



# PRODUCTS

Division of Sierra Corporation

# AK-2 ACHRO KURE OTC

Meets Federal EPA, OTC, LADCO VOC Requirements

## Technical Data

### 1. PRODUCT NAME

AK-2 ACHRO KURE OTC

### 2. MANUFACTURER

TK PRODUCTS, DIVISION

OF SIERRA CORPORATION

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Minnetonka, MN 55343

952-938-7223

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### 3. PRODUCT DESCRIPTION

AK-2 OTC, a clear, acrylic, copolymer resin curing, sealing and hardening compound for freshly placed and/or existing concrete, terrazzo, brick, stone, architectural concrete and other cementitious materials for exterior applications. AK-2 OTC is designed to meet Federal EPA, OTC, LADCO VOC Regulations.

#### Basic Uses:

On New Concrete: AK-2 OTC 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 does not adhere to the concrete; cleanup is easier, less cost for labor.

The coating is clear, dries clear and does not yellow.

On Existing Concrete: AK-2 OTC 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: AK-2 OTC brings out the highlights of the natural colors, increases the aesthetic value and longevity of the completed project.

Use AK-2 OTC on: Commercial and industrial work, i.e. public buildings, showrooms, shopping

centers, schools, hospitals, manufacturing plants, and warehousing; and residential driveways, sidewalks, patios, and swimming pool areas.

### 4. TECHNICAL DATA

#### Composition and Materials:

AK-2 OTC is an acrylic copolymer resin 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* -15° F.

- *Moisture Efficiency*: .028 kg/m<sup>2</sup> at 200 sq. ft. per gallon.

- *Drying Time*: 1 hour tack free, two hours open to traffic.

#### Applicable Standards

-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 Compound, maximum VOC 350g/l.

A.I.M. Definition - AK-2 OTC 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. - 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

#### 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 and allow surface water to completely dissipate. Use low pressure (20-30 lbs.) sprayer or power sprayer. Apply uniformly at specified rate of coverage. Avoid heavy accumulations.

**Existing Concrete:** Must be dry and free of oil or grease and soil. *Sprayer:* Airless sprayer or low pressure spray equipped with neoprene fittings ; avoid heavy accumulations. *Roller:* If applying by roller, use a short 3/8" nap. Keep the roller wet and keep a wet edge while applying to avoid lap marks. Do not roll back and forth excessively, this can cause air bubbles. AK-2 OTC is fast drying do not roll back into product that is drying. To aid in keeping the roller wet keep a pan filled with AK-2 OTC or TK-00 Solvent. Do smaller areas that can be handled before the product dries. A second coat should be applied on very porous surfaces where absorption is rapid. Allow coating to become tack free between coats. Because AK-2 OTC is fast drying, cooler or overcast days works best for roller application.

#### Coverage: Rate\* Sq. Ft/Gal

Curing	Rate* Sq. Ft/Gal
Troweled	200-400
Broomed	200-300
Dustproof/Seal	200-300
Second coat	400-600

Renovation	Rate* Sq. Ft/Gal
Dustproof/Seal	200-300

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

**Limitations:** Recommended for outdoor use only. 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 asphalt, or surfaces subject to immersion or constant liquid contact.

Sprayers must be equipped with neoprene hose, washers and gaskets;



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AK-2 ACHRO KURE OTC  
Curing and Sealing Compound

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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.

**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:**

AK-2 OTC contains flammable liquids. Keep away from heat and flame. Turn off anything that can create a spark. 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. AK-2 OTC 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, CO<sub>2</sub>, 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.

#### **6. AVAILABILITY**

AK-2 OTC is available through TK Distributors. Contact TK PRODUCTS for the nearest distributor.

Packaged in: 55 gal. drums, 5 gal. 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, AK-2 OTC can be reapplied to the affected area.

#### **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

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#### **8. TECHNICAL SERVICES**

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

#### **9. FILING SYSTEMS**

Information Handling Services:

PO BOX 1213

Englewood, CO 80150

Information Marketing Services:

13271 Northend

Oak Park, MI 48237

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

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