



Technical Data Sheet

Hi-Build Epoxy Pool Coating

Description:

CCM Pool Epoxy is a high build epoxy coating. It is a two-pack solvent free epoxy with 100% solids it has a high gloss epoxy finish. It's formulated for use in situations that require high chemical resistance. Also CCM Pool Epoxy is extremely tough and can stand environments of high wear or traffic. It can be used where the surface of the coating will come into contact with cleaning products in order to sterilise the surface, to keep the highest levels of hygienic cleanliness.

Why use CCM Pool Epoxy:

- Designed for use on concrete, fibreglass or steel swimming pools.
- Easy clean formulation to help keep your environment germ free.
- Perfect for all large concrete swimming pools.
- Great chemical resistant
- Premium quality
- Designed to be used in conjunction with many types of cleaning products.
- CCM Pool Paint can be matched to most colours on request.
- Designed for long term adhesion to concrete.
- This is an extremely tough product designed for use in pools and environments that require a highly sanitary surface.

CCM Pool Epoxy is highly resistant to Chlorine and Hypochlorite salts and pH buffers and adjusters, used in swimming pool sanitisation systems.

Limitations

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. CCM Pool Epoxy Paint is perfect for use below the pools water line.

CCM Pool Epoxy will not tolerate the application of dry concentrated pool sanitisation salts being poured directly into the pool, where they may settle to the bottom of the pool and remain un-dissolved and in concentrated form for an extended period of time in contact with the Pool Epoxy. Doing so may cause colour change, fading of the coating. Strong acids may damage the surface of the epoxy coating on repeated application if spilled.

Technical Data

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| Resin Type: | Epoxy polyamine |
| Pigments: | Titanium dioxide |
| Colour: | A range of Pool Colours |
| No. of Coats: | 2 coats @ 250 microns typically |
| Dry-Time: | 8- 10 hr handle,. |
| Over-coat: | 16-24 hr overcoat |
| Full Cure: | 7 days |
| Coverage: | See application guide |
| Packaging sizes: | Part A 5 kg / Part B 1kg |
| Flash Point: | Flammable when mixed 14°C |
| Thinner: | CCM Pool Epoxy Thinner |
| Heat resistance | Dry: 120°C, Wet: 60°C. |

New Concrete plastered Pools

New concrete plaster pool should be left to cure for 28 days prior to coating and acid washed.

The surface prior to painting with CCM Epoxy Pool Paint should not be perfectly smooth. A slight texture is preferable to give the Epoxy Pool Paint a good “Key”. If the concrete is new make sure the plaster or concrete has cured for at least 28 days

Previously Painted Concrete or plastered pools:

You will need to use a grinder with a “Sanding Flap Disc” (30-80 grit) to abrade the surface, so the surface concrete is not smooth and glossy, but matt. Acid etching is a great way to be sure all grease and slime are removed from your pool. This can help to increase the epoxy’s adhesion to the old surface. If you are unsure on how to create a good surface for the Epoxy Pool Paint to adhere to hire professional company for abrasive blasting company to do this work for you. When your pool has been abraded, vacuum up all the dust, then thoroughly clean with detergent. Follow this by a good water blast to remove the final dust layer. A surfactant such as dish washing liquid should be used to remove fatty scum from around and above the water line of the pool, a stiff bristle brush is a good tool to use.

Fibreglass Pool – A light grade sand paper such as 30-60 grit should be used to remove the smooth gelcoat surface of the pool. The entire pool should be completely sanded to a flat finish using an orbital sanding machine. Do not over sand the surface or you may break through to the fibreglass, and this undesirable as you will create an uneven surface. Cracked areas must be repaired and sanded back with an approved fibreglass swimming pool repair kit.

Refer to the CCM Pool Epoxy Paint brochure.

CCM Pool Epoxy Preparation and Pool Painting Guide.

Compatibility:

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 CCM Pool Epoxy distributor/dealer to be forwarded to the CCM lab for analysis.

Aged concrete 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.

Cleaning products:

Concrete Etch Solution

Surfactant cleaning liquid (grease remover)

All above chemicals when purchased will have material safety data sheet and technical data sheets, these must be read and understood prior to the use of any recommended chemicals.

Condensation test material:

Several two-foot square transparent pieces of plastic Duct tape

Abrasion material:

A belt sander or disk sander using 30-60 grit for concrete and fibre glass gel coat. Take care not to gouge into the gel coat or concrete surface of the pool.

Painting supplies:

10mm non shedding premium quality roller sleeves are recommended if you are rolling. A paint brush for detailing CCM Pool Paint Thinner for thinning paint for cleaning-up tools and spills.

Joint or Crack Filler:

A sandable two component epoxy filler is recommended this can be solvent free or water based epoxy filler.

GENERAL SURFACE PREPARATION

The key to a successful pool or deck paint job is proper SURFACE PREPARATION AND CORRECT APPLICATION. By following these instructions you can insure a virtually maintenance free pool.

Ensure hydrostatic valve is in working order.

Immediately after the pool is emptied, you can begin to prepare your pool for coating.

Surface Prep

All surfaces to be coated should be tested for integrity and soundness. Pool paint is not a repair coating 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 30-60 grit profile, be sure not to miss any small areas or adhesion blistering problems can occur. Then, scrub the entire pool with a soap/tri-sodium phosphate (TSP) solution to remove all dirt, oils, loose or peeling paint, and chalk. Rinse the pool with water to remove trace cleaning chemicals. 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. Consult our technical department if "black spot" is present.

All surfaces should then be acid etched with a concrete etch solution to remove mineral deposits on previously painted epoxy surfaces. Be sure the water line is free from grease and grime by cleaning to with a surfactant solution. Rinse the pool with water and wipe dry.

