



## AURA Hot Tubs Water Care Guide

### WATER CARE

There are three things necessary for clean safe water:

1. **CIRCULATE:** Water has to be circulated regularly; it can not be stagnant.
2. **FILTER:** Water has to be filtered to remove particulate and debris.
3. **SANITIZE:** Water has to be sanitized to kill organisms like algae, bacteria and virus.

The control system in your spa will automatically circulate and filter. The sanitation requires minimal effort if done consistently and properly.

To sanitize spa water, three things are required:

1. **BALANCE:** The water must be balanced so the sanitizer can work and spa equipment is protected.
2. **SHOCK:** Shock to oxidize organics and maximize sanitizer efficiency.
3. **SANITIZE:** Maintain a proper level of sanitizer at all times.

### SANITIZE YOUR WATER

All hot tubs require the use of sanitizers and purifiers in order to keep the water clear and healthy. Sanitizers and purifiers are a substance that, when added to your water, kill bacteria and odor. Today, there a variety of different products that work to purify your spa water. The following information provides a short explanation of each of the sanitizing methods

**CHLORINE.** Chlorine sodium dichlor is the most common chemical sanitizer used in hot tubs. Simply add 1-3 teaspoons of granulated chlorine into your hot tub every other day to maintain a chlorine level of 1-3 ppm (parts per million).

**BROMINE TABLETS.** Bromine tablets are a combination of 70% sodium bromide and 30% chlorine. The tablets are inserted into a dispenser that floats in the water, providing continuous disinfection. Once you fill the hot tub with water, add 2 oz. of sodium bromide to activate the tablets. You must maintain a bromide residual reading at all times. If the reading drops to "0" from a lack of keeping the dispenser full, you must add an additional 2 oz. of sodium bromide.

### BALANCING YOUR WATER

Balancing the water is the first step in keeping your spa clean and clear. Water that is not balanced can cause skin and eye irritation, cloudy water, and may damage the spa's shell and inner workings. Water balance is comprised of two factors that work hand in hand: alkalinity and pH. It is always a good safeguard to test your spa water's alkalinity and pH levels before using your spa.

**ALKALINITY.** Alkalinity measures the water's ability to neutralize acid and keep the pH level within the proper range. If the alkalinity is not within an acceptable range (between 100-150 parts per million), you will not be able to balance the pH. This is why you must test and adjust alkalinity before testing or adjusting the water's pH balance.

**pH.** The pH level indicates the level of acidity in the water. The acceptable pH level must range between 7.2 - 7.8. Never enter your spa if the pH level is out of range, or you risk the possibility of skin and eye irritation.

### KEEPING YOUR WATER CLEAN

There are two products that help to keep your water clear:

**CLARIFIER.** Clarifiers coagulate the bacteria, oils, and other organics that sanitizers cannot destroy in the water. In other words, the clarifier turns the liquid bacteria into a solid so that the filter can capture it. However, a problem with clarifiers is that much of the coagulated materials tend to gather on the shell surface, forming an unsightly "scum line" along the water line. This is why we strongly recommend the use of a natural enzyme product over the other types of clarifiers. A natural enzyme product breaks down the organics by converting them into a gas before they can interfere with the sanitizer's performance. Because it dissolves the organics as opposed to coagulating them, it helps to rid the shell of the "scum line".

**STAIN & SCALE PREVENTER.** Stain and scale preventers help to control any staining or discoloring of the water caused by minerals. It also helps to prevent oxidizing and scale from forming on the shell's surface and/or any corrosion occurring to the heating element. Homes that use well water or water high in mineral content especially need to use stain and scale preventer on a regular basis to prevent mineral build up. However, as a safeguard, we recommend that all spas be treated with a stain and scale preventer once a week. It is an excellent safety measure, and in the long run will produce clearer water and will protect your spa.

**CORRECTING WATER PROBLEMS.** Water problems can often be corrected by draining and refilling your hot tub. A hot tub should always be drained every three to four months. If the hot tub is used frequently with more than one or two adults, a spa may need to be drained more often. A good rule of thumb is that a spa should be drained after 75 units of usage. A unit of usage is equal to one person using the spa for 1/2 hour. For example, four people using a spa for one hour would equal eight units of usage. Even with very limited usage, never wait longer than four months to drain and refill your spa. This is recommended because chemicals stay in the water and are not filtered away. The water will reach a point after a certain amount of time where chemicals will not benefit your spa water. This is often referred to as the level of Total Dissolved Solids (TDS).

The two most common water problems are foaming and soft water. The sections below explain each problem in detail:

**FOAM.** There are three conditions that would cause foaming in your spa water: soft water, a high count of TDS, and/or soap residue from bathing suits, shampoo, body oils, and cosmetic products. If your water is soft with low hardness levels, see the section below. If there is a high count of TDS, you need to drain and refill your spa. If the foaming occurred due to soap or other residues, it is recommended to use a product designed to rid your spa of the residue, such as Foam Away.

**SOFT WATER.** Many areas of the country, especially those that have a municipal water source, tend to have soft water. Soft water may cause instant foaming and staining. Staining occurs because water has a natural demand for minerals. It attempts to satisfy this demand by garnishing minerals from other available sources such as heating elements, plumbing, etc. This corrosion is not only damaging to your equipment, but it also can stain your water and shell surface. All soft water should also be tested for hardness levels. An ideal level is between 100 - 200 ppm. Water hardness describes the total amount of calcium present in the water.

Please refer to your AURA Hot Tubs Owner's Manual for water care troubleshooting.