

Q: What caused the color in my spa water, and how do I make it clear again?

In a covered spa, it's almost NEVER algae! Most people don't realize that they have metals in their water, but even small trace amounts can cause discoloration. When chlorine or bromine sanitizer, or even non-chlorine shock is added to oxidize contaminants, the trace metals in the water are also oxidized, commonly resulting in blue-green water from copper, or yellow or brown color from iron. **CuLator SpaPak effortlessly solves this frustrating problem.**

Q: How does CuLator work?

A: CuLator takes metal chelating agents and binds them to a novel, unique, insoluble, non-toxic polymer backbone. This allows for the **permanent elimination of the metals from the water** rather than temporarily sequestering them. CuLator SpaPak works in both fresh or salt water hot tubs and with all sanitizers.

Q: Why is CuLator far more effective than conventional metal sequestering products?

A: Common sequestrants surround metal ions and retard oxidation, but break down over time and need to be constantly added. CuLator is the world's only true metal eliminator. Developed for the EPA Superfund Program, it is the only insoluble, non-toxic polymer that rapidly binds metal ions. For severe metal problems, we recommend using **Metal Free** sequestrant plus **Sea Klear Natural Clarifier** along with CuLator. As spa water passes through the SpaPak, the sequestered metals are permanently trapped inside the bag.

Q: How do I use CuLator in my hot tub?

A: Either leave the SpaPak in your skimmer continually, or use it when you fill your spa (let it eliminate for a day or two then rinse, dry and reuse). Your choice! Each SpaPak comes with a CuLator GatorEgg protector. Just make sure you run the pump for an hour the first time you use the product. **TO OPEN** the GatorEgg, hold the bottom piece, twist the top piece to the right. This may be a bit more difficult when it has been in the water for a time, but keep trying, it will open. **TO CLOSE** hold the bottom piece, twist the top piece to the left. Make sure the little tabs are lined up before starting. TIP: Start your spa with better water using **PreFresh** fill filter.

Q: Does CuLator react adversely with mineral-based purifiers?

A: No, CuLator does not remove the beneficial (colloidal) silver, copper, or zinc minerals found in mineral sanitizers. CuLator rapidly eliminates the bad (ionic) byproduct of the metal produced when these products lose their effectiveness. CuLator is 100% compatible with Spa Frog, Nature2, Cleanwater Blue, and PoolRx.

Q: My CuLator didn't change colors. Does that mean it isn't working?

A: No. The contents of the CuLator SpaPak often change color, but not all metals show color when they bind to the polymer, and color changes can be dependent on the concentration of metal in spa water. Further, it can often be difficult to distinguish subtle color changes. Regardless, CuLator is continuing to eliminate metals.

Q: How often do I need to replace the CuLator SpaPak?

A: We recommend replacing the CuLator SpaPak about every 6 months. Once metals are captured, they permanently stay inside. After 6 months, just toss the old and replace with a new one. It's that easy to eliminate metal problems!

How Does Culator® Eliminate Metal Staining Problems?

Joseph P. Laurino, PhD, MBA

CuLator® Metal Eliminator and Stain Preventer is a technologically advanced product designed to rapidly eliminate metals from water. CuLator takes conventional chelating or sequestering agent groups and binds them to a unique, insoluble and non-toxic polymer backbone. This allows metals to be physically eliminated from pool, spa or fountain water, rather than simply sequestering metals in the water. The chemistry to produce these polymers was developed over 25 years of scientific research.

Conventional sequestering agents surround the metal ions and slow down the oxidation and precipitation of metal oxides onto the pool surface. Unfortunately, sequestering agents are unable to remove significant amounts of metals through a pool's filtration system. Furthermore, all sequestering agents break down over time and need to be constantly added to the pool water. Many sequestering agents are also phosphate-based.

CuLator Metal Eliminator and Stain Preventer is the world's only true metal eliminator. Developed for the Environmental Protection Agency's (EPA) Superfund Program, these polymers are the only compounds that do not dissolve in water; they are also the only such compounds that rapidly bind and eliminate metals. Metals are bound to the polymer and trapped in the CuLator cloth bag (placed in a pool skimmer basket or pump basket with protective GatorEgg) and not left floating in the pool water. After use, the bag is thrown away and the metals permanently eliminated.

CuLator Metal Eliminator and Stain Preventer is non-toxic and is totally compatible with all sequestering agents. CuLator is also compatible with biguanides and all mineral-based water purification systems that release small amounts of minerals (such as copper, silver and zinc) into the pool water. CuLator Metal Eliminator and Stain Preventer is effective over a very broad pH range (pH 4 to 14), and works in fresh water, excessively hard water, and salt water.

