



**POOL AND DECK COATINGS**

**Kelley Technical Coatings**



Louisville, Kentucky 40201-3726  
[502] 636-2561 [800] 458-2842  
Fax [502] 635-5170 www.kelleytech.com

**ALL OLYMPIC PRODUCTS ARE VOC COMPLIANT**

## **Bulletin No. 114**

# POXOLON 2 or ZERON (EPOXY) Coatings on Aluminum

ZERON or POXOLON 2 provides the best known system for coating aluminum swimming pool surfaces. This system will develop positive adhesion and extremely long life when the application information is followed as closely as possible. No coatings system is stronger than its weakest link. This system develops only the strongest possible links.

When painting new or unpainted aluminum, the actual surface preparation should not be started until all other work in and around the pool is completed. This other work includes back filling, grading, landscaping, pouring decks, sodding, and any other work which creates dust or contamination for the surface to be coated. Prior to the start of the surface preparation, all welded joints (when the sections are welded) should be ground smooth, all weld splatters should be ground off, and all concrete splatters must be removed. When repainting aluminum, follow the information in our Bulletins No. 119 and No. 148.

### **SURFACE PREPARATION**

After all of the above items are completed, the entire aluminum surface to be coated must be sanded. All aluminum surfaces must be sanded. Aluminum is soft so the sanding is easily done. This is a light sanding operation, as it is only intended to "scarify" or roughen the surface sufficiently to secure a mechanical bond with the primer. Fairly large areas may be sanded within a short time. No circular motion should be used in sanding. If an electric sander is used, it should not be a disc. Hand sanding should be done by dragging the sandpaper in a straight line back and forth or up and down. One operator should be able to sand 350 to 500 sq. ft. per hour. Care should be exercised to sand all scum gutters, coping, etc. Any suspicious looking stain or discoloration should also be removed by sanding. All underwater light, gutter cleaning plates, and other removable fittings should be removed prior to sanding and not replaced until the painting is completed.

After sanding is completed, the sand and grit must be removed with a vacuum cleaner or by flushing it through the drain.

The next step is to thoroughly degrease every inch of the aluminum to be coated. Any good degreasing solvent will suffice. The solvent is liberally applied by mopping on a small area (30 to 40 sq. ft.) Immediately after it is mopped on and before it has a chance to dry, it should be wiped off with clean rags. As soon as possible after the degreasing operation with solvent, the entire aluminum pool surface is washed with our No. 910 POOL WASHING COMPOUND or tri-sodium phosphate. Mix 8 oz. of

either to each gallon warm water. Wash one area at a time and hose off with clean water before the solution has a chance to dry on the surface. Immediately after the surface is hosed off and the aluminum is dry, the first coat of No. 215 BONDERITE PRIMER may be applied.

After the first coat is dry to the touch the second coat of No. 215 BONDERITE should be applied.

NOTE: The surface may be dried off with clean rags when time is essential. BONDERITE PRIMER is never applied with rollers. It must be applied with brushes, as brushing will mix the primer with any dust or contaminants which could have collected on the surface after washing. A roller will leave hills and valleys.

After applying the primer, consult the recoating schedule for the first coat of POXOLON 2 or the only coat of ZERON.

**APPLICATION OF POXOLON 2 OR ZERON POOL COATING** Either must be applied according to directions if you are to expect best results. They have excellent adhesion over BONDERITE. If there is dew, rain, or water on the surface, it must be dried off before any coat is applied. It is VERY IMPORTANT that all directions are carefully followed.

**(A) CAUTION! THOROUGHLY STIR IN THE CATALYST.** All epoxy containers are only 3/4 full to leave room for the catalyst which is added at the ratio of one quart to each gallon and one gallon and one quart to each 5 gallon can. The catalyst is under the lid in 5 gallon cans and in separate containers for one gallon cans.

**(B)** Do not fail to wait the appropriate time for the proper chemical reaction to take place before applying the mixed material. With ZERON in hot weather begin to use immediately. Either POXOLON 2 or ZERON may be applied by rolling or by spraying. When rolling, use a roller equipped with a 1/2" lambswool cover. Roll from a 5 gallon can filled 1/3 to 2/3 full, equipped with a grid to roll off the excess coating. Spraying produces a better finish but requires the services of an experienced spray man.

**(C)** The surface MUST be 60°F or above at the time the coating is applied. Below 60°F, epoxies are static and do not cure or harden.

**LINES:** for racing lanes, POXOLON 2 in either Viking Blue or Black should be used. The lines must be applied the next day, if possible, in hot weather and not over 2 days in cooler weather or they will not bond. If it is impossible due to rain or other

conditions, then the POXOLON 2 or ZERON under the lines must be roughened with coarse sandpaper before the lines are applied. Masking tape should be used in order to produce straight lines.

