

## POOL PLASTER PROBLEMS AND REMEDIES

### STAINS

Most stains are organic in nature and can be removed with Jack's Magic Stain Solution #1 or #2.

#1 is for Iron and Cobalt

#2 is for Copper and Scale

A lot of stains are a combination of scale and iron. The best way to determine what kind of stain your pool may have without spending a lot of dollars needlessly, is to use a Jack's Magic topical kit, which contains 3 small samples. #1, #2, and O2 safe shock. The kit contains some very good instructions on how to correct many problems.

The correction may be done with a combination of 2 or 3 of these products.

**JACK'S MAGIC IS A GREAT PRODUCT AND JACK'S HAS DONE A LOT FOR THE POOL & SPA INDUSTRY BUT, JACK'S MAGIC AND MAGIC MARCITE ARE IN NO WAY AFFILIATED.**

### MOTTLING AND HYDRATION

Gray streaks-Gray cloudy looking areas

### MINERAL HYDRATION

This usually shows up within 1 week of the pool being filled with water as dark areas.. This is usually an oval shape in the shallow end floor, on a step, bench, or spa floor. (If this happens you need to tell your pool company as soon as possible.)

### CALCIUM SILICATE HYDRATION (MOTTLING)

This usually starts to be noticed at about 3 months and can be seen best when the pool is in shade (Mornings, Evenings, and Cloudy Days). At 3 months you see it, but cannot really point your finger at it. At 4 or 5 months you will say it is in that area over there. By 6 or 7 months you will not need to point it out because it is apparent.

## POOL PLASTER PROBLEMS AND REMEDIES

### **CAUSES**

**IRON** : Usually from fill water.

**COPPER**: Usually from coil in heater that has been stripped.

### **MINERAL HYDRATION:**

Is caused by water settling in a low area drying and leaving mineral in that area to harden and sealing off the top of the material only in that area causing that area to discolor.

### **CALCIUM SILICATE HYDRATION:**

Is caused by the free lime (calcium hydroxide), which come to the surface on a new finish. If not removed by normal brushing & water balancing (included on page 8), this process continues for the first 90 days. All the while the (CALCIUM HYDROXIDE) is converting to CALCIUM SILICATE (the same thing glass is made from) which looks like a thin glaze over the dark areas of the pool. In essence growing a glass – like calcium glaze over parts of the pool, darkening those areas. This calcium glaze is very hard and can only be removed with a low alkalinity treatment. THIS IS NOT A WARRANTYABLE ITEM.

## POOL PLASTER PROBLEMS AND REMEDIES

### PREVENTION

Hydration: None if water sits in a low spot such as rinse down or rainwater. Crew should use a sponge to dry any and all low areas after pool is plastered, when hose is put in pool.

Mottling: Follow the Magic Marcite pool water chemistry letter without fail for the first 12 months of your pool finish life.

### RESOLUTION

**HYDRATION:** Drain and lightly acid wash pool, then heat affected areas with a propane torch. The pool may need to be left empty a day or 2 to air dry. This should be under warranty and no charge to Home Owner. If you decide to do this, consult a professional

### **IT IS IMPORTANT TO NOTIFY YOUR POOL COMPANY RIGHT AWAY IF YOU HAVE A HYDRATION PROBLEM!**

**MOTTLING: Low Alkalinity Procedure.** By-pass heater, heat pump, solar, chlorine generating machines, ionizers, and any metal that is not stainless steel. Remove light if rim is metal. Check calcium level if calcium is above 325 PPM. Some water will need to be drained and replaced before low alkalinity can be done. Lower alkalinity as close to zero as possible, check calcium levels, and record. Check water as needed to maintain an alkalinity below 15 PPM. You may need to visit 2 to 3 times weekly to achieve this, and brush each visit. Do this process until a white film starts to come off surface when pool is brushed. Check calcium levels and when calcium rises to between 450 and 500 PPMs. Drain 2 feet of water out of pool and refill with fresh water and rebalance chemicals. At this time you will notice quite a difference. You will notice about 80% to 90% of the graying will be gone, and with proper water chemistry the rest will fade within 4 to 8 weeks.

**This process should be done or  
monitored by a professional!**

## POOL PLASTER PROBLEMS AND REMEDIES

**MAGIC MARCITES-----POOL WATER CHEMISTRY**

**JACK'S MAGIC-----THE POOL SOLUTION**

**MAGIC MARCITES-----POOL PLASTER PROBLEMS AND REMEDIES**

I have received the above-mentioned letters

\_\_\_\_\_  
POOL COMPANY REPRESENTATIVE

\_\_\_\_\_  
HOME OWNER

## POOL PLASTER PROBLEMS AND REMEDIES

RE: Eliminating Service calls for Mottling and Scaling by using High Performance Converter (HPC)

Everyone is aware that one of the biggest service issues in the industry is scaling and mottling caused by improper chemical levels. The time, energy and money spent to educate the consumer on proper chemical levels and pool care are astounding. I for one will explore any avenue that would greatly reduce these service calls.

In May of 2002 I became aware of a new product call HPC. This product made incredible almost unbelievable claims about its effect when used in exposed aggregate finishes. The claims that most caught my eye were “controls side staining”, “will never yellow” and “more acid and chemical resistance with less calcium bleed out”. Since that time I have been testing this product with a few clients and I have seen remarkable results in the stopping of mottling and scaling. I have been so impressed that I am ready to offer the addition of this product to the pool finish material to all of my clients. The cost is 30 cents per square foot a \$110.00 for an average pool.

