



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 I, 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 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.

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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

TEST	RESULTS
ASTM D 638 Tensile Properties (7 day cure) Tensile Strength Tensile Elongation	2,500 psi (17.7 MPa) 40%
ASTM D 695 Compressive Properties (7 day cure) Compressive Strength Compressive Modulus	5,000 psi (34.5 MPa) 90,000 psi (620 MPa)
ASTM C 882 Bond Strength 2-day cure 14-day cure	1,600 psi (11.0 MPa) 2,500 psi (17.7 MPa)
ASTM C 579 Compressive Strength 3-hour cure 24-hour cure	1,500 psi (10.3 MPa) 5,000 psi (34.5 MPa)
ASTM C 1583/ACI 503R Bond Strength	300 psi (2.0 MPa)
ASTM D 790 Flexural Strength	3,000 (20.9 MPa)
ASTM D 2566 Shrinkage on Cure	0.2%
ASTM C 884 Thermal Compatibility	Pass
ASTM D 648 Heat Deflection Temperature	120°F (49°C)
ASTM D 570 Water Absorption	0.2% (24 hour)
AASHTO T277 Chloride Ion Permeability	0.0 coulomb

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 0.5 cubic foot (0.014m³) and 1.0 cubic foot (0.028m³) kits.

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

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CONDITIONS OF SALE/ LIMITED WARRANTY

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