



KEY #450

URETHANE COATING/SEALER

DESCRIPTION

KEY #450 is a two component, chemical resistant, aliphatic (non-yellowing) polyurethane coating/sealer. The high gloss finish offers excellent abrasion resistance, chemical and stain resistance, and superior color retention. **KEY #450** can be used equally well on vertical or horizontal surfaces. It is ideal for concrete floors and walls in warehouses, storage facilities, aircraft hangars, animal housing, vehicle maintenance facilities, and numerous other uses.

KEY #450 is available in both clear and pigmented formulations. **KEY #450** is used as a finish coating option for most **Key Resin Coating and Flooring Systems**.

KEY ADVANTAGES

- Excellent Chemical & Stain Resistance
- Excellent Abrasion Resistance
- Suitable for both Exterior & Interior Use
- May be used for both Horizontal & Vertical Use

KEY CONSIDERATIONS

- Application rate must be no thicker than 200 square feet per gallon. Thicker films will show bubbling in the cured film or have improper cure development.
- Contains solvent, use in occupied areas may require air containment and ventilation.
- VOC content is 405 g/L, may not be compliant in some areas.
- Substrate temperature recommended to be a minimum of 50°F and maximum of 100°F.
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials.

COMPOSITION

KEY #450 is a two component, chemical resistant aliphatic polyurethane.

COLOR SELECTION

KEY #450 is available in clear and factory pigmented Key Standard Colors. Gloss finish only. Certain Key Standard Colors require minimum order quantity, refer to Key Resin Terms & Conditions of Sale.

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.

MIXING INSTRUCTIONS

- Mix only that amount of material that can be used in a 60 minute period.
- If using less than full units, proportion the amounts carefully and mix for 2-3 minutes using a low speed drill and jiffy mixer, scraping the bottom and sides of the mixing vessel.

APPLICATION

- Apply **KEY #450** polyurethane at a spread rate of 250-350 square feet per gallon to achieve 2.5-3.5 mils dry film thickness. Thicker application may result in bubbling in the cured film or improper cure development. Recoat time is approximately 12-16 hours at 75°F. Keep a wet edge at all times.
- Refer to detailed mixing/installation instructions document for further information.
- Use with adequate ventilation. Application in a small closed room requires negative air movement to remove solvent fumes and allow for proper curing. Read detailed mixing/installation instructions and material safety data sheet before using.

PHYSICAL PROPERTIES, TECHNICAL DATA

Mixing Ratio	2 Parts A to 1 Part B by Volume
Viscosity @ 75°F	700-900 cps
Weight per gallon	10.5 lbs. per gallon, mixed
Solids Content	56% (clear), 65% (pigmented), by Volume
Volatile Organic Content (VOC)	405 g/L
Pot Life	60 minutes @ 75°F, 50% RH
Dry to Touch	10-14 hours @ 75°F, 50% RH
Re-Coat	12-16 hours @ 75°F, 50% RH
Light Foot Traffic	16-24 hours @ 75°F, 50% RH
Full Cure	5-10 days @ 75°F, 50% RH
Gloss, 60° - Clear	Gloss Finish
Heat Resistance	140°F Continuous, 200°F Intermittent
Sunlight Resistance	Non-yellowing
Tabor Abrasion, 1,000 gm. load, 1,000 cycles, CS-17 Wheel	30 mg. loss, average
Impact Strength ASTM-D-2794	
Direct	160 in. lbs.
Reverse	160 in. lbs.

CHEMICAL RESISTANCE

REAGENT	RATING	REAGENT	RATING
Acetic Acid-5%	L	JP-8 Jet Fuel	R
Acetone	L	Lactic Acid-15%*	R
Betadine	R	Methyl Ethyl Ketone	L
Beer	R	Motor Oil	R
Bleach-10% *	L	Nitric Acid-10%*	R
Citric Acid-30%, 40%	R, L	Skydrol	R
Crude Oil	R	Sodium Hydroxide-50%	R
Diesel Fuel	R	Spor-Klenz (concentrate)*	L-1 hour
Ethylene Glycol	R	Spor-Klenz (diluted)	L-8 hours
Fatty Acids	L	Sulfuric Acid-20%	R
Gasoline	R	Toluene	R
Fatty Acids	L	Urea	R
Hydrochloric Acid-10%	R	Vinegar	L
Hydrochloric Acid-15%	R	Xylene	R
Iodine	R		

R - Recommended for continuous splash/spill service.

L - Limited recommendation for 8 hours or less exposure time, requires more frequent cleanup, occasional spills only.

* - May cause slight stain or discoloration.

AVAILABILITY

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

MAINTENANCE

After completing the application of **KEY #450 Urethane Coating/Sealer**, the installer should provide the owner with maintenance instructions. **KEY #450** is easily cleaned with neutral soaps or detergents. Refer to Key Resin Technical Bulletins #3 and #3-A for additional information.

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 Sales/Technical Representatives** are available to assist you. Telephone 888.943.4532 or visit www.keyresin.com.

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.**