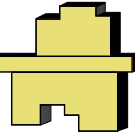


KEY RESIN COMPANY



# KEY VINYL ESTER STD

## DESCRIPTION

**KEY VINYL ESTER STD** is a high performance, trowel applied resin flooring system consisting of 100% solids vinyl ester-novolac and graded aggregates that provides heavy-duty, acid and corrosion resistant protection at <sup>3</sup>/<sub>16</sub>" to <sup>1</sup>/<sub>4</sub>". Ideal for heavy-duty, high traffic areas, **KEY VINYL ESTER STD** is sealed to meet your facility's needs to enhance skid-inhibiting and abrasion resistance. **KEY VINYL ESTER STD-HD** (heavy duty) includes a broadcast finish to improve the abrasion, impact, and slip resistance of the system. **KEY VINYL ESTER STD** can be installed with an integral cove base for areas requiring seamless wall to floor coatings. Added structural integrity and crack-resistance is achieved by using fiberglass reinforcement. Carbon aggregates are available for exposures to hydrofluoric or hydrofluorosilicic acid and in cases requiring a conductive system. Contact your **KEY REPRESENTATIVE** for assistance.

## KEY ADVANTAGES

- Excellent Acid & Corrosion Resistance
- High Wear, Impact, & Abrasion Resistance
- Thermal Shock Resistant
- Low Maintenance
- Safe (non-skid)

## KEY CONSIDERATIONS

- On or below grade installation must have an efficient vapor barrier under the slab. Special treatments are necessary where hydrostatic pressure or moisture vapor transmission may be present.
- Substrate temperature must be a minimum of 55°F.
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials.
- All control joints and expansion joints in the substrate must be revealed with the appropriate divider strips in the topping.

## SELECTION GUIDE

Activity Centers
Aircraft Hangars
Airports
Baggage/Service
Terminals
Animal Areas
Housing
↑ Cage Washing
↑ Beverage
Processing
Packaging/Warehousing
↑ Bottling
Cafeterias
↑ Chemical Processing
Clean Rooms
Coolers
Computer Assembly
Commercial Kitchens
↑ Containment Areas
Convention Centers
Correctional Facilities
Corridors
↑ Docks/Ramps
Dairies
Distilleries
Packaging
↑ Bottling
↑ Food
Processing
Preparation Service
Garages
Hospitals
Corridors & Lobbies
Patient Rooms
Operating Rooms
Services
↑ Laboratories
Laundries
Locker Rooms
↔ Machine Shops
Manufacturing
Light Duty
↑ Heavy Duty
↑ Meat, Fish, Poultry Processing
Mechanical Equipment Rooms
↑ Munitions Facilities
Parking Garages
Interior Decks
Exterior Decks
Pharmaceutical Plants
↑ Pulp and Paper Processing Facilities
Schools
Shopping Malls
Showers
↔ Utilities
↔ Warehouses
↑ Waste Water Treatment Facilities

↑-Excellent Choice ↔-Alternate Choice

# TECHNICAL DATA

## System Performance Properties

<b>Flammability</b> ASTM D-635	Self Extinguishing
<b>Fungus &amp; Bacteria Growth</b> MIL-F-52505 §4.4.2.11	Will not support growth of fungus or bacteria when subjected to mildew and bacteria tests.
<b>Hardness</b> ASTM D-2240	80-84 Shore D
<b>Bond Strength to Concrete</b> ACI COMM #403, Bulletin 59-43	300 psi (100% concrete failure)
<b>Resistance to Elevated Temperature</b> MIL-D-3134F §4.7.4	No slip or flow at required temperature of 158°F
<b>Coefficient of Friction</b> ASTM D-2047	0.80
<b>Water Absorption</b> ASTM D-570	Nil
<b>Thermal Shock Resistance</b> ASTM C-884	Passes
<b>Abrasion Resistance</b> ASTM C-501	50 mg
<b>Impact Resistance</b> MIL-D-3134F §4.7.3	Withstands 16 ft./lbs. without cracking, delamination, or chipping.
<b>Compressive Strength</b> ASTM C-579, 7 days	15,000 psi
<b>Tensile Strength</b> ASTM C-307	4,200 psi
<b>Thermal Coefficient of Expansion</b> ASTM C-531	26 x 10 <sup>-6</sup>

## TYPICAL USES

**KEY VINYL ESTER STD** is used in heavy traffic and production areas that require extreme acid and corrosion resistant performance such as pulp, petroleum, and chemical processing facilities, hazardous materials storage and loading areas, plating and metal finishing plants, and laboratories.

## APPLICATION

Concrete surfaces must be in sound condition and properly prepared prior to any **KEY RESIN COMPANY** flooring system installation. Refer to **Key Resin Company Technical Bulletin #1** for specific preparation guidelines.

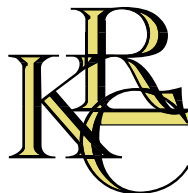
Installation of **KEY VINYL ESTER STD** involves several steps including priming, troweling base toppings, broadcasting quartz aggregates, grouting, and sealing. For specific installation guidelines consult **Key Resin Company's Installation Instruction Manual**.

## MAINTENANCE

After completing the application of **KEY VINYL ESTER STD**, 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 STD** is 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.



KEY RESIN COMPANY

4061 Clough Woods Drive  
Batavia, Ohio 45103, 888.943.4532

## Neat Resin

## Performance Properties

<b>Compressive Strength</b> ASTM D-695	13,000 psi
<b>Ultimate Tensile Strength</b> ASTM D-638	4,200 psi
<b>Tensile Elongation</b> ASTM D-638	6-8%
<b>Flexural Strength</b> ASTM D-790	7,800 psi
<b>Flexural Modulus</b> ASTM D-790	2.5 x 10 <sup>5</sup>
<b>Hardness</b> ASTM D-2240	65-85 Shore D

## COMPOSITION

**KEY VINYL ESTER STD** is composed of 100% solids vinyl ester-novolac resin filled with a variety of graded quartz and silica fillers that can be modified to create the best design mix for ideal performance. Vinyl ester-novolac finish coats meet exposure requirements.

## COLOR & AVAILABILITY

**KEY VINYL ESTER STD** is available in either grey or red. Colors will not fade or wear thin.

**Key Flooring Systems** are available throughout the United States, Canada, and a number of other countries. Contact the **KEY REPRESENTATIVE** in your area for details.

## 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 at any time. CALL (888)943-4532.

Key Vinyl Ester STD-2