

# TK-311 CONCRETE BONDING AGENT

## 2 PART 100% EPOXY

Meets Federal EPA's VOC Requirements

## Technical Data



**TK PRODUCTS**

Division of Sierra Corporation  
ISO 9001:2000 Certified

TK-311 CONCRETE BONDING AGENT  
Concrete Bonding & Repair Materials

3 PRODUCTS



### 1. PRODUCT NAME

TK-311 CONCRETE BONDING AGENT, TWO PART 100% EPOXY

### 2. MANUFACTURER

TK PRODUCTS, DIVISION OF SIERRA CORPORATION  
11400 West 47th Street  
Minnetonka, MN 55343  
952-938-7223  
952-938-8084 (FAX)  
E-mail: [tksales@tkproduct.com](mailto:tksales@tkproduct.com)  
Website: <http://www.tkproduct.com>

### 3. PRODUCT DESCRIPTION

TK-311 is a 2-component epoxy bonding agent for concrete and other materials. Each kit consists of two separate components of equal volume to be mixed together just before applying to the desired surface.

#### Uses:

TK-311 EPOXY BONDING AGENT binds fresh concrete, existing concrete or other materials (such as metal, wood or brick) to horizontal or vertical existing concrete.

### 4. TECHNICAL DATA

#### Composition:

Part A (base) = 100% epoxy resins  
Part B (catalyst) = amine curing agent

#### Physical Properties:

	Part A	Part B
Density lbs./gal.:	9.65 lb.	9.87 lb.
Spec. Gravity:	1.16	1.18
% Non-Volatile:	100%	100%
Material VOC	0 g/l	0 g/l
Potlife @ 70°F =	20 – 30 min.	
Tack Free in	4 hours	

#### Applicable Standards:

- ASTM C-881, Type I & II
- Corps of Engineers CRD-C-595-87
- A.I.M. Category: Primers and Undercoaters
- A.I.M. Definition:  
Primer: A coating formulated and recommended for application to a substrate to provide a firm

bond between the substrate and subsequent coatings.

- V.O.C. Content Limit: 350 g/l.

### 5. APPLICATION PROCEDURES AND INSTRUCTIONS

Before buying and using this product, read completely this product's label, technical data sheet, and Material Safety Data Sheet (MSDS), available where product is purchased.

Be familiar with application instructions before use. They are on the container label.

The compound can be used at a range of temperatures. The colder the temperature, the longer the cure time and pot life. The hotter the temperature, the shorter cure time and pot life.

#### Surface Preparation:

The surface must be prepared before mixing the components. It must be clean, sound and free of any debris. Any oil, grease, dirt, dust, paint, sealers, or other compounds can be removed by washing and/or shot blasting, acid etching or sandblasting followed by a thorough rinsing and drying of the surface. Vacuuming is recommended after all types of preparation.

#### Coverage:

TK-311 EPOXY BONDING AGENT can be applied with a brush, roller, trowel or broom. Approximately 100-125 square feet per gallon on smooth surfaces. On rough surfaces, it may cover approximately 75 square feet per gallon of the compound. A second coat may be necessary on highly porous surfaces.

#### Mixing:

The two components (A & B, base and catalyst) must be thoroughly mixed at a one to one ratio by volume in a clean container just prior to the application due to the limited pot life. They can be mixed by hand or by a low speed electric drill at the job site. Efforts should be made to avoid introduction of air during mixing. This will lead to formation of bubbles which

will reduce the ultimate strength of the bonding agent. If only a portion of a kit is going to be mixed, the amounts to be mixed need to be measured accurately. Care must be taken that the remaining unused portions do not come into contact with anything (each other or the mixed portion). Spreading the material immediately after mixing will increase the available working time.

#### Bonding Fresh to Existing Concrete:

Any existing cracks larger than 1/4 inch should be patched before continuing. The catalyzed TK-311 coating should be tacky when the fresh cement is poured. If the coating is dry, another coating must be applied before the cement is poured.

If a large area is to be coated, it is recommended to apply the TK-311 in smaller areas so the coating won't be dried by the time the fresh cement is placed.

#### Bonding Existing to Existing Concrete:

Both surfaces should be cleaned, dried, free of debris and coated with TK-311. In order to bond the two surfaces together, both coatings of TK-311 must be tacky. Pressure may be necessary during the bonding time (24-48 hours depending on the temperature).

#### Limitations:

Shelf life is approximately 12 months from date of manufacture when stored in unopened containers. Apply in temperature above 50°F.

#### Equipment Cleanup:

Use an aromatic solvent such as TK-00 Solvent to clean equipment and to remove the compound from skin in cases of accidental contact.

#### Safety Precautions:

Safety goggles/glasses, glove and a respirator (to minimize the intake of the fumes) should be worn when handling this material. Avoid skin contact; if contact accidentally occurs,



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remove immediately with solvent, then wash with soap or a lanolin cleaner. Avoid eye contact; if contact accidentally occurs, flush with warm water and get medical attention immediately. Adequate safety measures must be taken to prevent fire in areas where solvents are being used.

Refer to this products Material Safety Data Sheet for further information. MSDS' are available through TK Distributors, the TK Office, or the TK Website. This information should be read before using this product.

## 6. AVAILABILITY

TK-311 Concrete Bonding Agent is packaged in 10, 2 and 1/2 gallon kits, and is available through TK Distributors. Contact TK Products for the nearest distributor.

## 7. CONDITIONS OF SALE/LIMITED WARRANTY

*TK Products, division of The Sierra Corporation, warrants that its products conform to the label descriptions, are free from manufacturing defects, and are fit for the ordinary purposes for which such goods are used. Inasmuch as the use of TK Products' product by others and other factors affecting product performance are beyond TK Products' control, TK Products does not guarantee the results to be obtained. There are no warranties except as stated herein, either express or implied, including implied warranties of merchantability or fitness for a particular purpose. SHOULD ANY TK PRODUCTS' PRODUCT FAIL TO GIVE SATISFACTORY RESULTS, TK PRODUCTS WILL REPLACE THE PRODUCT OR, AT ITS OPTION, REFUND THE PURCHASE PRICE. THIS IS THE SOLE AND EXCLUSIVE REMEDY FOR ANY FAILURE OF TK PRODUCTS' PRODUCTS TO PERFORM AS WARRANTED AND SHALL ALSO CONSTITUTE LIQUIDATED DAMAGES IN CASE OF LOSS. UNDER NO CIRCUMSTANCES SHALL THE BUYER BE ENTITLED TO ANY OTHER REMEDY OR DAMAGES. REMEDIES FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES ARE SPECIFICALLY EXCLUDED. TK Products does not authorize any person to assume for it any other liability in connection with the sale or use of its products unless specifically authorized by TK Products in writing. See also TK PRODUCTS DISCLAIMER section below.*

## 8. TECHNICAL SERVICES

The TK office offers assistance with specifications, performance test data and field services.

## TK DISCLAIMER:

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04/06