CuLator®
METAL ELIMINATOR
& STAIN PREVENTER

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CuLator Questions and Answers

Q: How does it work?

A: CuLator® takes conventional chelating groups and binds them to a novel, unique, insoluble, non-toxic polymer backbone. This allows for the permanent elimination of the metal from the water rather than simply sequestering the metals in the water. The chemistry to produce these insoluble chelating polymers was developed over 23 years.

Q: Why is CuLator better than conventional sequestering agents?

A: Conventional sequestering agents surround the metal ions and slow down the oxidation and precipitation of the metal oxides onto the pool surface. These agents break down over time and need to be constantly added. Many of these agents are phosphate-based. CuLator is the world's only true metal eliminator. Developed for the Environmental Protection Agency's Superfund Program, these polymers are the only compounds that are insoluble in water, rapidly bind metal ions, and are non-toxic.

Q: What are the dosages?

A: Proper dosages are dependent upon the level of metal ions in the pool, and CuLator PowerPaks are formulated for every need. Compared to other chelation and sequestering agents, a small amount of CuLator polymer has the capacity to bind a substantial amount of metal. Each PowerPak is able to bind one-third of its weight in metals, and will lower the total metal content of 20,000 gal. (75 000 L) of water as follows: one standard **PowerPak**, up to 1.0 ppm; one **Spring Opener PowerPak**, up to 1.5 ppm; one **Winter Closer PowerPak**, up to 1.5 ppm; and one **Ultra PowerPak**, up to 4.0 ppm.

Q: Does CuLator work with sequestering agents?

A: Yes. CuLator is totally compatible with all sequestering agents. Dissolved metals prefer CuLator over sequestering agents. When water containing sequestered metals passes through the PowerPak, the metals are permanently transferred from the sequestering agent to the CuLator polymer and are trapped inside the PowerPak.

Q: Does CuLator react with mineral-based water purification systems?

A: CuLator does not remove the beneficial (colloidal) form of metal found in mineral-based water purification products, such as those containing silver and copper. Rather, CuLator rapidly eliminates the bad (ionic) form of the metal produced when these products lose their effectiveness.

Q: Does CuLator react with biguanides?

A: Biguanides are poly amine/imine compounds and will not react with CuLator.

Q: The pH of my pool water is not ideal. Do I need to adjust my pH before using CuLator?

A: CuLator is effective over a very broad pH range (pH 4-14). Since the pH of most pool water is around 7, adjustment of the pool water pH is not necessary prior to using CuLator.

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Q: Can CuLator be used in saltwater pools?

A: Yes. CuLator works in all freshwater and saltwater pools, spas, and fountains – even those filled with "hard" water containing large amounts of calcium and magnesium.

Q: Will CuLator remove stains from my pool surfaces?

A: No. CuLator only removes dissolved metals from water. To remove existing stains, you will need to add a reducing agent such as ascorbic acid, citric acid or oxalic acid. While CuLator can be used to eliminate metals from pool water during surface remediation and new pool start-ups, we recommend obtaining proper instruction on the use and handling of the required chemicals by consulting a pool professional.

Q: My pool water is cloudy. Will CuLator help?

A: Cloudiness is often associated with water that is not balanced, either due to high alkalinity or high hardness. To lower alkalinity, add sodium bisulfate or muriatic acid. To lower the hardness, you will need to remove some pool water and replace with fresh water. CuLator will NOT lower or raise alkalinity or hardness.

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

A: No. The contents of the CuLator PowerPak 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 pool water. Further, it can often be difficult to distinguish subtle color changes. Regardless, CuLator is continuing to eliminate metals.

Q: My CuLator PowerPak expanded ("puffed up") and/or is floating. Is this normal?

A: Yes. Depending on pool water chemistry, the PowerPak will float and/or expand. It will eventually contract.

Q: How often do I need to replace the PowerPak?

A: We recommend replacing the CuLator PowerPak monthly. Once metals are captured, they permanently stay inside, eliminating the need to closely monitor the PowerPak. For optimum results, use a **Spring Opener PowerPak** for the first month of the pool season, a regular **PowerPak** monthly during the season, and a **Winter Closer PowerPak** one month prior to closing your pool.

Q: When should I use the CuLator Ultra PowerPak?

A: The Ultra PowerPak is best used for larger pools or for pools with high metal content in the water. Replace monthly or as needed.

Q: What happens if the PowerPak bag accidentally tears and the product is released into the pool?

A: CuLator is non-toxic. In the event of an accidental release, the pool's filtration system will easily remove the contents from the pool water. Replace the torn bag with a fresh CuLator PowerPak.

For more information, visit www.culator.com.

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