

WATER BALANCE

ZeroChlor pools allow for lower TA, (40-80ppm) The system changes the chemical make-up of the calcium of the water into bicarbonate. Therefore, it is unlikely that alkalinity should ever need to be raised. pH and alkalinity are closely linked, alkalinity is defined as the ability of the water to resist pH changes. Therefore, if your TA is high you may need to add large amounts of acid quite often.

pH

A pH of 7.0 results in more stable water parameters. Never allow pH to rise above 7.2 as this renders the ZeroChlor hydrolysis and ionization ineffective. Prolonged high pH levels or low pH levels may damage your plates and allow deposits to build up on the stack and bars. Unnecessary buildup will require additional cleaning in an acid solution more often than bi-annually. High TA causes the pH to drift upwards. Never add chemicals directly to skimmer.

IRON

Best to remove iron from water before starting up system. Well water not recommended. Iron can present as a dark gray or black stain. Contact customer service for satisfying the special needs of well water.

CALCIUM

Calcium is added at installation of the ZeroChlor system to achieve proper conductivity in the pool water so that an electrical charge can travel between the electrodes. 300-400ppm is necessary to make this happen. Have the water tested for calcium hardness one week after installation. Once the levels are correct, test at least twice a year. Too little calcium will inhibit proper performance of the ZeroChlor system. Low calcium allows corrosion, high calcium can cause the water to be cloudy.

PHOSPHATES

Phosphates are food for algae! We always recommend to keep phosphates at zero. However, phosphates less than 100 ppm are typically not an issue. If you have an algae problem, proper pH and a .5 copper residual, you may have a phosphate problem. Test for phosphates and treat accordingly. Use a reputable product such as, "Phosfree" by Natural Chemistry. A non-metal-based algaecide can be a helpful assist. A peroxide or potassium-based shock can be used also. Never use chlorine while the ZeroChlor system is powered on.

ALGAE

Algae blooms can occur when the pH is out of range and/or the copper residual is below .5. If an algae bloom occurs, check phosphates, return pH and copper to proper ranges. Use a non-metal algaecide and a non-chlorine shock to speed the clearing process. Run system 24/7 until the pool clears. Dead spots in the pool are susceptible to algae growth. Brush these areas regularly or add a robotic pool cleaner to reduce dead spots. Increase pump filter run times or RPM to increase GPM, if algae occur. Every back yard is different and may require more or less filtration depending on the amount of organic materials nature is adding to your pool.

CLOUDY WATER

Upon installation the ZeroChlor system, the new water chemistry may descale previous build ups of calcium from your pipes, heater, pool surfaces or other pool equipment. This may result in a temporary cloudy water situation. Cloudy water can also be caused by too much calcium or too much oxygen in the water.

STAINS

Staining can occur from improper water chemistry, or other metals such as iron. Return pool water to proper balance, use Natural Chemistry "StainFree" to assist in fresh stain removal.

GREEN WATER

First determine if the water is green from metals or algae. If copper is high, drain water until proper levels are achieved. If the pool walls are slick, copper may be low and pH out of range: Balance pool water, add nonmetal algaecide, raise copper, shock pool using a non-chlorine oxidizer. Brush. Run pump 24/7.

FILTRATION RUN TIMES

When water quality is an issue, run the ZeroChlor system 24 hours a day to clear up the water. At start up, run the pump 24/7 until the copper residual reaches .5. Thereafter use the chart below for a guideline to achieve a minimum of 2 turns per day, 3 turns is ideal. System must run during daylight hours in swimming season. Algae loves stagnant water.

20K 35 GPM	25K 40 GPM
30K 45 GPM	35K 50 GPM
40K 55 GPM	

Running your system 24 hours per day at these minimum flow rates will achieve 2 turns per day. ZeroChlor pools perform best with pools that have a bottom drain and at least one skimmer. We highly recommend the use of a variable speed pump and AFM filter media.