



## Application Guide

## Type EP Epoxy

**Overview** Ramuc Type EP Epoxy offers a hard, tough, durable finish, providing stain, chemical, and abrasion resistance for protection of concrete, plaster, gunite, and fiberglass swimming pools and spas or slides. This two-component coating epoxy cures to a high-gloss finish, and offers excellent coverage rates. Type EP Epoxy has been a proven performer for more than 40 years, and is recommended for spas or whirlpools. Because of their chemical cure, epoxies are the paints of choice for indoor pools. All epoxy films will chalk (break down from the UV rays of the sun and water chemistry) over a period of time. This is a natural degradation or “cleansing” of the top surface of the epoxy film.

For compatibility purposes, the existing paint on previously painted surfaces of a pool or spa should be determined before painting. Aged plaster should be checked for integrity. Check for hollow or weak/crumbling plaster by using a ball-peen hammer or any other comparable method. Perform repairs to the plaster before painting.

### Supplies Needed

Cleaning products:

**Clean and Prep Solution** by Ramuc, the complete surface preparation product to clean and etch surfaces prior to painting.

**Or use:**

Tri-sodium phosphate (TSP)

Muriatic or sulfamic acid solution

High-pressure (3000 p.s.i.) power washer with turbo tip

Condensation test material:

Several one-foot square transparent pieces of plastic

Duct tape

Sandpaper #80 grit, power sander, sanding blocks, or wire brush

Painting supplies:

No thicker than 3/8” nap roller for use with solvent paint

Paint brush for detailing

5 gallon bucket for boxing (intermixing) paint

Mechanical mixer, paddle attachment to a power drill)

Ramuc Thinner or xylene for thinning paint, cleaning-up tools and spills

Joint or crack filler:

Hydraulic cement or Durathane® polyurethane sealant or any other submersible polyurethane sealant. Do not use silicone-based products, as paint adhesion will be adversely affected. Durathane must be topcoated before submersing in chemically treated water.

Plaster, concrete, or gunite surfaces should be tested for integrity and soundness. Pool paint is not a quick fix for weak surfaces. Should any minor repairs need to be made, such as hydraulic cement patch or crack joint filling, do them at this time. Follow the manufacturer's recommendations. Previously painted epoxy or bare fiberglass surfaces need to be abraded to a #80 grit profile. Power wash with a turbo tip to remove loose material. Care needs to be taken when recoating epoxy surfaces to remove all tightly adhering residual chalk. Scrub the entire pool with a /tri-sodium phosphate (TSP) solution to remove all dirt, oils, loose or peeling paint, and chalk.

All surfaces should then be acid washed/etched with a 15–20% solution of muriatic or sulfamic acid to achieve a medium grade sandpaper finish on bare concrete or plaster and to remove mineral deposits on previously painted epoxy or fiberglass surface. Neutralize/rinse with TSP and water.

***OR after power washing, prepare the surface with Clean and Prep Solution by Ramuc. It will degrease/clean, properly etch surfaces and rinse neutralize in lieu of the TSP/ACID/TSP process detailed above.***

### CONDENSATION TEST

When surface prep is completed, allow the pool surface to dry. Average dry times vary regionally and are dependent upon the porosity of the surface. It is recommended to wait five dry days and then perform a condensation test to determine surface dryness on concrete, plaster or gunite type surfaces.

To determine dryness, perform this simple test – Duct tape 1' x 1' pieces of transparent plastic to the deep end wall and floor, and on several other areas of the pool. Wait three hours to determine if condensation has formed underneath the plastic. If condensation has formed underneath the plastic then the surface is not dry enough to paint. Remove the plastic and wait 24 hours to perform the test again. Continue with the test until no condensation forms underneath the plastic after the three-hour wait period.

### Mixing

Ramuc Type EP is self-priming; no other type of primer is recommended or should be used.

- a) Mechanically mix Part A for approximately 5 minutes.
- b) Mechanically mix both Part A and Part B together for approximately 15 minutes.

Allow the admixed paint to set for 20–45 minutes (induction time) prior to use at 70°F and 50% relative humidity. At 65°F., the induction time is 45 minutes. Lower temperatures and higher humidity will affect the final cure of the coating. If mixing more than the one gallon kit at a time, intermix to ensure color uniformity. Type EP has a pot life (USE LIFE) of 8 hours.

### Application

Use no thicker than a 3/8" nap mohair or lambskin, phenolic core roller, one made for solvent-based coatings. Apply at the recommended coverage rate. Ideal air temperatures for application are between 50°–90°F. Surface temperature should be at least 50°F.

Do not paint when rain is imminent. Use dark colors for accent painting only.

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### Cure Rates

Outdoor pool: 5–7 dry days

Indoor pool: 10–14 days with adequate ventilation

If rain occurs during the curing process, allow an extra day of dry time for each day of rain. Rain or moisture can cause blistering, color blushing, and the finish could be altered.

Dry time to touch: 6–8 hours

To recoat: 16–72 hours. If second coat is applied beyond 72 hours, the first coat must be abraded/sanded prior to applying second coat.

FILL OUTDOOR POOLS AFTER AT LEAST 5 ACCUMULATED DRY DAYS,  
INDOOR POOLS WITH ADEQUATE VENTILATION, AT LEAST 10 DAYS.

Primer: All Ramuc paints are self-priming

### Coverage

175-200 sq. ft. per gallon on bare, sandblasted, or rough surfaces.

400-450 sq. ft. per gallon on recoats

(Actual coverage will vary and is dependent upon the texture and profile of the surface.)

Minimum dry film per coat: 1.7 dry mils (2.8 mils wet)

Maximum dry film per coat: 2.0 mils dry (3.2 mils wet)

Pot life - use life: 8 hrs. (@ 70°F and 50% relative humidity)

Finish: High Gloss

### Technical Data

Clean-up: Ramuc Thinner

Weight/gallon: 11.8# mixed

Solids by weight: 73%  $\pm$  2% mixed

Solids by volume: 60%  $\pm$  2% mixed

V.O.C.: Does not exceed 336 g/l

### Spray Information

Conventional air: 50-70 p.s.i.

Tip size: .043–.055 orifice

Airless: 2000–2300 p.s.i.

Tip size: .017–.021

## Special Situations

## Type EP Epoxy

### Blushing–Fading–Chalking

#### The cause:

- The pool is filled too soon (see cure rates) before the paint is completely cured, causing a blush over the surface which looks like fading or chalking.
- Super-chlorinated water may cause a bleached-out look.
- The shock of calcium hypochlorite can cause a white, bleached look to the paint film, leaving a whitish deposit
- A chalky substance can be created by over treating the water with shock, bromine, ozone and ionization. We suggest a natural polymer product or clarifier that can reduce the chalking problem.
- Iron in the water from rust in the filter system may leave deposits and stain the film.
- All epoxies will chalk to some degree due to exposure to UV rays of the sun.

#### The solution:

- Scrub surface using a solution of TSP or Clean and Prep Solution, rinse well.
- Solvent wipe affected areas with Ramuc Thinner.
- Pool water chemistry balance levels suggested are: 300-400 ppm calcium hardness, 80-120 total alkalinity, 1.0-1.2 chlorine and 7.2-7.6 pH.
- Be sure the newly painted pool surface cures at least five dry days for an outdoor pool and/or 10 days for an indoor pool, before filling.

# RAMUC®

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