**VERY IMPORTANT - WHEN APPLYING SUCCEEDING COATS:** If you wait too long, the previously applied coat may cure to the point that the solvent in the succeeding coat will not "bite into" the previous coat. When this happens, scaling and peeling may take place within one to three months. Also, when succeeding coats are applied too quickly, the solvent in this succeeding coat will soften the underlying coat and it will never completely cure. This could result in future peeling. A good rule of thumb (in addition to the recoating table) is to press your fingers on the coating. As long as it is tacky, do not apply the additional coat. This is true of both coating and primer.

Either POXOLON 2 or ZERON produce a smooth, slick, non-porous finish which is easy to clean and keep clean.

For cleaning equipment, use No. 1109 EPOXY SOLVENT. When using either pool coating, the application equipment should be cleaned with the No. 1109 SOLVENT immediately after using. Once it cures it is almost impossible to remove the coating.

Avoid painting in the direct rays of the sun on real hot days. Paint on the shady side when the day is hot. Do not paint in the morning before the dew and condensation has had ample time to evaporate. Dry off the surface with rags or towels if dew or moisture is evident.

#### **GENERAL INFORMATION**

**CAUTION!** Be certain to follow these directions. Both No. 215 BONDERITE PRIMER and the finish coats are two-part systems. After thoroughly stirring in the catalyst, wait according to induction schedule, before beginning application of either product. **DO NOT MIX** more than can be used within the useable "pot life" chart on in this bulletin. If it takes 45 minutes to apply 5 gallons, you can mix a new 5 gallon container every 45 minutes. When spraying, clean all hose and equipment immediately after the completion of its use. Never let coating "set up" in the hose or pot as it will be impossible to remove. Never wear hard soled shoes when painting. Wear sneakers or soft soled shoes.

Wherever slippery conditions are a hazard (wading pools, steps, coping, shallow areas, etc.), it will be necessary to lightly broadcast sand on these areas while the finish coat is still tacky. After the coating sets up, the excess sand may be brushed from the surface.

Consult the curing schedule below regarding the curing time before filling the pool.

For cleaning application equipment, use No. 1109 SOLVENT.

#### **PHYSICAL DATA**

##### **SOLVENT:**

No. 1109 for POXOLON 2, ZERON and No. 215 BONDERITE PRIMER.

##### **FLASH POINT:**

Above 105°F

#### **NO. 215 BONDERITE PRIMER AND PAINT RECOATING TIME BEFORE APPLYING THE NEXT COAT:**

Approx. 4 hours @ 90°F (must be tack free)

Approx. 6 hours @ 80°F (must be tack free)

Approx. 8 hours @ 75°F (must be tack free)

Approx. 24 hours @ 65°F (must be tack free)

#### **CURING SCHEDULE BEFORE FILLING THE POOL:**

Min. 3 days @ 75°F and up

Min. 4 days @ 70°F (average temperature)

Min. 5 days @ 65°F (average temperature)

Min. 6 days @ 60°F (average temperature)

#### **POT LIFE:**

BONDERITE PRIMER AND POXOLON 2:

Approx. 2 hours @ 95°F

Approx. 3 hours @ 85°F

Approx. 5 hours @ 75°F

Approx. 8 hours @ 60°F

ZERON: 1/2 hour @ 80°F - 1 hour @ 65°F to 85°F

**NOTE!** Above 85°F, use immediately after mixing thoroughly with catalyst. Do not mix 5 gallon containers unless you can use within 30 to 40 minutes. The smaller the quantity mixed at one time, the longer the pot life. **ALWAYS STORE AND MIX IN A COOL PLACE.**

POXOLON 2 will spread 225 to 250 sq. ft. for each coat. ZERON will spread 125 to 150 sq. ft. per gallon. Always apply one coat of BONDERITE PRIMER and two coats of POXOLON 2, or one coat of ZERON. BONDERITE will spread approximately 200 to 250 sq. ft. per gallon.

#### **CAN STABILITY:**

ZERON and POXOLON 2: Up to 2 years

BONDERITE PRIMER: Up to 2 years

Solvents: Indefinitely

**CAUTION! - COMBUSTIBLE!** Keep away from heat and open flame. Avoid prolonged contact with skin and breathing of vapor. Close container after each use. Areas of body or clothing on contact with uncured resin and/or catalyst should be thoroughly cleaned with solvent and washed with soap and water immediately. Use only where there is adequate ventilation. **KEEP OUT OF THE REACH OF CHILDREN.**

#### **WARNING!**

If you scrape or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at **1-800-424-LEAD** or log on to **www.epa.gov/lead**

Information herein given has been accumulated through many years of experience and verified by our technical personnel and is based upon tests believed to be reliable, but **RESULTS ARE NOT GUARANTEED.**

**NOTE:** KELLEY TECHNICAL COATINGS, INC. makes no implied warranty of merchantability, no implied warranty of fitness for a particular purpose and no other warranty, either express or implied, concerning its products.

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Louisville, KY 40210