

LEISURE TIME®



Spa Care Guide

Congratulations on your new spa or hot tub purchase!

As you prepare to enjoy many hours of relaxation, let Leisure Time help you maintain clear, clean water for maximum enjoyment.

Leisure Time offers an extensive line of products designed especially for hot water use. In this Spa Guide, we'll review what Leisure Time products to use when first filling your spa, as well as what products you need for successful spa maintenance.

For additional information on Leisure Time products, visit your local Leisure Time retailer or visit the Roberts Hot Tubs website at www.rhtubs.com.

The Leader In



**LEISURE
TIME®**

Spa Chemistry

Spa Care Made Easy

Congratulations!

You've purchased the spa of your dreams and now you're on your way to enjoying hours of relaxation. Only one thing stands in your way – learning how to set up and maintain your spa.

Not to worry. Leisure Time understands filling your spa and learning how to care for it can at first seem intimidating. That's why we've developed easy-to-use Spa Care Kits and a proven 3-Day-A-Week Program to make spa care easy!

Before You Begin

Before filling your spa, we advise that you have your “source water”, or water you will be filling your spa with, tested by your professional spa retailer.

A professional test will identify what levels of metals and minerals exist in the water and determine if any water chemistry adjustments need to be made to properly balance your source water.

Getting Started

As you begin caring for your spa or hot tub, it's important to realize that a spa is different from a pool and, therefore, spa water needs to be treated differently than pool water.

In a spa or hot tub, the water is heated between 98-104°F — a temperature that is much warmer than swimming pool water. In addition, the ratio of people to the amount of water in a spa is much greater. For example, having four people in a hot tub is equivalent to having 300 people in an average backyard pool.

The heated water and higher bather load ratio can result in increased water problems due to a great deal of residual soaps, deodorants, perfumes, natural body oils and other cosmetics. In order to avoid these problems, it's very important that you use products specifically formulated for spa or hot tub use such as the Leisure Time products we recommend throughout this guide.

NOTE:

Before adjusting water chemistry, add a sequestering agent such as SPA METAL GON™ to prevent staining of spa surfaces.

Now that your spa water has been tested professionally, you're ready to begin preparing your spa for use.

As you follow along, please note that you can obtain each Leisure Time product individually from your Leisure Time retailer or we'll indicate which Leisure Time Spa Kit contains the product you need. During all steps of spa water care, remember to circulate your water for at least 15 minutes before adding an additional Leisure Time product.

Once you've set up your spa for initial use, follow the 3-Day-A-Week program listed in this guide to keep spa water sparkling clean.

Step 1 **Filling Your Spa**

1. Protect the Spa's Finish with Spa Fast Gloss.

If you have an acrylic or fiberglass spa, you should first protect the finish with a polish like SPA FAST GLOSS™ before you add any water. This polish will chemically bond with the spa surface reducing chemical attack or fading from UV rays. Apply a coat of SPA FAST GLOSS every time you drain and refill the hot tub for continual protection.



SPA FAST GLOSS is included in standard Leisure Time Bromine, Chlorine and Reserve & Renew™ Chlorine-Free Spa Kits.

2. Fill Spa with Water.

Add water into your spa until the water level reaches the center of the skimmer or the middle of the tile line. If you are using a garden hose to fill the spa, allow water to run for several minutes before adding water to the spa in order to flush out any bacteria that sometimes accumulates in the residual water of garden hoses.

3. Add Spa Metal Gon to Prevent Staining.

As you fill your spa, it's very important to add a sequestering agent to the water to prevent minerals such as calcium, iron, copper and manganese that may exist in your source water from staining spa surfaces.

Each Leisure Time Spa Kit contains the sequestering agent SPA METAL GON to prevent such staining. Add one bottle of SPA METAL GON for up to 500 gallons of water. This dosage should be allowed to circulate in a completely filled spa for at least 30 minutes before proceeding to Step 2 – Balancing The Water.

Step 2

Balancing The Water

Preventing problems with your spa is often a matter of simply maintaining the proper water chemistry balance. The three most important factors in balancing spa water chemistry are pH, total alkalinity and calcium hardness.

1. Test pH and Total Alkalinity using Spa Water Test Strips.

Although your dealer initially tested your water, you should test your water's pH and total alkalinity on a regular basis using test strips or a liquid test kit.

