

KEY URECON SL

Product Data Sheet



DESCRIPTION

KEY URECON SL is a 1/8"-1/4" seamless, urethane-modified, cementitious slurry system with a smooth finish (refer also to flooring system TDS), or is used as a body coat component of various other **Key Urecon Systems**. Ideal for medium to heavy duty traffic areas, **KEY URECON SL** exhibits high impact resistance and excellent thermal shock and chemical resistance. In addition, as a material tolerant to high moisture content in the concrete substrate, **KEY URECON SL** is a solution for many concrete substrate moisture problems. **KEY URECON SL** can be installed with an integral cove base for areas requiring seamless wall to floor systems. Installing **KEY URECON SL** with a textured surface (requiring a topcoat) provides greater resistance to slipping under most wet conditions, refer to **KEY URECON SLT** for this option. Excellent for rehabbing old floors, **KEY URECON SL** provides a strong, long lasting surface that resists chemical corrosion, abrasion, and impact. Note: **KEY URECON SL** is not color stable unless a UV light resistant topcoat is used, refer to **KEY URECON SLT** for various color stable topcoat options.

KEY ADVANTAGES

- Excellent chemical, wear, and impact resistance
- Unaffected by moisture vapor transmission for on or below grade applications
- May be installed over 5 day old concrete
- Thermal shock resistant
- Hygienic/antimicrobial—will not support bacterial or fungal growth, safe for food industry, non-absorbent, non-tainting
- Meets USDA requirements for incidental food contact
- VOC (EPA Method 24) SCAQMD compliant, low odor
- Meets USGBC LEED criteria for low VOC
- Bio-based material, polyol component manufactured using rapidly renewable agricultural content
- Fast cure time

KEY CONSIDERATIONS

- Should be applied when temperature is between 50°F and 85°F.
- Substrate must be free from condensation or water contamination during application and cure
- Material requires mechanical mixing. Do not mix partial units
- Substrate should be clean, dry, sound, properly prepared concrete
- Repair cracks, divots and spalls prior to installation
- Severe concrete outgassing may require priming with **KEY URECON SC** (broadcasted)
- Epoxy and Polyaspartic topcoats require a broadcast texture (refer to **KEY URECON SLT**)

COLOR SELECTION

Refer to **Key Dry Oxide Pigment Colors Chart**. Price surcharge for Blue, Green, Safety Yellow. May also use **Key Urethane Pigment Packs** at additional cost. Light colors will become altered with exposure to UV spectrum light. **Key Colored Quartz** and **Key Colored Broadcast Chips** also available, used with various clear sealers.

CURE/DRY TIME

Working Life	10-15 mins @ 75°F, 50% RH
Recoat* (*Accelerator Additive reduces time)	6-8 hrs @ 75°F, 50% RH
Light Foot Traffic Service	8-10 hrs @ 75°F, 50% RH
Light Vehicular Traffic	12-16 hrs @ 75°F, 50% RH
Full Cure & Max. Resistance	3-5 days @ 75°F, 50% RH

Refer to product information sheet for specific topcoat(s) if used

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**. **KEY URECON SL** may be installed over 5 day old concrete. **Important:** Be aware that concrete substrates will continue to contract (shrink) during early cure stage possibly causing random shrinkage cracks in the concrete or covered contraction (sawcut) joints to crack, resulting in reflective cracks in the **KEY URECON SL** topping—contact Key Resin Technical Service for recommendations.

Concrete substrates should be a minimum of 3000 psi compressive strength and 225 psi tensile strength. Substrates should be sloped to drain in wet areas to prevent standing water or chemicals.

Work must be performed by experienced contractors. The **Key Resin Technical Service Department** is available to answer any questions.

MIXING INSTRUCTIONS

Mechanical mixing is required. Add Part I and Part II in running mixer and blend until uniform (about 30 seconds). Add oxide pigment pack and Part III aggregate slowly to mix and blend for 1 more minute. Use immediately.

INSTALLATION

KEY URECON SL is installed using a gauge rake or steel trowel. Refer to detailed installation instructions document and **Key Resin Technical Service** for additional important details.

CLEAN UP

Clean skin with soap and water. Tools and equipment should be cleaned with xylene or lacquer thinner. Consult Safety Data Sheet (SDS) for safety and health precautions.

COMPOSITION

KEY URECON SL is a urethane modified, portland cement system blended with a variety of graded silica, or ceramic fillers.

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TECHNICAL DATA

Mixing Ratio	Pre-Packaged Kit
Weight (liquids)	9.00-9.50 lbs per gallon, mixed
Volatile Organic Content (VOC) (EPA Method 24)	<5 g/L, compliant to low VOC Rule 1113 in all 50 states

AVAILABILITY

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

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.

PHYSICAL PROPERTIES

Flammability	ASTM D635	Self-Extinguishing
Fungus and 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, Shore D	ASTM D2240	80-85
Adhesion to Concrete	ASTM D7240	300-400+ psi (Concrete Failure, varies by concrete strength)
Flexural Strength	ASTM C580	2,600 psi
Coefficient of Friction	Contact Key Resin Technical Service	Contact Key Resin Technical Service
Water Absorption	ASTM D570	Nil
Thermal Shock Resistance	ASTM C884	Passes
Abrasion Resistance	ASTM D4060 CS17 Wheel, 1000 cycles	70 mg
Impact Resistance	MIL-D-3134J	Withstands 16 ft./lb. without cracking, delamination, or chipping
Compressive Strength	ASTM C579, 7 days	7,500 psi
Tensile Strength	ASTM C307	1,100 psi
Service Temperature Resistance		-50 – 240°F wet, 280°F wet intermittent, 350°F dry
Thermal Coefficient of Linear Expansion	ASTM C531 ASTM D696	1 x 10 ⁻⁵ in/in/per °F

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.

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