



KEY POLYASPARTIC POLYUREA COATING #470

DESCRIPTION

Key Resin #470 is a two component, ultra high solids, aliphatic polyurea designed to provide high gloss, UV stable (non-yellowing) and chemical resistant protection. **Key Resin #470** is a superior, new generation product exhibiting fast cure time and excellent stain resistance.

Key Resin #470 has very low odor and can be applied indoors in occupied areas. **Key Resin #470** is generally used as a clear or pigmented high gloss finish on Key resin decorative and industrial flooring systems such as Key Chip 100 (garage floor finish), Key Quartz, Key Luster Metallic, Key Mortar SLT/STD, and Key Urecon SLT/TG systems.

KEY ADVANTAGES

- VOC compliant
- Fast set times
- Excellent UV resistance
- High gloss
- Excellent abrasion resistance
- Chemical & stain resistance
- Low odor-used in occupied areas

KEY CONSIDERATIONS

- Substrate temperature must be a minimum of 50°F
- Substrate must be free of dirt, waxes, curing agents and other foreign materials
- Do not apply over damp or wet substrates
- Avoid applications on surfaces with active moisture vapor transmission
- Very fast set (short working time)

COMPOSITION

Two Component, Catalyzed Polyaspartic Polymer

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. The **KEY RESIN COMPANY** technical service department is pleased to answer any questions.

INSTALLATION

KEY RESIN #470 is a two component material (2 parts A to 1 part B by Vol.). Add Part B to Part A while mixing, using a slow speed mechanical mixer (Jiffy mixer). Mix until a homogeneous mixture is obtained (approximately 3 minutes). Use care to scrape sides and bottom of container to ensure that no unmixed material remains. Do not whip too much air into the material which may result in pinholes or blisters. Do not mix more material than can be used in 10-15 minutes.

KEY RESIN #470 will begin to increase in viscosity immediately after mixing and will double in viscosity within 17-20 minutes. Material should be in place at this point.

Immediately after mixing, pour material on floor in a ribbon and spread with a flat trowel or notched squeegee depending on thickness of application. Typical application is 8-12 mils (130-200 sq/gal.). Backroll spread material gently with a short nap mohair roller. Do not over roll and entrap air. Total application time should take no longer than 15 minutes.

Up to 5% solvent (xylene, MEK or similar) may be added at time of mixing to slightly lower viscosity and lengthen pot life.

KEY RESIN #470 will be tack-free in 2-2 ½ hours at 70°F and 50% relative humidity. Allow 4 hours between coats if applying more than one coat. Light pedestrian traffic is possible after 4 hours, 24-48 hours before heavy pedestrian or automotive traffic. **KEY RESIN #470** is highly stain resistant and hot tire resistant after 48 hours.

CLEAN-UP

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

COVERAGE

Key Resin #470 is typically spread at 160 ft²/gallon to yield 8-10 mils. Up to 15 mils is possible in one application but will exhibit a longer set time.

COLOR

Key Resin #470 is available in Clear, Key Standard Colors and custom colors subject to laboratory approval and increased cost.

TECHNICAL DATA

Viscosity @ 75°F	Part A 175-200cps
	Mixed A&B 350-400 cps
Mixing Ratio	2 Part A to 1 Part B by Volume
Solids Content	95-97%
Volatile Organic Content	.03#/gal. (35.8 gm/l)
Weight per gallon	8.77

CURE/DRY TIME

Pot Lift (Working time) 75°F	15-17 minutes
Dry to Touch, 75°F	2.0-2.5 hours
Re-Coat	4 hours
Light Service	4-5 hours
Heavy Traffic	48 hours

TYPICAL PHYSICAL PROPERTIES

Hardness - Shore D	24 hours	25-30
ASTM-D-2240	48 hours	55-60
Tensile Str., psi ASTM-D-412		3,000-4,000
Elongation, % ASTM-D-412		50 max

CHEMICAL RESISTANCE

REAGENT	RATING
Acetic Acid-10%, 30%	L
Acetone	L
Ammonia Hydroxide-38%	R
Beer	R
Bleach	L
Brake Fluid	L
Citric Acid-30%	R
Citric Acid-40%	L
Crude Oil	R
Diesel Fuel	R
EEP Solvent	L
Ethanol	L
Ethylene Glycol	R
Fatty Acids	L
Gasoline	R
Hydrochloric Acid-15%	R
Hydrogen Peroxide-30%	L
Iodine	L
Isopropanol	R
Jet Fuel	R
Lactic Acid-15%	R
Lactic Acid-50%	R
Methyl Ethyl Ketone	L
Nitric Acid-10%	L*
Orange Juice	R
Phosphoric Acid-85%	L
Skydrol	L
Sodium Hydroxide-50%	R
Sulfuric Acid-20%	R
Toluene	L
Urea	R
Urine	R
Vinegar	R
Xylene	L

R-Recommended for continuous service
L-Limited Recommendation, occasional spills
*-May cause slight stain or discoloration

AVAILABILITY

Key Resins 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 **Key Resin #470**, the installer should provide the owner with maintenance instructions.

Key Resin #470 is easily cleaned with neutral soaps or detergents.

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.

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.**