Each Leisure Time Spa Kit contains 4-WAY TEST STRIPS to test spa water. To test, simply dip a test strip in spa water, swirl three times and compare to chart. Determine the pH and total alkalinity levels using the chart on the test strip bottle.

2. Adjust pH & Total Alkalinity

Once you've determined pH and total alkalinity readings, your spa water should be balanced so that the pH and total alkalinity levels are within the normal ranges. Each Leisure Time Spa Kit contains granular SPA UP and SPA DOWN to adjust pH and total alkalinity levels. When using these products, remember to circulate spa water for at least 15 minutes before adding another product.

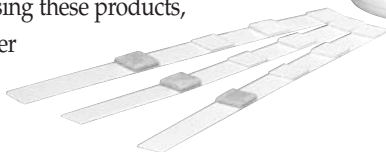
To effectively balance your spa water, review the following information carefully, as well as refer to the application instructions of the product you use.

pH

It is critical that the pH of your spa water remain in the normal range of 7.2 - 7.8. A pH reading outside this range can cause your spa water to be corrosive or scale forming.

Water with a reading below 7.2 can be corrosive. A number of problems can occur if pH remains at this level including the corrosion of metal fixtures and heating elements, excessive sanitizer consumption and skin irritation.

Water above 7.8, on the other hand, can also be damaging. Water with a pH level this high is considered scale forming and will allow metals or minerals in the water to form deposits and possibly stain spa surfaces.



Total Alkalinity

Total alkalinity acts as a buffer preventing the pH level from changing as additional chemicals or other substances are added into the water.

The ideal total alkalinity range is between 80-120 ppm (parts per million). A reading below this range will make it very difficult to stabilize the pH level of the water and corrosion of spa surfaces is possible. A reading above the recommended total alkalinity level may increase pH levels and cause cloudy water, scaling and decreased efficiency of the spa sanitizer.

Other Leisure Time balancing formulas available individually include:

- **LIQUID SPA UP and LIQUID SPA DOWN**

“No mix” liquid versions of **SPA UP & SPA DOWN**

- **SPA ALKALINITY INCREASER™**

designed specifically for raising low alkalinity levels

- **pH BALANCE™**

formulated to lock in pH within normal range

when added to freshly filled spa

CAUTION: In hard water areas where calcium reading is over 150 ppm, **pH BALANCE SHOULD NOT BE USED.** In these conditions, this formula will soften hard water and release calcium into spa water possibly causing cloudy water, scaling and clogging of spa filter.

3. Determine & Adjust Calcium Hardness

The professional water test conducted by your retailer should have given you a calcium hardness reading. You may also determine calcium hardness by using a liquid test kit.

It is critical to have some calcium in your spa water. The level of calcium should be between 150-400 ppm.

Calcium hardness readings above 400 ppm can cause scale buildup on spa surfaces and equipment. During initial filling, your spa will be protected against high calcium levels by the SPA METAL GON added while filling your spa with water.

Once you complete the initial set up of your spa, use SPA DEFENDER™ weekly to prevent calcium scaling. SPA DEFENDER is included in all Leisure Time spa kits.

Low calcium levels below 150 ppm can cause spa water to become highly corrosive possibly damaging spa equipment and plumbing. To raise calcium levels add Leisure Time's CALCIUM BOOSTER™ available individually from your Leisure Time retailer.

When using these products, remember to circulate spa water for at least 15 minutes before adding another product.

Proper spa water maintenance requires using an effective sanitizer to control and prevent bacteria growth. No matter which sanitizing method you choose, spa water must contain a proper residual of bromine or chlorine, to keep the water safe and sanitary.

Leisure Time offers both bromine and chlorine based sanitizers, as well as a natural mineral purification system that enhances spa water clarity with all Leisure Time sanitizers.

When adding a sanitizer, remember to circulate spa water for at least 15 minutes before adding another product.

Bromine Sanitizing

Use SODIUM BROMIDE to create a bromide reserve and then maintain bromine levels with BROMINATING TABLETS. Add 1/2 ounce of SODIUM BROMIDE per 100 gallons. Then, add BROMINATING TABLETS in the floater or feeder as directed to obtain proper sanitizing levels. Test water with 4-WAY TEST STRIPS to ensure that the bromine level is in the ideal range of 3-5 ppm.

