



Division of Sierra Corporation  
ISO 9001:2008 Certified

### 1. PRODUCT NAME

TK-2414 MMA BRIDGE DECK & CRACK SEALER

### 2. MANUFACTURER

TK PRODUCTS  
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### 3. PRODUCT DESCRIPTION

TK-2414 MMA BRIDGE DECK & CRACK SEALER is a two-component, clear liquid, low viscosity, low surface tension, solvent-free, rapid curing reactive methacrylate resin that is formulated to penetrate, repair and seal cracks in concrete surfaces.

TK-2414 MMA BRIDGE DECK & CRACK SEALER is UV resistant, protects against intrusion from water and chloride ions and provides resistance against weather and aging. Its fast cure time (1 hour) allows the surface to be reopened to traffic with minimal down time.

#### BENEFITS:

- Penetrates cracks by gravity
- Fast turn around time
- User-friendly with ease of use installation
- Low viscosity allows easy topical applications and excellent penetration into cracks.
- Shelf life up to 1 year when stored properly
- Prevents premature deterioration of the surface
- May be applied at a wide range of temperatures (from 35° - 104°F), allowing for an extended application season

#### USES:

- Concrete
- Bridge Decks
- Parking Structures
- Exterior, Horizontal Applications

### 4. TECHNICAL DATA

#### Composition:

TK-2414 MMA BRIDGE DECK & CRACK SEALER is a reactive methacrylate resin.

Viscosity, Brookfield RVT:	< 25 cps
Gel Time, ASTM D2471:	25 - 35 min.
Tensile Strength, ASTM D638:	2328 psi
Tensile Elongation, ASTM D638:	30%
Shear Bond Adhesion, ASTM C882:	2188 psi
Tack Free Time, AASHTO T237	30 - 60 min. @ 70°F (21°C)

-A.I.M. Category: Concrete Waterproofing Sealers VOC < 400 g/l  
-A.I.M. Definition: A coating that is formulated and recommended for application to a porous substrate for the primary purpose of preventing the penetration of water.

### 5. APPLICATION PROCEDURES AND INSTRUCTIONS

#### Surface Preparation:

The surface must be clean, dry and free of dust, dirt, oil, wax, curing compounds, efflorescence, laitance and any other bond-breaking materials. Check the weather forecast to ensure that dry conditions will be present for application and drying. Using a dust-free, mobile shot-blaster or grit-blaster, brush-blast the substrate to expose surface cracking. Do not use wet preparation methods.

#### Mixing:

TK-2414 MMA BRIDGE DECK & CRACK SEALER (Unit A) is to be mixed with the appropriate amount of Unit B (Initiator) prior to application. The following Mixing Chart is a guide.

Mixing Chart

Temperature (°F)	# Units A (Sealer)	# Units B (Initiator)
40°	1	5
50°	1	4
60°	1	3
70°	1	2
85°	1	1

Add the appropriate amount of Unit B (Initiator), determined from the mixing chart, to the Unit A (Sealer). When calculating the proper amount of Unit B (Initiator) to be used, the temperature of the substrate as well as ambient air temperatures need to be considered. Sift the Unit B (Initiator) into the Unit A (Sealer) while mixing to ensure there are no lumps present. Stir vigorously with a mechanical mixer 1-2 minutes until Unit B (Initiator) is dissolved. The mixed material should be applied immediately as working time is 15-30 minutes. Dumping and spreading the material into a thin film will NOT extend this working time.

#### Application:

TK-2414 MMA BRIDGE DECK & CRACK SEALER is to be applied as a flood coat in a gravity fed process by broom or roller. The contents of the batch should be immediately poured onto the substrate and worked into the cracks and distributed by squeegee, 1/2" to 3/4" nap solvent grade rollers, or broom. Do not leave ponded material on the surface. TK Products recommends that a 30 mesh dry aggregate be randomly broadcast into the wet, uncured resin at a rate of approximately 4lb./100ft<sup>2</sup>. A second treatment may be required on very porous substrates.

#### Coverage:

Typical coverage is between 90-150ft<sup>2</sup>/gallon for crack healing and surface sealing. These rates may vary depending on the porosity and absorption properties of the substrate. Higher porosities will reduce the coverage rate.

#### Limitations:

- Do not thin as the addition of solvents will prevent proper curing
- Ambient temperature at application must be over 35°F.
- Concrete must be allowed to cure for 21-28 days before application
- Sealed concrete surfaces may appear blotchy due to differential absorption

- Proper application of this product is the responsibility of the user. Visits to the jobsite by TK Products staff are meant as a technical resource only. No supervision of the application processes or quality control will be performed by TK Products.

**Clean Up:**

Immediately clean tools with xylene, methyl ethyl ketone or similar solvents. In case of spills, collect the material with an absorbent cloth, and dispose of in accordance with all applicable regulations.

**Precautions:**

Use NIOSH/MSHA approved respiratory protection in accordance with all applicable Federal, state and local regulations. Any person using a respirator must be properly trained in respirator use. Keep away from all sources of ignition including heat and open flame. Use only with adequate ventilation. Avoid contact with the eyes, skin and clothing and wash thoroughly after handling. Do not take internally; avoid inhalation. The use of gloves and eye protective equipment is mandatory. Tyvec suits recommended. Do NOT use in confined areas.

**First Aid:**

*Inhalation:* Relocate person to fresh air, give artificial respiration if not breathing. GET MEDICAL HELP.

*Eye and Skin Contact:* Wash with large quantities of clean water for 15 minutes.

*Ingestion:* Do not induce vomiting. GET MEDICAL HELP.

**Storage:**

Store the material in a clean, cool and dry area, away from direct sunlight. Maximum storage temperature is 86°F. Store the material in its original, unopened container.

**6. AVAILABILITY**

TK-2414 MMA BRIDGE DECK & CRACK SEALER is available through TK distributors. Contact TK Products for the nearest distributor.

**Packaged in:**

- 5-gallon Unit A (Sealer)  
3.41-oz. Unit B\*\* (Initiator)
- 55-gallon Unit A (Sealer)  
4.26-lb. Unit B\*\* (Initiator)

**\*\* Temperature at time of application will determine the number of Initiator (Unit B) required. Refer to the "Mixing Chart" (on front) for temperature/unit requirements.**

**7. CONDITIONS OF SALE/ LIMITED WARRANTY**

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**9. FILING SYSTEMS**

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Englewood, CO 80150  
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Oak Park, MI 48237

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