



TK-3981 TRI-A-LITH CONCRETE HARDENER

Meets Federal EPA's VOC Requirements

PRODUCTS

Division of Sierra Corporation

Technical Data

TK-3981 TRI-A-LITH CONCRETE HARDENER
Concrete Chemical Floor Hardener

PRODUCTS
3



1. PRODUCT NAME:

TK-3981 TRI-A-LITH CONCRETE HARDENER

2. MANUFACTURER

TK PRODUCTS, DIVISION
OF SIERRA CORPORATION
11400 West 47th Street
Minnetonka, MN 55343
952-938-7223
952-938-8084 (FAX)
E-mail: tkproduct@AOL.com
Website: http://www.tkproduct.com

3. PRODUCT DESCRIPTION:

TRI-A-LITH is a solution of magnesium silicofluoride designed to harden concrete by a 100% reaction with calcium compounds such as lime in the cement. The solution penetrates deep into the concrete surface, surrounding all the fine particles, as well as larger aggregate and gravel, binding them into a dense mass. As the hardener cures and dries, it crystallizes into a insoluble mass, producing hard, durable concrete having many basic and desired properties.

Uses:

TRI-A-LITH is used to prevent dusting, increases the longevity of the concrete, to resist water erosion, discoloration by oil, grease, abrasion by grit, soil and heavy transport traffic and to resist chemical attack and efflorescence. Disintegration caused by freeze/thaw cycling is minimized. Alkali in concrete is neutralized, prevents peeling, and cleaning and maintenance are easier and more economical.

Installations:

Use TRI-A-LITH on concrete, stucco, mortar, brick, plaster, terrazzo, and other porous surfaces, on both new and existing, interior and exterior surfaces.

4. TECHNICAL DATA:

TRI-A-LITH is non-flammable and has the viscosity of water.

Composition:

A blend of magnesium and zinc silicofluoride with wetting and penetrating agents in a water solution.

Applicable Standards:

Corps of Engineers, General Services Administration, Veterans Administration and Federal Works Agency specifications for magnesium silicofluoride concrete floor hardeners. Recommended for use on Class 1, 2, 3, and 4 concrete floors per Table 1.1 ACI Standard 302-69.

This product is currently not regulated by 1999 Federal EPA VOC Requirements.

5. APPLICATION PROCEDURES AND INSTRUCTIONS

New concrete must have a 10 day cure period without any film forming or wax base curing or sealing compounds. Either a wet cure, poly cure or a silicate base curing compound such as TK-1835 SILHARD can be used. Film forming and/or wax base materials must be chemically or mechanically removed. If exterior work has been steel troweled, it can become slippery due to heavy traffic. Protect material from freezing. Apply in temperatures above 40°F.

Method and Procedure:

TRI-A-LITH can be applied by sprayer, long-handled brush or squeegee. Three succeeding applications are advised to gain maximum hardness and utilization of the hardener. Note: If white crystals form on the surface, stop the application; this indicates the possibility of a stronger than necessary solution. Thoroughly

flush surface with hot water, scrub spots with stiff bristled brush, mop up excess and allow to dry. To correct the problem, the water ratio may need to be increased; consult TK PRODUCTS.

Application:

Dilution and Coverage

Surface	Coat	TRI-A		Coverage
		LITH	Water	
Light trowel	1st	1/3	2/3	100 sq. ft.
	2nd	1/2	1/2	
	3rd	2/3	1/3	
Steel trowel	1st	1/4	3/4	100-300 sf
	2nd	1/3	2/3	
	3rd	1/2	1/2	
Rough finish	1st	1/3	2/3	100 sq. ft.
	2nd	1/2	1/2	
	3rd	1/2	1/2	
Terrazzo	3 coats	1/4 each	3/4 coat	300 sq. ft.

Wood floated or broom finished surfaces may require a fourth coat. Check with TK Products for dilution ratio.

Application Procedures to Follow:

1. Dilute as noted in chart
2. Spray or flush onto surface spreading evenly, brush out excess solution and/or puddles. The first and second coats are allowed to dry completely.
3. After the last coat, flush surface with clean, hot water, scrub with stiff bristled broom to remove any residue. Mop up excess. Surface can be returned to use at once.

Terrazzo Surfaces:

Methods and procedures are the same as above with the following exceptions.

1. Do not allow TRI-A-LITH to dry.
2. After each application, while surface is still damp, flush with hot water; allow to dry before applying next coat.
3. After third coat, mop up flush water; allow to dry.



PRODUCTS
3

TK-3981 TRI-A-LITH CONCRETE HARDENER
Concrete Chemical Floor Hardener

Limitations:

TRI-A-LITH IS NOT FOR USE ON COLORED CONCRETE.

Equipment Cleanup:

Use water.

Precautions:

TRI-A-LITH is a corrosive, toxic substance and should be handled with safe working practices. Proper safety equipment, i.e., rubber boots, gloves and protective eye wear should be worn. Good working practices in handling and application will prevent accidents. Glass, metal, fabric, or painted surfaces should not come in contact with this material. If contact occurs, wipe surface at once with water soaked cloth; wipe dry.

WARNING:

Contains acid and fluosilicates. KEEP OUT OF THE REACH OF CHILDREN.

First Aid:

Ingestion: DO NOT induce vomiting, administer 1 oz. of Milk or Magnesia to patient along with water; get medical help. *Eye Contact:* Flush with water for 15 minutes; get medical help. *Skin Contact:* Flush with water, wash with soap and water.

6. AVAILABILITY

TK-3981 is available through TK Distributors. Contact TK Products for the nearest distributor. Packaged in 55, 5 and 1 gallon containers.

7. LIMITED WARRANTY

TK Products, a division of The Sierra Corporation, warrants that its products conform to their 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 its products by others and other factors affecting product performance are beyond TK Products' control, TK Products does not guarantee the results to be obtained. SHOULD ANY OF ITS PRODUCTS FAIL TO GIVE SATISFACTORY RESULTS, TK PRODUCTS WILL REPLACE THE PRODUCTS OR, AT ITS OPTION, REFUND THE PURCHASE PRICE. THIS IS THE SOLE AND EXCLUSIVE REMEDY FOR ANY FAILURE OF THE PRODUCTS OF TK PRODUCTS TO PERFORM AS WARRANTED AND SHALL ALSO CON-

STITUTE 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. See also TK PRODUCTS DISCLAIMER section below.

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 LIMITED WARRANTY (Section 7) above.

FOR INDUSTRIAL USE ONLY

3/00