CONCRETE 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.

WHEN SHOULD I PAINT

Ideal temperatures for application are between 10°C and 30°C. Surface temperature should be at least 10°C. If rain occurs during any part of the paint process, allow an extra day of dry time for each day of rain and perform the Concrete Condensation Test above to be sure. Rain or moisture will affect the top layer of fresh paint film by causing a slight flat finish or white patches. If all previous surface preparation and dry times have been adhered to, you can either apply a light coat of fresh paint or wipe the affected areas with a small amount of the recommended thinner. It is recommended to use a non-skid additive to the paint for shallow pools to help reduce liability on possible injuries sustained if a person slips and falls. Epoxy paint surface can be very slippery and caution should be used in the application steps without a non-skid additive. Normal paint curing time is 5 days before filling the pool with water.

PAINTING YOUR POOL

When you have finished your preparation and the temperature of the day and surface to coat are correct, and no rain is forecast for 24 hours you can begin to paint. Be sure to finish painting 6 hours before any dew is likely to appear.

1. Thinned primer coat (bare concrete)
2. 250 micron first coat
3. 250 micron second coat

24 hours should be left between coats. A primer coat is not required on previously painted epoxy pools. Use a short nap brush for cutting in.

MIXING THE PAINT

Mix 5kg part A with 1kg part B when preparation is complete. Mix Part A and B for 2 minutes, then let the paint stand for 10 minutes prior to use. The pot life of the product is 4 hours and painting must be completed within this time for each kit mixed. If the Pool Epoxy is left mixed in the can for more than 4 hours it will become unusable. The hotter the day the faster the epoxy will cure or go hard in the pot.

Material is flammable, especially when mixed, keep away from naked flame. Avoid breathing vapours, especially when mixed. Avoid as much as possible contact with skin, it will irritate sensitive skins, which may become sensitised, always use Neoprene gloves.

If spilled in eyes, seek medical attention immediately.

KEEP OUT OF REACH OF CHILDREN

Application

May be applied by stiff bristled brush, short nap roller or airless spray (refer spray application recommendation).

Epoxy pool paints are best applied by a 10mm nap Dacron roller sleeve. Apply coating at recommended spread rates. Ideal temperatures for application are between 10°C and 30°C. Surface temperature should be at least 10°C. If rain occurs during any part of the paint process, allow an extra day of dry time for each day of rain. Rain or moisture will affect the top layer of fresh paint film by causing a slight flat finish or white patches. If all previous surface preparation and dry times have been adhered to, you can either apply a light coat of fresh paint or wipe the affected areas with a small amount of the recommended thinner. It is recommended to use a non-skid additive to the paint for shallow pools to help reduce liability on possible injuries sustained if a person slips and falls. Epoxy paint surface can be very slippery and caution should be used in the application steps without a non-skid additive. Normal paint curing time is 4-5 dry days before filling the pool with water.

If bad weather prevents application of 2nd or 3rd coats for more than 5 days, sand the first coat before application to open up the epoxy coating for proper keying of the subsequent coat.

Material is flammable, especially when mixed, keep away from naked flame. Avoid breathing vapours, especially when mixed. Avoid as much as possible contact with skin, it will irritate sensitive skins, which may become sensitised, always use Neoprene gloves.

If spilled in eyes, seek medical attention immediately.

KEEP OUT OF REACH OF CHILDREN

Health and Safety: (Please refer to Material Safety Data Sheet before using)

Important:

Before painting, the label must be read. Do not apply at temperatures below 10°C. Do not exceed the recommended application rate. Proper surface preparation is essential. When CCM Pool Epoxy part A and part B are mixed together the pot-life or useable time varies according to colour and ambient temperature, between 4 hours only. Do not apply if rain is forecast within 24 hours after your application. Rain will not affect the cure of the coating, except for possible impact marks, but if the film is still relatively uncured, unreacted activator will combine with the water to form a white "bloom" or precipitate, marring what otherwise would have been a perfect pool. Likewise, a sudden drop in temperature towards evening may create dew which could have the same effect. It is therefore best to start as early as possible when the sun is on the pool and cease in the early afternoon. Stir part A and B well and be sure not to induce bubbles when mixing. Leave to stand for 5 mins if bubbles are present after mixing with a paddle.

Spray Application recommendation:

Thin the product 5% with Pool Epoxy thinner. This will give an even spray pattern and good coverage. The Wagner Pro Spray 3.39 will spray the product, but we suggest for very large projects contact Wagner at www.wagnerspraytech.com for the latest information on larger sized spray machines.

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| Spray Unit: | Wagner Pro Spray 3.39 |
| Tip Size: | Maxi Tip MT621 or Std Tip 009621 |
| Gun filter: | White (50 mesh) |
| Operating Pressure: | 3000 p.s.i. |

Coverage Guide

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| Fiberglass: | Up to 36 M ² per 6kg Kit. |
| Acid Etched Smooth Concrete: | Up to 32-34M ² per 6kg Kit. |
| Scabbled Concrete, Pitted Steel and rough Swimming Pool: | Up to 28 M ² per 6kg Kit. |
| New Concrete Blocks: | Up to 20 M ² per 6kg Kit. |

CCM Pool Epoxy spread rate covers 3m² - 6m² per kg on bare, sand blasted or rough surfaces.
Second coat spread rate 7m² - 9m² per kg.

Common problems and cures.

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 "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 CCM Pool Epoxy 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.

Blistering

The cause:

Using a nap roller larger than 10mm, 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 CCM Pool Epoxy dealer for analysis.



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