



KEY VINYL ESTER BINDER/COATING

DESCRIPTION

KEY VINYL ESTER BINDER/COATING is a novolac vinyl ester resin used with all **KEY VINYL ESTER SYSTEMS**. Combining high acid and corrosion resistance with high temperature resistance, **KEY VINYL ESTER BINDER/COATING** is the ideal resin component for secondary containment lining systems, tank linings, exteriors of high temperature equipment, FGD stacks, trenches, pits, and sumps. The installed system thickness varies by system type and project specifications. **KEY VINYL ESTER BINDER/COATING** may optionally be available with fiberglass reinforcement, graphite filler or mineral flake filler as required.

KEY ADVANTAGES

- Excellent Acid & Corrosion Resistance
- High Heat & Impact Resistance
- Seamless Surface Inhibits Bacteria Growth
- Easily Maintained

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 50°F.
- Substrate must be free of hydrostatic pressure, moisture transmission, paint, curing agents, and other foreign materials which can prevent proper bond.
- Substrate irregularities may transmit through coating system.
- Vinyl Ester resin has a characteristic styrene odor during application and cure. **KEY VINYL ESTER BINDER/COATING** should be applied in areas with proper ventilation.

APPLICATION

SURFACE PREPARATION

Surface Preparation is the most critical portion of any successful resinous flooring system application. All substrates must be properly prepared to a minimum CSP 3-5 surface profile 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.

INSTALLATION

KEY VINYL ESTER BINDER/COATING is installed over a concrete or steel surface. For complete instructions, consult the installation instructions document for the specified system.

CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with xylene or lacquer thinner.

COMPOSITION

KEY VINYL ESTER BINDER/COATING is a 100% solids vinyl ester-novolac resin used in all **KEY VINYL ESTER SYSTEMS**.

COLOR SELECTION

KEY VINYL ESTER BINDER/COATING is available in Standard Grey. The addition of graphite filler (when specified) yields a dark charcoal grey.

TECHNICAL DATA

Lining System Performance Properties

Flammability ASTM D-635	Self-Extinguishing over Concrete
Fungus & Bacteria Growth MIL-F-52505 §4.4.2.11	Will not support growth of fungus or bacteria when subjected to mildew and bacteria tests.
Hardness ASTM D-2240	85 Shore D
Bond Strength to Concrete ACI COMM #403, Bulletin 59-43	300-350 psi (100% concrete failure)
Water Absorption ASTM D-570	0.10%
Abrasion Resistance ASTM C-501	30-40 mg
Impact Resistance Gardner Impact Tester	>120 in/lbs
Tensile Strength ASTM C-307	9,500 psi
Thermal Coefficient of Expansion ASTM C-531	$6-10 \times 10^{-8}$

TECHNICAL SERVICE

Key Resin Company and KRC Associates, Inc. provide services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces. **Key Representatives** are available to assist you. Telephone (888)943-4532 or online www.keyresin.com.

AVAILABILITY

Key Flooring and Lining Systems 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 the specified **KEY VINYL ESTER SYSTEM**, the installer should provide the owner with maintenance instructions. If floors become slippery due to animal fats, oil, grease, or soap film, clean and rinse thoroughly.

KEY VINYL ESTER SYSTEMS are easily cleaned with neutral soaps or detergents. Routine mechanical scrubbing is recommended for all surfaces having a non-skid texture. Waxing is optional. Long periods of heavy traffic may cause wear patterns necessitating a maintenance application of a finish coat.

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.**