

RAMUC APPLICATION GUIDE

Type EP Epoxy Pool and Spa Paint

Overview

Ramuc Type EP Epoxy offers a hard, tough, durable finish, providing unsurpassed stain, chemical, and abrasion resistance for protection of concrete, plaster, gunite, and fiberglass swimming pools and spas. This two-component coating mixes to 1 gallon, produces 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) over a period of time. This is a natural degradation 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. If existing surface is unknown, a sample should be submitted for testing to determine the type of existing surface. Paint chips can be taken to any Ramuc distributor/dealer to be forwarded to the Ramuc laboratory for analysis.

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:
 - Tri-sodium phosphate (TSP)¹
 - Muriatic or sulfamic acid¹ solution
 - High-pressure power washer (optional)

- Condensation test material:
 - Several two-foot square transparent pieces of plastic
 - Duct tape

- Abrasion material used to create a medium grade sandpaper profile for fiberglass surfaces or previously painted epoxy surfaces:
 - Sandpaper #80 grit, power sander, or wire brush

- Painting supplies:
 - No larger than 3/8" nap mohair metal, lambskin, phenolic core roller²
 - Paint brush for detailing²
 - 5 gallon bucket for boxing (intermixing) paint
 - Mechanical mixer (this simply can be a paddle attachment² to a power drill)
 - Ramuc Thinner or xylene for thinning paint, cleaning-up tools and spills

- Joint or crack filler:
 - Hydraulic cement¹ or Durathane® polyurethane sealant or any other submersible polyurethane sealant. Do not use silicone-based products, as paint adhesion will be adversely affected.

¹ Included in Ramuc Surface Preparation Kit

² Included in Ramuc Application Kit

The keys to a successful pool or deck paint job are proper SURFACE PREPARATION AND CORRECT APPLICATION. By following these simple 1-2-3 steps, you're ensuring virtually maintenance-free paint service on your pool.

GENERAL SURFACE PREPARATION

Immediately after the pool is emptied, begin the 3-step process.

STEP 1 - Plaster, concrete, or gunite surfaces should be tested for integrity and soundness. Pool paint is not a Band-Aid for weak surfaces. Water blast the surface to remove loose paint and dirt. Care needs to be taken when recoating epoxy surfaces to remove all tightly adhering residual chalk. Previously painted epoxy or bare fiberglass surfaces need to be abraded to a #80 grit profile. Then, scrub the entire pool with a soap/tri-sodium phosphate (TSP) solution to remove all dirt, oils, loose or peeling paint, and chalk. 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.

STEP 2 -All surfaces should then be acid 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 surfaces. Neutralize/rinse with TSP and water.

CONDENSATION TEST – **After all cleaning 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.

To determine dryness, perform this simple test – Duct tape 2' x 2' 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. This ensures the surface is dry enough to apply epoxy paint.

MIXING THE PAINT – Type EP Epoxy is self-priming; no other type of primer is recommended or should be used. Ramuc Thinner can be used to thin paint by 10%.

- a) Mechanically mix Part A for approximately 10 minutes.
- b) Mechanically mix Part B for approximately 10 minutes.
- c) Mechanically mix both Part A and Part B together for approximately 15 minutes.

Allow the admixed paint to set for 15-30 minutes (induction time) prior to use at 70° F. and 50% relative humidity. At 65° the induction time is 60 minutes. Lower temperatures and higher humidity will affect the final cure of the coating. If mixing more than the one - 1 gallon kit at a time, intermix the kits to ensure color uniformity. Type EP has a "pot" life (use life) of 8 hours.

APPLICATION

STEP 3 - Use no more than a 3/8" nap mohair metal lambskin, phenolic core roller. 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

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 – 3 hours

To recoat – 12-72 hours. If second coat is applied beyond 72 hours, the first coat must be abraded/sanded prior to applying second coat.

Finish – high gloss, tile like

Primer – all Ramuc paints are self-priming

COVERAGE

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

400 - 450 sq. ft. on recoats

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

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

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

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

Clean-up – Ramuc Thinner

TECHNICAL DATA

Weight/gallon – 11.8# mixed

Solids by weight – 73% ± 1% mixed

Solids by volume – 60% ± 1% mixed

V.O.C. – Does not exceed 336 g/l (admixed paint)

SPRAY INFORMATION

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

Tip size – .042 - .055 orifice

Airless – 2000 – 2300 p.s.i.

Tip size - .017 - .021

SPECIAL SITUATIONS

I. **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. It is not the paint breaking down. 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 soap and water. This will remove surface dirt and deposits.
- ◆ Wet with a weak (2-3%) solution of muriatic acid. Acid will remove iron stains without damaging the paint film.
- ◆ Solvent wipe affected areas with Ramuc Thinner.
- ◆ Check your pool water chemistry daily or weekly for calcium hardness, total alkalinity, and balanced pH.
- ◆ Extremely corrosive water can ultimately cause deterioration or breakdown of a paint film over a period of years.
- ◆ Be sure the newly painted pool surface dries at least five dry, sunny days before filling.

II **BLISTERING**

The cause:

- ◆ Using a nap roller larger than 3/8", draws air into paint film
- ◆ Over application of paint beyond its recommended coverage rate
- ◆ Painting on a damp surface
- ◆ Filling the pool before the paint is cured
- ◆ Incompatible paints

The solution:

- ◆ Apply at recommended coverage rates
- ◆ All paintable surfaces must be dry prior to painting with epoxy
- ◆ Epoxy paint must cure for 5 dry days(outdoor pool), and 10 days(indoor pool)
- ◆ If in doubt as to type of coating that is on the pool now, take a paint chip to your local Ramuc dealer for analysis.

Ramuc Pool and Deck Paint

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