



KEY #467-ESD URETHANE TOPCOAT

DESCRIPTION

KEY RESIN #467-ESD is a three component, chemical resistant, ultra high solids, ESD (electrostatic dissipative) clear aliphatic polyurethane coating. **KEY #467-ESD** is a low VOC, low odor urethane that meets all federal and state environmental air quality standards. The gloss finish offers excellent abrasion resistance, chemical and stain resistance. **KEY #467-ESD** can be used equally well on vertical or horizontal surfaces. It will test in the ESD range of 1,000,000 to 1,000,000,000 ohms electrical resistance and is ideal for concrete floors and walls in electronic component assembly areas, data processing, military/aerospace, pharmaceutical plants, hospitals, and hazardous industries (dust or explosion hazards). For use in any areas where the build-up of static electricity is a concern. Available in clear only, **KEY #467-ESD** can be used as a finish coating option for most **KEY FLOORING SYSTEMS**.

KEY ADVANTAGES

- Excellent Abrasion & Wear Resistance
- Excellent Chemical & Stain Resistance
- Maintains Electrical Conductivity Performance Over the Wear Life of the Sealer
- May be Used for Both Horizontal & Vertical Applications
- Compliant to Low VOC Rule 1113 Air Regulations in all 50 U.S. states, Low Odor

KEY CONSIDERATIONS

- Substrate moisture testing and preparation is required as outlined in Technical Bulletin #1
- Substrate must be free of dirt, waxes, curing agents, and other foreign materials
- Minimum/maximum application temperature: 50°F/90°F
- Minimum/maximum relative humidity: 30%/80%

COMPOSITION

Three component, catalyzed, chemical resistant, moisture cure clear aliphatic polyurethane with conductive filler.

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 COMPANY'S TECHNICAL BULLETIN #1**. Work must be performed by trained or experienced contractors or maintenance personnel.

INSTALLATION

KEY #467-ESD is normally applied using a dip and roll procedure with a short nap mohair roller, followed immediately with cross rolling. **Review detailed installation instructions document prior to use.** Care should be taken to minimize the entrapment of air caused by over-rolling. Apply material within the recommended thickness range and allow to cure. Do not apply a second topcoat unless first consulting with Key Resin Technical Service. Do not thin material. **KEY #467-ESD** is a moisture cure urethane, relative humidity will significantly affect cure speed. Refer to Installation Instructions document for important additional details.

CLEAN UP

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

COVERAGE

KEY #467-ESD Clear will yield 4.0 mils dry film thickness when spread at 350 ft² per gallon. *Important:* Do not vary significantly from this coverage rate to achieve consistent conductivity readings.

TECHNICAL DATA

Hardness (ASTM D 3363 Pencil)	2H to 3H
Abrasion Resistance ASTM D 4060 (Taber Abraser 1000 gm. load per wheel)	10-20 mgs./1000 cycles, CS-17 Wheel
Solids Content (by volume)	90% Clear
Volatile Organic Content (VOC)	<50 g/L, per rule 1113 Compliant in all U.S. states, including Los Angeles SCAQMD counties
Dry Film Thickness	4.0 mils @ 350 square feet per gallon application thickness

CURE/DRY TIME (Applied at 350 square feet per gallon)

Pot Life	2 hours @ 75°F, 50% RH
Re-Coat (must sand first coat)	8-10 hours @ 75°F, 50% RH
Light Service (foot traffic)	16-24 hours @ 75°F, 50% RH
General Service (vehicle traffic)	72+ hours* @ 75°F, 50% RH *varies by temp and RH
Full Cure & Maximum Resistance to Staining	5-7 days* @ 75°F, 50% RH *varies by temp and RH

AVAILABILITY & COLOR SELECTION

Key Resin materials are available throughout the United States, Canada, and a number of other countries. Contact the **Key Sales/Technical Representative** in your area for details. **KEY #467-ESD** is available in Clear Gloss only. Conductive filler alters the appearance of the clear resin and will affect color tone of underlying colors. Applying a second topcoat will further darken the underlying colors. Confirm final appearance with finished samples or apply a small mock-up over existing flooring system.

MAINTENANCE

After completing the application of **KEY #467-ESD**, the installer should provide the owner with maintenance instructions. **KEY RESIN #467-ESD** is easily cleaned with neutral soaps or detergents. Refer to 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 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.

CHEMICAL RESISTANCE

<u>REAGENT</u>	<u>RATING</u>
Acetic Acid-5%	L
Acetone	L
Betadine	R
Beer	R
Bleach	L
Brake Fluid	R
Citric Acid-30%	R
Citric Acid-40%	L
Crude Oil	R
Diesel Fuel	R
Ethylene Glycol	R
Fatty Acids	L
Gasoline	R
Hydrochloric Acid-15%	R
Iodine	R
Lactic Acid-15%	R
Methyl Ethyl Ketone	L
Nitric Acid-10%	R
Orange Juice	R
Peroxide-35%	R
Phosphoric Acid-85%	L
Skydrol	R
Sodium Hydroxide-50%	R
Sulfuric Acid-20%	R
Toluene	R
Urea	R
Vinegar	L
Xylene	R

R-Recommended for continuous exposure service.
L-Limited Recommendation, occasional spills with frequent cleaning. Confirm details with Key Resin Technical Service.
*-May cause slight stain or discoloration.