From a technical perspective I wanted to include some of the technical highlights for this product. Fundamentally this product reacts with the alkali and creates a gel like substance which **slows down the calcium hydroxide bleed out**. Use of HPC in a pool mix **results in the production of a significantly less permeable, more durable pool finish** the major factors associated with the extension of a pool finish useful life span.

Tropical Pools, Blue Haven Pools and Bowles Custom Pools & Spas allowed us to try the HPC in their pools since September. Each of them have become sold on the benefits of using HPC and are recommending its use.

I hope you find this information useful.

Sincerely,

Willam Shrock

## POOL PLASTER PROBLEMS AND REMEDIES

4/3/06

### 0 ALKALINITY PROCEDURE

- STEP 1-** Turn pool equipment off @ breaker so it can't come on.
- STEP 2-** Pull the light out. (You do not need to do this if it is fiber optic.)
- STEP 3-** Stretch pool pole across deep end of pool. Suspend a submersible pump down from pole into center of deep end about 2' off of bottom of pool. The pump should be plastic or stainless steel outer W/A 1' discharge hose to circulate water.
- STEP 4-** Put 8 gallons of muratic acid for for every 10,000 gallons of water.
- STEP 5-** Put 1 qt. of Jack's Magic Blue Stuff for chlorine pools per 10,000 gallons of water or 1 qt. of Jack's Magic Purple Stuff for salt pools. Brush pools. Check alkalinity every couple of days. Add acid as needed to keep alkalinity @ 0. Usually that takes a ½ to 1 gallon of acid.
- STEP 6-** Brush pool thoroughly once daily until the finish looks even, or the pool is too cloudy to see. This could take up to 14 days for the discoloration to go away.
- STEP 7-** Once discolorations are gone, put sodium bicarb in pool to bring ph to 7.0 – 7.4 & alkalinity to 70 – 100. Once ph & alkalinity are at safe levels, start circulation pump and let it run for 48 hrs. Then clean filter and run pump for another 48 hrs., checking PH & alkalinity to keep them between 7.0 – 7.4 for PH and 70 – 100 for alkalinity. Repeat until pool is clear , then adjust pool to normal levels ( PH 7.2 – 7.4 & ALK. 80 – 120).

**William Shrock,  
Owner**

## POOL PLASTER PROBLEMS AND REMEDIES

### Aggressive Start-Up for Color Finishes

#### Day 1:

- A. No salt for 30 days, shock after procedure is complete.
- B. Turn breakers off so nothing can be accidentally turned on.
- C. Remove light from niche.
- D. Put 10 gals of acid for every 15,000 gals of water.
- E. Broadcast stain Jacks Magic solution #2 all over pool, especially in areas with heavy scale. Brush after 3 mins.
- F. Whether pool has a salt system or chlorinator put 1 bottle of blue stuff for every 5,000 gals in pool and brush.
- G. Always use a combination brush when doing this procedure.
- H. Put note to alert pool tech in control box or on back door.
- I. Put chlor pucks in skimmer basket (1 to 5,000 gal)

#### Day 2:

- A. Skip this day. Chemicals haven't had chance to do much of anything.

#### Day 3:

- A. You should see a difference in finish today. Check alkalinity and add acid if needed. Keep alk at zero or as close to it as possible. Brush pool aggressively.

#### Day 4:

- A. Skip this day.

#### Day 5:

- A. Finish should look more uniform by now. Adjust PH & Alkalinity up with sodium bicarb and brush. When done brush pool check ph and alk. If ph is 6.8 or higher and alk is 70 ppm or higher start pumps. Run for 48 hours.

#### Day 6:

- A. Don't do anything. Let pump filter.

#### Day 7:

- A. Pull filter apart and clean, reassemble. Balance water and turn over to pool co or H/O.

## POOL PLASTER PROBLEMS AND REMEDIES

**FOR THE WARRANTY ON YOUR AGGREGATE FINISH TO REMAIN IN EFFECT YOU MUST FOLLOW THE GUIDELINES BELOW FOR THE FIRST YEAR.**

### **POOL WATER CHEMISTRY**

It is necessary for the longevity of the Magicolors finish and as a condition warranty that the following chemical parameters are maintained for the first 30 days, after this time period normal NSPI standards with a slightly higher PH and Alkalinity.

Cl	1 – 3 ppm
PH	7.2 – 7.4
TOTAL ALKALINITY	80 – 100
CALCIUM HARDNESS	DO NOT ADD
CYANURIC ACID, ppm	Less than 50 ppm
SEQUEST AGENT	15 – 20 ppm

**Please follow the guidelines below after the first 30 days.**

Cl	1 -3 ppm
Ph	7.4 – 7.6
TOTAL ALKILINITY	80 – 100 ppm
CALCIUM HARDNESS	200 – 400 ppm
CYANURIC ACID	Less than 50 ppm
SEQUEST	12 ppm

The initial fill water is the most important water that the pool will receive. The initial fill water must be tested, recorded and adjusted to the above parameters before it has an opportunity to affect the new Magicolors finish.

The pool water must be carefully balanced beginning with the initial fill and constantly maintained thereafter using the chemical parameters listed above. The chemistry is for preservation of the finish and additional chemistry for sanitation recommended. PH and Alkalinity MUST be checked and adjusted to the recommended level every other day for the first 30 days. It is suggested to keep two cases of acid on hand for the first month of your pool life.

Once a week for the first 8 weeks, and once a month for the next 10 months for a total period of 12 months all chemistry readings must be documented. Documents can either be mailed directly or faxed to Magic Marcite Inc.. Documentation must be recorded by either a pool service or a pool store.

#### NOTE

If the above chemistry is not followed it could cause a white scale, gray cloudy looking areas & discoloration of your pool finish.



## POOL PLASTER PROBLEMS AND REMEDIES