



Division of Sierra Corporation
ISO 9001:2008 Certified

TK-ONE STEP

Meets Federal EPA's VOC Requirements

Technical Data

1. PRODUCT NAME

TK-ONE STEP

2. MANUFACTURER

TK PRODUCTS
DIVISION OF SIERRA CORPORATION
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Minnetonka, MN 55343
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952-938-8084 (FAX)
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3. PRODUCT DESCRIPTION

TK-ONE STEP is a clear, Methacrylate/Acrylic Copolymer resin with siloxane that is used as a one step application for curing, sealing, and hardening freshly placed and/or existing concrete, brick, stone, architectural concrete and other cementitious materials. The siloxane in TK-ONE STEP acts as a water repellent to resist moisture damage and degradation. TK-ONE STEP can be used for either exterior or interior applications.

BASIC USES:

NEW CONCRETE:

TK-ONE STEP forms a membrane film which seals in and retains 97.3% of the hydration water to provide maximum hardness of the substrate, resistance to abrasion, damage caused by salt, oil, grease, mild acids and alkali, and stains from soot, smog, fumes and gases. Construction debris do not adhere to the concrete; cleanup is easier, and labor costs are reduced. TK-ONE STEP contains siloxane for deeper penetration and repellency against water and deicing chemicals.

TK-ONE STEP has excellent curing and sealing properties. Because new concrete is saturated with water at the time of application, it is recommended that a second coat be applied after the concrete has dried for deeper penetration and long-term protection.

EXISTING CONCRETE:

TK-ONE STEP penetrates into the slab, binding together the small, dusting particles, filling the voids to produce a hard, dust-free, brighter surface; and provides the same compatibility and protective capabilities as on newly placed substrates.

ON TERRAZZO, BRICK, STONE OR ARCHITECTURAL CONCRETE:

TK-ONE STEP brings out the highlights of the natural colors, and increases the aesthetic value and longevity of the completed project.

Use TK-ONE STEP on: commercial and industrial work, i.e. public buildings, showrooms, shopping centers, schools, hospitals, manufacturing plants, and warehousing; and residential driveways, basement floors, sidewalks, patios, and swimming pool areas.

4. TECHNICAL DATA

COMPOSITION AND MATERIALS:

TK-ONE STEP is a Methacrylate/Acrylic Copolymer resin with siloxane blended with fast drying aromatic hydrocarbon. No fillers are used and there are no oils, waxes or saponifiable resins contained in the mixture. TK PRODUCTS' materials are manufactured with the finest quality raw materials available and close quality control is practiced.

Flash Point:	> 100°F
Moisture Efficiency:	.18 kg/m ² at 300 ft ² /gallon
ASTM C-1315:	max allowed = .40 kg/m ²
Drying Time:	1 hour tack free 2 hours open to traffic

APPLICABLE STANDARDS

- ASTM C-1315-95, Type 1, Class A, B, and C.
- ASTM C-309, Type 1, Class A & B and Type 1D with a red dye added.
- Fed TT-C-800A, Type 1, Class 1
- AASHTO Des. M-148, Type 1, Clear.
- A.I.M. Category: Curing and Sealing Compound, maximum VOC 700g/l.
- A.I.M. Definition - A liquid membrane-forming compound marketed and sold solely for application to concrete surfaces to reduce the loss of water during the hardening process and to seal old and new concrete providing resistance against alkalis, acids, and ultra violet light, and provide adhesion promotion qualities.
- The coating meets the requirements of American Society for Testing and Materials

(ASTM) C-1315-95, Standard Specification for Liquid Membrane Forming Compounds Having Special Properties for Curing and Sealing Concrete.

- Approved by the Resilient Tile Institute to be compatible with most resilient tile and carpet adhesives, and most paints.
- USDA authorization for use in meat, poultry and food processing plants.

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.

SURFACE PREPARATION:

Material is ready for use, requires no mixing or dilution. It is unlawful to further reduce with non-exempt solvents.

NEW CONCRETE:

Finish trowel or broom and allow surface water to dissipate. Do not delay application - apply immediately after surface water has dissipated. Use a low pressure (20-30 lbs.) sprayer or power sprayer. Apply uniformly at specified rate of coverage. Avoid heavy accumulations.

