POOL CARE GUIDELINES

Critical factors to maintain safe, great looking pool water based on products offered by Leisure Life Pool and Spa

CIRCULATION & FILTRATION

Water needs to be moving. The more you run your pump to move the water the less likely you are to encounter issues. Your pool pump must be sized appropriately and operate at least 8 hours a day, 12 is better, 24 best.

When your pump is moving water it moves it through your filter. The filtration process removes particles from the water and collects them in your sand or cartridge. You need to rinse and clean these particles. For sand filters, backwash on a regular basis. Cartridge filters should be removed and rinsed based on the type of cartridge filter system. A clean filter maximizes it's longevity and captures more particulate.

You will have cloudy water and use more chemicals if your pump and filter are not sized appropriately, you do not operate your pump at least 8 hours per day , and/or you have a dirty filter.

CLEANING

Pool surfaces get dirty. When you don't skim debris that falls into the pool, it sinks to the bottom. Outdoor pools also collect invisible biofilms that accumulate and harbor growth. If you have not invested in an automatic cleaner, you need to brush your pool walls weekly to lift up biofilms and get out the manual pool vacuum to remove physical debris. It's that simple.

WATER BALANCE

Maintaining properly balanced water is critical for the short term comfort of the pool water and effectiveness of sanitizer and vital in the long term operation of a pool. If you do not regularly balance your pool water your equipment and liner will fail prematurely. Water temperature will have an effect on proper balance. Temperatures in the 70 - 90 range are optimal.

When your water is properly balanced add sanitizer according to label directions for the product you use.

STEP 1 - Alkalinity

(if test is within appropriate range, proceed to Step 2)

Alkalinity: Total alkalinity is a measure of water's resistance to change in pH. Simply, it buffers your pH and if you do not balance alkalinity first you will have trouble maintaining proper pH levels. Also, high levels of Cyanuric Acid (CYA or Stabilizer) will impact this reading - Keep your CYA as close to 50ppm as possible for best results.

Appropriate range for Total Alkalinity

100 - 120 ppm for dichlor, trichlor and bromine sanitizers

80 - 100 ppm for sodium hypochlorite (salt) or calcium hypochlorite

If total alkalinity is low it will cause corrosion of equipment, eye and skin irritation. Add Alkalinity Plus (Increaser)

- If pH is also low (below 7.2) and Alkalinity is below 60ppm check for and treat high levels of copper and iron first to avoid staining.
- If pH is 6.8 or lower and Alkalinity is below 50ppm, raise pH prior to adjusting Alkalinity.

If total alkalinity is high your pH will be difficult to adjust and you will experience cloudy water and problems related to high pH. Add pH Minus (pH Decreaser, Sodium Bisulfate).

- Always refer to the product label for how to add.
- Do not add more than 10 pounds of Alkalinity Increaser at any one time.
- Wait 4 hours and retest before adding additional chemicals.
- Add directly to the water. Water must be circulating when you add.
- DO NOT ADD THROUGH THE SKIMMER.
- ADDING ALKALINITY PLUS THE SAME DAY AS CALCIUM HARDNESS INCREASER WILL CAUSE CLOUDY WATER.

Once the Total Alkalinity is in the appropriate range, the pH should be adjusted to 7.2 to 7.6. When you adjust the Total Alkalinity first, pH should be close to the ideal range.

STEP 2 - pH

pH: pH is the most important factor to be maintained in swimming pools. When unbalanced, high or low, your sanitizer will not work to keep your pool water safe. When pH is above 7, the water is basic. Below 7 the water is acidic. The ideal pH is the same as the pH of human eyes and mucous membranes.

Ideal pH range 7.2 - 7.6

Ideal pH 7.4

If pH is low it will cause corrosion of equipment, plumbing, and liners because your water is acidic - it's going to wear away what it touches. Skin and eye irritation is common because the acidic water strips away your body's natural oils. Add pH Plus (Increaser)

- If pH is low (below 7.2) and Alkalinity is below 60ppm check for and treat high levels of copper and iron first
- If pH is 6.8 or lower and Alkalinity is below 50ppm, raise pH prior to adjusting Alkalinity.
- Always refer to the product label for instructions.
- Dissolve in cold water and pour into the pool while walking around the perimeter or add directly to the pool water.
- Water must be circulating when you add. DO NOT ADD THROUGH THE SKIMMER
- Do not add more than 4 lbs. Of pH plus per 10,000 gallons of water at a time.
- Wait 4 hours and retest before adding additional chemicals.
- ADDING PH PLUS THE SAME DAY AS CALCIUM HARDNESS INCREASER WILL CAUSE CLOUDY WATER.

If pH is high you will experience cloudy water and problems related to high pH (algae is one of them). Add pH Minus (pH Decreaser).

- Always refer to the product label for instructions. Water must be circulating when you add.
- Fill a plastic bucket with water and mix thoroughly using a plastic or wooden utensil. Pour mixture into the pool while walking around the perimeter. Do not pour mixture into skimmers, near underwater lights, or near steps and ladders.
- Always add acid or acid solutions to water. NEVER add water to pH Minus.
- Do not add more than 20 oz. of pH minus per 10,000 gallons of water at one time.
- Wait 4 hours and retest before adding additional chemicals.

STEP 3 - Calcium Hardness

Calcium Hardness: Calcium is always present and directly relates to Alkalinity. The appropriate level depends on your pool surface (see below). Calcium and Alkalinity are minerals. If your pool water does not have the appropriate balance of minerals it is going to seek it from wherever it can - plasticizers in vinyl liners, calcium in concrete decks, minerals from plumbing and fittings. Problems caused: Faded liners, brittle liners, sagging liners, stains, pitting, pinhole leaks, etching….the list goes on. Beyond that, your filter and sanitizer do not work properly causing you to spend more money and time. If there are too many minerals in the water something is going to be released from solution. The first thing to be released is calcium. This is why you see scaling or deposits.

Appropriate range for Calcium Hardness

175 - 275 ppm for vinyl liner, painted surface, fiberglass

225 - 300 ppm concrete/unpainted surface

If calcium hardness is low (soft water) it can cause the water to be aggressive. Plaster surfaces and grouting soften and erode, metal oxidizes and rusts quickly, pool surfaces stain, and the pool water may have a green tint. Add Calcium Hardness Plus (Increaser)

If calcium hardness is high (hard water) your pump works harder, your heater is not as efficient, you will have scale on your surfaces and equipment, you may have deposits on your surfaces, and water circulation can decrease due to build up of minerals . Add Water or a Flocculant. Do not add a Flocculant if you can't vacuum the flocculant to waste. If your fill water is high in calcium you will need to use Stain & Scale.

- Always refer to the product label for how to add.
- Avoid increasing Calcium hardness levels by more than 50ppm every couple of hours.
- Wait 4 hours and retest before adding additional chemicals.
- Add directly to the water. Water must be circulating when you add.
- Calcium Chloride will generate heat when contact with water is made. Use caution if you pre-dissolve in a plastic bucket. Broadcast over the water surface with pump running.
- DO NOT ADD THROUGH THE SKIMMER
- If you have a new masonry finish refer to your installers instructions.