



Division of Sierra Corporation  
ISO 9001:2008 Certified

# TK-5329 Floor Hardener and Densifier

Meets Federal EPA's VOC Requirements

## Technical Data

TK-5329 FLOOR HARDENER AND DENSIFIER  
Concrete Chemical Floor Hardener

TK 3 PRODUCTS

### 1. PRODUCT NAME:

TK-5329 FLOOR HARDENER  
AND DENSIFIER

### 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-5329 is a colorless, odorless blend of 100% active sodium silicate and silicate chemicals which deeply penetrate the concrete and masonry substrate. It chemically reacts with the free lime or calcium carbonate in the concrete to strengthen, harden, densify and dustproof. TK-5329 penetrates deep into the concrete and seals the capillaries and pores, as well as the surface. It leaves a very hard mineral film on the surface.

### TK-5329 HARDENER AND DENSIFIER:

- Allows the concrete to breathe.
- No solvent or fumes.
- Does not leave a film like coating.
- Can be used on new and old concrete.
- Waterproofs the concrete by densifying the concrete.
- Compatible with floor and carpeting adhesives.
- Does not make the floor slippery.
- Resists black tire marks.
- Compatible with most stripping paints.
- Floors can be put back into service immediately after treatment.

### USES:

- TK-5329 is used on:
  - Warehouse floors.
  - Factory floors.
  - Distribution center floors.
  - Animal and food processing plant floors.

### 4. TECHNICAL DATA:

Nontoxic, noncombustible. Complies with all V.O.C. Regulations.

#### IMPACT:

-ASTM C-42 - increases impact resistance.

#### ABRASION:

-ASTM C-779 - 33% increase in abrasion resistance.

#### BONDING:

-ASTM D-3359 - 16.7% increase in Epoxy adhesion. No change for Polyurethane adhesion

#### CURING:

-TK-5329 provides greater moisture retention during the initial 24 hour curing period, versus untreated samples.

#### HARDENING:

-ASTM C-39 - 42% increase in compressive strength at 7 days. 39% increase at 28 days over untreated samples.

#### PERMEABILITY:

-TK-5329 is breathable, and will allow moisture vapor to pass through treated surface.

-ASTM G-23 - no effect by ultraviolet light and water spray exposure.

-V.O.C. Compliant - Maximum VOC 100 g/l (0.83 lb/gallon)

-USDA Compliant

-A.I.M. Category: Sealer

-A.I.M. Definition: A coating that is formulated and recommended for application to a substrate for one or more of the following purposes: to prevent subsequent coatings from being absorbed by the substrate; to prevent harm to subsequent coatings by materials in the substrate; to block stains, odors, or efflorescence; to seal fire, smoke or water damage; or to condition chalky surfaces.

### 5. APPLICATION PROCEDURES AND INSTRUCTIONS

Before using this product, read the Material Safety Data Sheet for complete safety information.

Material Safety Data Sheets are available from TK Distributors, the TK Office or the TK Website.

### COVERAGE:

200 sq.ft./gal for steel troweled concrete. For other surfaces, 200-250 sq.ft./gal depending on the porosity and density of the concrete, as well as its surface texture. The surface must remain saturated with TK-5329 for a minimum of 30 minutes. A porous or open concrete surface may allow a rapid drying of the surface (faster than 30 minutes), you will need to apply additional TK-5329 in order for the proper reaction to occur.

Coverage rates are provided as a guideline only. Surface texture, porosity, weather conditions, etc. will determine coverage rates. A test panel mock up should be applied prior to project start up to determine coverage rates, appearance and proper results.

### Surface Preparation for Old or New Concrete:

The surface must be clean, free of dirt, oil, curing compound sealers, and foreign material. Fix or patch all cracks and remove laitance. Any cleaners used need to be thoroughly rinsed off. The surface can be damp, but no standing water which will dilute TK-5329.

### APPLICATION:

Can be applied with sprayer, roller, or brushed.

### For New Concrete:

Concrete must cure a minimum of 7 days before applying TK-5329. Water curing or covering the concrete with poly are recommended methods of curing the concrete. TK-2519 DC WB can be used as a curing compound but all application instructions of TK-2519 DC WB must be followed to assure complete removal of the curing resin.

Apply to a clean, dry surface. Work TK-5329 into the surface using a soft bristle or scrub pad. The use of a mechanical scrubber will increase the effectiveness of this product. Work in this manner until TK-5329 begins to gel

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or become slippery. Then re-wet with water and work for another 10 –15 minutes. As surface becomes slippery again, flush with water and squeegee the surface dry to remove excess TK-5329. The use of water wash and mechanical scrubber will increase the effectiveness of this application and rinsing.

#### **For Old Concrete:**

Apply to a clean, dry surface. Work TK-5329 into the surface using a soft bristle or scrub pad. The use of a mechanical scrubber will increase the effectiveness of this product. Work in this manner until TK-5329 begins to gel or become slippery. Then re-wet with water and work for another 10 –15 minutes.

As surface becomes slippery again, flush with water and squeegee the surface dry to remove excess TK-5329. The use of water wash and mechanical scrubber will increase the effectiveness of this application and rinsing. If this floor is to receive a subsequent coating or adhesives for tile or carpeting after 30 minutes flush with water and squeegee dry.

#### **MAINTENANCE:**

Use normal dust mopping or sweeping between occasional detergent and water cleanup.

#### **LIMITATIONS:**

Do not apply if ambient or substrate temperature is below 32°F. Over application may cause discoloration of concrete or white haze. Brush out all puddles to prevent formation of white residue. Protect metal, glass, wood, brick and painted surfaces. Wash immediately with clear water if contact occurs. Protect from freezing.

#### **PRECAUTIONS:**

**WARNING:** May cause nose, throat, lung and eye irritation. Harmful if inhaled. Keep out of reach of children.

Avoid inhalation of vapors and spray mist. Avoid contact with eyes and skin. Excessive and prolonged inhalation may result in headache, nausea, and eye and lung irritation. Contact with skin may cause irritation or rash. Close container when not in use. Use only with adequate ventilation. Wash thoroughly after handling or contact.

#### **FIRST AID:**

If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention 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, induce vomiting as directed by physician, hospital emergency room or poison center. Give conscious victim 1 to 2 glasses of water and get medical attention immediately.

Keep container closed when not in use. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

### **24 Hour Chemical Emergency**

**CHEMTREC 1-800-424-9300**

#### **6. AVAILABILITY**

TK-5329 is available through TK Distributors. Contact TK Products for the nearest distributor. Packaged in: 55, 5 and 1 gallon containers.

#### **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.**

#### **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:**

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.

#### **FOR INDUSTRIAL USE ONLY**

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