EXISTING CONCRETE:

Must be free of oil or grease and soil. Use a long nap applicator or paint roller to distribute the compound more evenly. Airless sprayer or low pressure spray equipment can be used on larger areas; avoid heavy accumulations. If application is uneven, use a paint roller to even out the film. TK-ONE STEP will darken the appearance of existing concrete. Apply a test area to check for approval prior to application. On very porous concrete, a second coat may be needed to get a uniform film on the surface. Allow coating to become tack free between coats.

Coverage	Sq. ft./gallon
Curing	
broomed	300
troweled	350-550
Dustproof/Seal	
Second Coat	300 - 500
Second Coat	400 - 800
Renovation	
Dustproof/Seal	300 - 400

*Coverage rates will always be dependent upon the porosity of the concrete.

TK-ONE STEP
Curing & Sealing Compound



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Limitations:

Apply in temperatures above 40°F. Cold weather applications can be made under prescribed conditions and procedures specified by TK Products.

Not for use on colored concrete, asphalt, or surfaces subject to immersion or constant liquid contact.

Not for use where spillage of solvents, fuels, brake, transmission or hydraulic fluids, etc. are expected.

Sprayers must be equipped with neoprene hose, washers and gaskets; rubber or other materials will disintegrate from the solvent.

Material will not freeze and may be stored outdoors in cold weather; however, it must be allowed to warm to approximately 50°F before using.

This product is to be applied according to recommended coverage rates. TK-ONE STEP will darken the appearance of concrete, especially if over applied.

Note 1. Concrete containing calcium chloride will remain dark longer when sealed. Extenders and additives (concrete admixes, fly ash) are now being added to some ready mixed concrete which can cause inconsistency in the porosity of the concrete. Some areas of the finished concrete may then appear darker than others. To compensate for these variations, coverage ratios should be adjusted.

Note 2. Popout problems can occur on heavily steel troweled concrete in certain regional areas during extremely hot (90°F), dry, windy conditions. These deficiencies are the result of a heat caused reaction between the silica in the shale particles of the fine aggregate with the sodium and potassium alkali in the portland cement. For more information on this problem, refer to "POPOUTS" by Norman E. Henning, P.E. and Kenneth L. Johnson, P.E. of Twin City Testing and Engineering Laboratory and Lowery J. Smith of the J.L. Shiely Company.

Where this type of shale is present, and extremely hot weather conditions prevail, it is recommended that liquid membrane curing compounds should not be used until the concrete has been completely cured by water ponding, continuous water spray mist, or wet burlap covering for a period of three days. A seal coat can then be applied for dustproofing and protection (when concrete is completely dry).

Cleanup of Equipment:

Use TK-00 Solvent. For sprayer, pump the solvent through the spray equipment to remove residue of materials which can clog the hose and wand assembly.

Precautions:

TK-ONE STEP contains aromatic hydrocarbon. Keep away from heat and flame. Prevent build-up of vapors by opening all windows and

doors to achieve cross-ventilation. Use only with adequate ventilation. Do not breathe vapor or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headaches or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Close container after each use. Avoid contact with eyes, skin, and clothing. Wash after handling. KEEP OUT OF REACH OF CHILDREN. Do not allow vapors to penetrate into foodstuffs. Remove animals from quarters until all fumes have dissipated. AS-1 1315 in its cured state is not toxic.

First Aid:

If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention immediately; for skin, wash thoroughly with soap and water. If swallowed, do not induce vomiting. Call physician immediately.

In Case of Fire:

Use foam, CO₂, dry chemical. Do not use water spray. Generic Name: Petroleum Distillates.

Spills or Leaks:

Contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused content in accordance with local, state and federal regulations.

For safety controls, Material Safety Data Sheets are available through TK Distributors, the TK Office or the TK Website. This information should be read before using the product.

6. AVAILABILITY

TK-ONE STEP is available through TK Distributors. Contact TK PRODUCTS for the nearest distributor. Packaged in: 55-gallon drums, 5-gallon pails, and one gallon cans.

Maintenance

Minimal maintenance is required other than normal sweeping, dusting or mopping. If wear patterns do occur, or spillage removes the coating, TK-ONE STEP can be reapplied to the affected area.

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

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8. TECHNICAL SERVICES

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

9. FILING SYSTEMS

Information Handling Services
PO Box 1213
Englewood, CO 80150
Information Marketing Services
13271 Northend
Oak Park, MI 48237

TK DISCLAIMER:

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