

## Lo-Chlor Website Pool Stains?

### **What are stains?**

A stain is something that alters the appearance of the pool surface to the detriment of the pool. Stains can be the size of a hair clip or to where the whole pool surface is stained.

### **What causes stains?**

Stains are primarily caused by unbalanced water which can introduce metals into the water. These react with Chlorine and/or alkaline pH to give dark coloured metal oxides which we call stains.

### **How do metals get introduced into the pool?**

Metals can be introduced by various methods but typically:

**Salt:** If you have a salt water pool then the actual salt you use can be the most common cause of staining. Salt can contain metals such as Iron and Manganese which over prolonged use fall out of solution. Iron stains can appear as green, yellow to brown in colour whilst Manganese stains tend to be either dark brown or black in colour.

**Liquid Chlorine:** After continuous use for many years you can have an Iron build up which tends to be yellow or brown in colour.

**Source / Top Up Water:** If you take your source water from a bore water then this water can contain unwanted metals such as Iron, Manganese or Copper.

**Organic Stains:** Organic stains are caused by algae growth, leaf stains or dirt washed into the pool and left longer than a week. They tend to usually be yellow or green in colour.

**Metal Fixtures:** Pool water that has been left out of balance, usually acidic in nature, will have a detrimental effect on any metal fixtures and/or fittings. This is apparent in Above Ground pools where the ladder and walls can be made of cheap stainless steel which will corrode.

**Osmosis in Fibreglass Pools:** Black Spots in fibreglass pools should not be mistaken as black spot algae as these are Cobalt Oxide stains. The Cobalt comes from osmosis of the gel coat which leaches some of the Cobalt catalyst from the fibreglass (polyester) resin. Osmosis is also characterised by blisters at the site of the black spot.

**Metal Based Algaecides:** Overdosing and/or incorrect use of copper based algaecides can result in pool staining.

### **How Do I know What Type of Stain I Have?**

Understanding which type of stain you have both help determine the best treatment put preventative measures in place to help prevent re-occurrence. Stains broadly fall into four categories:

**Organic stains:** These are mostly caused by leaves, algae and dirt that have entered the pool environment and have been left to sit in one place for weeks. The most common colours for these types of stain are yellow, green and brown.

**Metal Stains:** Most commonly Iron which gives yellow through to brown stains and Black Spots in Fibreglass pools which are Cobalt stains.

**Calcium Scale:** Whilst strictly not a stain, calcium scale can appear as a stain as the scale itself can be coloured due the inclusion of metals and dirt. This tends to be rough to the feel like sandpaper.

### **How do I test for stains?**

The best method of determining what stain you have is to take a water sample from your pool to a professional swimming pool shop. Explain the problem and ask them to test for the presence of metals.

## Lo-Chlor Website Pool Stains – Treatment

The way in which you treat the stain is key to stop the stain re-occurring. Below are the key points to remember:

1. **Always de-chlorinate the pool prior to treating for staining** - Chlorine present in the pool can neutralise the stain removers and make them less effective.
2. **Always ensure that you dose the required amount of Multi Stain Remover** – insufficient product may result in not all of the stain being removed.
3. **Caution is required with coloured marble and vinyl pools** - When using on coloured marble finishes or printed vinyl liners DO NOT allow direct contact with the pool surface. In these instances, it is recommended that you place the product in a sock attached to a telescopic pole and hold near the stained area.
4. **Always Add No More Metal** – Treating the stain is a two stage process. The first stage is adding the Multi Stain Remover to lift the stain then **as soon as you see the stain lifting** you should add No More Metal. This enables the metal ions that have lifted off the surface to be held in suspension in the water and deposited in the filter. Failure to add No More metal will result in the stains reappearing on pool surfaces.
5. **Always thoroughly backwash post stain treatment** – This ensures any unwanted remnants of metal ions, organic matter and scale are removed from the filter.
6. **Stain treatment can cause the pool to go cloudy** – Be prepared to use Miraclear Liquid Clarifier or Miraclear Gel Cubes to correct this post treatment.
7. **Caution is required when rebalancing the pool** – The largest cause of stains re-occurring is due to the pool water being rebalanced too quickly. This results in metal ions being “buffered” back out of solution to redeposit on the pool surfaces. Both Multi Stain Remover and No More Metal are very acidic products therefore they will lower both the Total Alkalinity and pH of the pool water. When rebalancing first raise the Total Alkalinity by no more than 20ppm per day. Once your Total Alkalinity is at the correct level (80 – 120ppm) adjust the pH as necessary and add your registered sanitiser.
8. **Fibreglass Pools:** Always remember that the Black Spot in fibreglass pools is a result of osmosis which is the breaking down of the fibreglass (polyester) resin. Our treatment will not fix the problem of the resin itself, it only works as a curative for the discolouration. To extend the time between osmosis treatments we would recommend the use of No More Metal on an ongoing basis, also ensuring that your pool is correctly balanced.
9. **Longevity of the stain** – The longer the stain has been present then the harder it will be to remove. The secret is to identify the cause and deal with the stain as soon as it appears.