

# TK-EPO™ MP PATCH

## Multi-Purpose Epoxy Patching Mortar

Item No. TK-EPO EXCEL MP

### PRODUCT DESCRIPTION

TK-EPO™ MP PATCH is a three-component, 100% solids, non-shrink, multi-purpose epoxy patching mortar that forms a tenacious bond with the substrate to provide a superior concrete patch in a variety of applications. The epoxy resins tested in accordance with ASTM C881, meeting Type III, Grade 1, Class B & C.

#### Features:

- Forms a tenacious and mechanical bond for superior patching.
- Low modulus.
- Rapid strength gain allows surface to be reopened to traffic in 3-4 hours at 73°F (23°C).
- Freeze/thaw resistance.
- Semi-rigid for shock absorption.
- Compatible with epoxy overlays.
- Textured wearing surface.
- Eliminates Halo effect.

#### USES:

TK-EPO™ MP PATCH is used to patch concrete columns, bridge and parking decks and spalls in plant/industrial floors.

### APPLICATION PROCEDURES

#### PREPARATION:

Thoroughly clean the patching area and exposed reinforcing steel by sandblasting to a white metal finish. Vacuum or blow all dust and loose particles from the area. Saw cut approximately 1/2" (0.2 cm) deep around the perimeter of the patching area and remove any deteriorated or unsound concrete with a chipping hammer (not to exceed 30#).

#### MIXING:

- 1) Mix complete kits only.
- 2) Start by premixing the individual components separately, then combine equal parts (1:1 mixing ratio) of component "A" and "B" into a pail and mix thoroughly for 3 minutes using a Jiffy mixer on low speed (300 rpm).
- 3) Keep the mixer at the bottom of the pail to avoid introducing air into the mix, and continue mixing until the material is of uniform consistency.
- 4) Begin incorporating component "C" (aggregate) slowly and mix thoroughly until aggregate is fully wetted out.

#### APPLICATION:

Patching Concrete - Prime the patch area by brushing or rolling with a neat coat of the liquid mixture (components "A" and "B" only), and immediately place the patch.

#### CLEAN UP:

Collect spills and leaks with an absorbent material and dispose of in accordance with local, state and Federal disposal regulations. Flush area with water to rinse. Uncured material

### TECHNICAL DATA

Viscosity:	1,800 cps
Gel Time (60 g mass):	25 minutes
Tack Free Time (73°F/23°C):	3-5 hours

### TESTING DATA

Applicable Standard	Product Performance
<b>ASTM D638</b> (7 day cure): Tensile Properties	
Strength Tensile	2,500 psi (17.7 MPa)
Tensile Elongation	40%
<b>ASTM D695</b> (7 day cure): Compressive Properties	
Strength Compressive	5,000 psi (34.5 MPa)
Compressive Modulus	90,000 psi (620 MPa)
<b>ASTM C882:</b> Bond Strength	
cure 2-day	1,600 psi (11.0 MPa)
cure 14-day	2,500 psi (17.7 MPa)
<b>ASTM C579:</b> Compressive Strength	
3-hour cure	1,500 psi (10.3 MPa)
24-hour cure	5,000 psi (34.5 MPa)
<b>ASTM C1583/ACI 503R:</b> Bond Strength	300 psi (2.0 MPa)
<b>ASTM D790:</b> Flexural Strength	3,000 (20.9 MPa)
<b>ASTM D2566:</b> Shrinkage on Cure	0.2%
<b>ASTM C884:</b> Thermal Compatibility	Pass
<b>ASTM D648:</b> Heat Deflection Temperature	120°F (49°C)
<b>ASTM D570:</b> Water Absorption	0.2% (24 hour)
AASHTO T277: Chloride Ion Permeability	0.0 coulomb

may be removed using TK-KWIK KLEAN 2012\* or an approved solvent. Cured material may only be removed by mechanical means.

#### LIMITATIONS:

- Minimum substrate temperature is 40°F (5°C)
- Minimum age of hardened concrete is 5-7 days old.

## **PRECAUTIONS:**

### Safety Precautions

- Component "A" - Irritant
- Component "B" - Corrosive
- Product is a strong sensitizer. Use of safety goggles and chemically resistant gloves recommended.
- Use of a NIOSH/MSHA organic vapor respirator is recommended where ventilation is inadequate. Avoid inhalation of vapors and avoid skin contact.
- EYE CONTACT: Flush immediately with water for at least 15 minutes and contact a physician immediately.
- RESPIRATORY CONTACT: Relocate person to fresh air.
- SKIN CONTACT; Remove any contaminated clothing. Remove epoxy immediately with a dry cloth or paper towel. Solvents should not be used as they carry irritant into the skin. Wash area of contact thoroughly with soap and water.
- CURED EPOXY RESINS ARE INNOCUOUS

## **FIRST AID:**

- Consult this product's safety data sheet for additional health and safety information. Safety Data Sheets are available through TK distributors, the TK office and the TK website.

## **AVAILABILITY:**

TK-EPO™ MP PATCH is available through TK Distributors. Contact TK Products for the nearest distributor.

Packaged in pre-measured 1.0 cubic foot (0.028m<sup>3</sup>) kits.

### Kit Contents:

- (1) gallon Component "A" + (1) gallon Component "B" + (2) 50-lb. bags Component "C" (aggregate)

Storage Conditions: Shelf life is 2 years in original unopened containers. Store at temperatures between 40°F - 95°F (5°C - 35°C).

Condition material to 65°F-85°F (18°C-29°C) before using.

FOR PROFESSIONAL USE ONLY

## **NOTES:**

\*TK-KWIK KLEAN 2012 must be purchased separately

11/16 Last Rev.06/15

### **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.

### **TK DISCLAIMER:**

Every effort has been made to ensure the accuracy of the above information and to avoid infringement of any patent or copyright. The information is based on field tests by government and private agencies, as well as lab tests, and on technical data from raw material manufacturers. The person(s) specifying or requesting the use of these products is responsible for assuring their suitability for a specific use, as well as the proper application of the products. Where there is any question as to the suitability of a particular product, a small test patch is recommended. See also CONDITIONS OF SALE/ LIMITED WARRANTY (Section 7) above.



### **TK Products Construction Coatings**

11400 West 47th Street Minnetonka, MN 55343

800-441-2129 toll free | 952-938-8084 fax | www.tkproducts.com