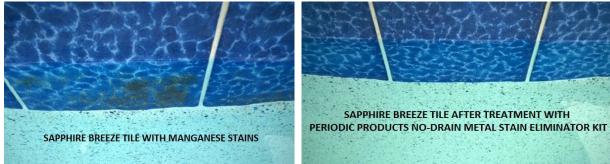
ISSUE WITH ISLAND SAPPHIRE BREEZE TILE

We have had some issues with our NPT tile **Island Sapphire Breeze**. Part number **GMI-37-0056**. In some instances the tile has turned black under the water line. This black look will not scrub off.





This particular tile has a small metallic content. The metallic content in the tile is reacting chemically when **Manganese** is present in the pool water causing the tile to turn black.

Manganese is a metal that causes staining. It can appear in pool water especially when the pool has been filled with well water or other rural source. Manganese can discolor the water coffee-brown, rose or purple and can stain the pool surface these same colors. In Florida our well water is coming from the aquifer underground. Many municipalities also get their tap water from the aquifer. Manganese is becoming more prevalent in our aquifer and in your pool water.

To solve the "black tile" issue there is a new and successful process. A kit is available from **Periodic Products**, Pool Corp **Vendor 119684**. This kit contains everything needed to treat up to a 20,000 gallon pool. The kit works in fresh and salt water pools and is safe for all pool surfaces. SKU: **PEP-50-0012 Metal Stain Eliminator Kit**. This kit contains the chemicals used to remove the staining, sequester all metals and a **CuLator Ultra PowerPak 4.0** that removes the manganese and other metals from the water.



Topping off the pool with water over time will slowly add manganese back into the water. It is suggested to use a regular dose of a sequestering agent along with either SKU: **PEP-50-0000 Power Pak 1.0** (CuLator PowerPak 1.0) or SKU: **PEP-50-0009 Power Pak 4.0** (CuLator Ultra PowerPak 4.0) every 6 months to remove any manganese from the water. If the manganese level is allowed to build back up in the pool water the staining of the tile will reoccur.

Manganese levels in the pool water can be tested for with a specialized test kit. Unfortunately there are not many available and the reliable test kits available are quite expensive. Staining begins when manganese levels in pool water reach .3 ppm.

All of the products from Periodic Products come with very precise instructions and are easy to follow. The pool water needs to be balanced. The chlorine level is lowered to 1 ppm or less. This can be accomplished by using **Sodium Thiosulfate** such as **Jack's Magic's After Shock**. Raise the water level in the pool so the stains on the tile are under water. From the Metal Stain Eliminator Kit you add the Ascorbic Acid powder then the Citric Acid powder. Next add the Metal Sequester liquid. Allow the pool to circulate for 1 hour. Shut the pump down allowing the water to sit overnight. The next day turn on the pump, check and balance the pH and place the Ultra PowerPak 4.0 cartridge into the pump basket. This cartridge will collect the manganese and later be discarded.

The Metal Stain Eliminator Kit will remove Manganese from pool water but will also remove Copper, Iron Cobalt, Nickel, Silver and Lead.

Metal Identification Chart

Contents inside the CuLator PowerPak may turn color when certain metals are bound and eliminated.

