTANCE

**KEY #540** is chemical resistant to dilute acids and alkalis. For detailed chemical resistance contact **KEY RESIN TECHNICAL SERVICE.** 

# AVAILABILITY

**Key #540** is available in 2 gallon (1 gallon Part A & 1 gallon Part B) and 10 gallon (5 gallon Part A & 5 gallon part B) units.

#### 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 contractors or maintenance personnel. The **KEY RESIN COMPANY** service department is pleased to answer any questions.

Surface profile shall be CSP-3 to CSP-5 meeting ICRI standard guideline #03732 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 sq. ft. per 24 hours per ASTM-F-1869 or less than 80% R.H. as taken per ASTM-F-2170. All surface irregularities, cracks, control joints and expansion joints must be properly addressed prior to application. Outgassing must be avoided and substrate primed (twice if necessary) with a vapor tolerant primer such as **KEY #635 MVT**.

# APPLICATION

- 1. Priming is usually not required, If needed, use KEY #635 MVT for moisture and outgassing.
- 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 Sprayer with a reverse-a-clean tip with an opening of .020 .025 inch. Beware of pot life when using spray equipment.

#### 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.