Chlorine Sanitizing

Uses SPA 56 CHLORINATING GRANULES™. Add 1/2 ounce of SPA 56 CHLORINATING GRANULES per 500 gallons. Test water with 4-WAY TEST STRIPS to ensure that the chlorine level is in the ideal range of 3-5 ppm.

Ozone Sanitizing

To sanitize a spa with ozone, a special unit called an ozonator is installed in your spa. This ozonator releases ozone into the spa which effectively sanitizes and helps reduce contaminants in the water. Ozone, however, cannot act alone. A residual of bromine or chlorine should be maintained in the water.

If you are sanitizing with ozone, use the SODIUM BROMIDE and BROMINATING TABLETS included in Leisure Time's OZONE SPA CARE SYSTEM to establish a bromine residual. The application instructions will be the same as those listed above for Bromine Sanitizing.

Reserve & Renew™ Sanitizing System

This chlorine-free sanitizing system keeps water clean and healthy with just one simple application. When RENEW is added, RESERVE liquid bromide salts are activated into bromine. To maintain crystal clear water, add RENEW after daily use to provide the activity needed to destroy wastes left behind and to eliminate any bacterial contaminants.

To use the RESERVE & RENEW™ System, fill spa and add RESERVE (4 oz./250 gal.). Wait 15 minutes and add RENEW (4oz./250 gal.) to create a bromine residual.

Mineral Purification

More recently, mineral purification has become a choice for sanitizing spa water. Mineral purifiers are typically placed inside the filter cartridge and slowly release unique metallic ions into the water that help control microbial contamination.

Leisure Time's mineral purification system, the SPA MINERAL PURIFIER, enhances the effectiveness of Leisure Time's sanitizing systems. Compatible with bromine, chlorine and ozone, the unique combination of minerals in this purifier naturally treat bacteria for up to four months when used with a minimal sanitizer residual of 0.5 ppm.

Shocking

No matter which sanitizing system you choose, it will be necessary to "shock" your spa on a routine basis. Your spa water should be shocked weekly or more frequently if the spa is used excessively.

Shocking, also referred to as oxidation, is the process of removing organic materials such as body oils, cosmetics and lotions from the water. When these organic materials buildup, the water can become cloudy or hazy.

When using chlorine as a sanitizer, water containing too many organic materials can also have a heavy chlorine odor. This indicates there is not enough effective sanitizer in the water and the water needs to be shocked.

Shocking with RENEW™ or OZ™ TABS will oxidize the materials that may be causing foul odors, eye or skin irritation, or dull, cloudy water. Shocking on a routine basis also increases the effectiveness of your sanitizer.



Step 4 Follow A Program

The 3-Day-A-Week Program

Maintenance is the key to a clean and healthy spa. Once you've followed the steps above to fill your spa, keep water clear and fresh with this 3-Day-A-Week Program.

For the purpose of explanation, we will use Monday, Wednesday and Friday as the treatment days for the 3-Day-A-Week Program. You could just as easily use Tuesday, Thursday and Saturday, or any three days of similar spacing.

Throughout the 3-Day-A-Week Program be sure to circulate spa water for at least 15 minutes before adding another product.

Maintaining spa equipment is the key to extending the life of your spa. In addition to caring for your spa water on a regular basis, it's important to maintain your filter and spa surfaces.

Use these Leisure Time formulas for ongoing care:

Filter Care:

- **SPA INSTANT CARTRIDGE CLEAN™**

spray-on formula removes oil, grease, calcium and scale from filter surface when time doesn't allow for overnight soaking

- **FILTER CLEAN™**

overnight soaking formula removes dirt, oil, grease and soap film from both cartridge and diatomaceous earth (D.E.) filters

Surface Care:

- **KOVER KARE & KONDITIONER™**

cleans, restores and protects spa covers from weathering, fading and discoloration

- **SPA MULTI-PURPOSE CLEANER**

removes grease and grime from surfaces

Every time you drain and clean your acrylic or fiberglass spa, use **SPA FAST GLOSS** to prevent surface wear. This special silicone formula bonds with the surface to waterproof and seal spa finish against harmful elements.



