# **KEY URECON TG**

**Product Data Sheet** 



### DESCRIPTION

**KEY URECON TG** is a 1/4" – 3/8" heavy duty, trowel applied urethane modified cementitious topping. High impact resistance, excellent thermal shock and chemical resistance make **KEY URECON TG** ideal for use in manufacturing and food/beverage processing areas. In addition, as a system tolerant to high moisture content in the concrete substrate, **KEY URECON TG** is a solution for many moisture problems. **KEY URECON TG** may be used both indoors and outdoors and in areas where freeze/thaw is a factor, and the surface reduces slipping under most wet conditions. Excellent for rehabbing old floors, **KEY URECON TG** may be mixed with dry pea gravel to install at thicknesses up to 6" in one lift. **KEY URECON TG** is the key choice for wet areas, dairies, food processing areas, and industrial kitchens, and can be installed with an integral cove base for areas requiring seamless wall to floor coatings. **KEY URECON TG** will not support the growth of fungus or bacteria. Note: **KEY URECON TG** 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**

- High impact, thermal shock, and wear resistance
- Excellent chemical resistance
- Low odor for use in occupied areas
- Meets USGBC LEED criteria for low VOC
- Hygienic-will not support growth of fungus or bacteria
- Unaffected by moisture vapor in the concrete slab–up to 100% RH using the RH in situ probe test method and no limit using the calcium chloride test method
- One-step application with fast cure time-topcoat optional depending on service conditions
- Meets USDA requirements for incidental food contact
- Safe for food industry–non-absorbent, non-tainting, washable

### **KEY CONSIDERATIONS**

- Should be applied when temperature is between 50°F and 85°F
- Site must be free from water contamination during application and curing
- Substrate should be clean, dry, sound, properly prepared concrete
- Expansion joints in the substrate must be revealed through the topping and filled with urethane sealant
- Movement of substrate cracks may transmit through
  system

### **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.

### **CURE/DRY TIME**

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

### **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 TG** 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 TG** 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 TG** is installed using a 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.

### KEY URECON TG Product Data Sheet

PHYSICAL PROPERTIES



## **TECHNICAL DATA**

| Mixing Ratio                                     | Pre-Packaged Kit                                             |
|--------------------------------------------------|--------------------------------------------------------------|
| Weight (liquids)                                 | 9.00-9.50 lbs per gallon, mixed                              |
| Volatile Organic Content (VOC<br>(EPA Method 24) | ) <5 g/L, compliant to low VOC<br>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.

#### Flammability ASTM D635 Self-Extinguishing Will not support growth of fungus or bacteria Fungus and Bacteria Growth MIL-F-52505 § 4.4.2.11 when subjected to mildew and bacteria tests Hardness, Shore D 80-85 **ASTM D2240** 300-400+ psi Adhesion to Concrete ASTM D7234 (Concrete Failure, varies by concrete strength) **Flexural Strength ASTM C580** 2,000 psi >0.60, exceeds ADA Coefficient of Friction **ASTM D2047** recommendations 0.10% ASTM D570 Water Absorption Thermal Shock Resistance Passes ASTM C884 **ASTM D4060** Abrasion Resistance 70 mgs CS17 Wheel, 1000 cycles Withstands 16 ft./lb. without cracking, MIL-F-3134J Impact Resistance delamination, or chipping **Compressive Strength** ASTM C579, 7 days 7,500 psi **Tensile Strength** ASTM C307 800 psi 1.1 x 10<sup>-5</sup> in/in/per °F Thermal Coefficient of Expansion ASTM C531 -50 – 240°F wet, 280°F wet Service Temperature Resistance intermittent, 350°F dry

### 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-conforming 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 MERCHANT-ABILITY 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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**CORPORATE OFFICE / EASTERN US / INTERNATIONAL** 4050 Clough Woods Drive . Batavia, OH 45103 513.943.4225 888.943.4532 www.keyresin.com