Leisure Time's 3-Day-A-Week Program

MONDAY

CHLORINE

Test pH and total alkalinity. Adjust with SPA UP or SPA DOWN if necessary.

Test chlorine residual. Add SPA 56 CHLORINATING GRANULES to maintain a 3-5 ppm chlorine residual or (0.5 ppm residual when using the SPA MINERAL PURIFIER).

Add SPA BRIGHT & CLEAR.
Add SPA DEFENDER.

BROMINE

Test pH and total alkalinity. Adjust with SPA UP or SPA DOWN if necessary.

Test bromine residual.
Check floater to ensure a good supply of BROMINATING TABLETS.
Maintain bromine residual of 3-5 ppm (or 0.5 ppm residual when using the SPA MINERAL PURIFIER).

Add SPA BRIGHT & CLEAR.
Add SPA DEFENDER.

WEDNESDAY

Test pH and total alkalinity. Adjust with SPA UP or SPA DOWN if necessary.

Test chlorine residual. Add SPA 56 CHLORINATING GRANULES to maintain a 3-5 ppm chlorine residual (or 0.5 ppm residual when using the SPA MINERAL PURIFIER).

Add SPA SCUM GON.

Test pH and total alkalinity. Adjust with SPA UP or SPA DOWN if necessary.

Test bromine residual.
Check floater to ensure a good supply of BROMINATING TABLETS.
Maintain bromine residual of 3-5 ppm or (0.5 ppm residual when using the SPA MINERAL PURIFIER).

Add SPA SCUM GON.

FRIDAY

Test pH and total alkalinity. Adjust with SPA UP or SPA DOWN if necessary.

Test chlorine residual. Add SPA 56 CHLORINATING GRANULES to maintain a 3-5 ppm chlorine residual (or 0.5 ppm residual when using the SPA MINERAL PURIFIER).

Shock water with RENEW or if using ozone, OZ TABS.

Test pH and total alkalinity. Adjust with SPA UP or SPA DOWN if necessary.

Test bromine residual.
Check floater to ensure a good supply of BROMINATING TABLETS.
Maintain bromine residual of 3-5 ppm (or 0.5 ppm residual when using the SPA MINERAL PURIFIER).

Shock water with RENEW or if using ozone, OZ TABS.

During spa use, you may occasionally experience excess foaming in your spa. Use SPA FOAM DOWN to immediately reduce foaming. Regular shock treatment with RENEW or OZ will help prevent excess foam from reoccurring.

RESERVE & RENEW™

Test pH and total alkalinity. Adjust with SPA UP or SPA DOWN if necessary.

Test bromine residual.

Add RENEW to destroy wastes and provide a 3.0-5.0 ppm bromine residual. If your spa has not been used for more than two days, add RENEW to keep the water fresh.

Add SPA BRIGHT & CLEAR.

Add SPA DEFENDER.

Test pH and total alkalinity. Adjust SPA UP or SPA DOWN if necessary.

Test bromine residual.

Add RENEW to destroy wastes and provide a 3.0-5.0 ppm bromine residual. If your spa has not been used for more than two days, add RENEW to keep the water fresh.

Add SPA SCUM GON.

Test pH and total alkalinity. Adjust with SPA UP or SPA DOWN if necessary.

Test bromine residual.

Add RENEW to destroy wastes and provide a 3.0-5.0 ppm bromine residual. If your spa has not been used for more than two days, add RENEW to keep the water fresh.

Add RESERVE.



NOTE: This program is intended for a residential spa with average use. It is not designed for public, commercial or semi-public spas. If your spa is used by more than two people more than three times per week, you should check and make chemical additions more often than suggested.

To ensure water quality and keep the water easy to balance, Leisure Time recommends draining your spa water at least every three months, or more often if the spa is used frequently.

IMPORTANT: Filter cycle should be run a minimum of 6-8 hours per day.

Trouble Shooting Common Problems

Most water conditions can be resolved by the recommended solutions below. Extreme conditions may warrant draining and refilling the spa or hot tub. Stains or calcium deposits may require attention prior to refilling. It is recommended that the water be changed monthly or as needed to maintain water quality.

SYMPTOM	CAUSE	SOLUTION
CLOUDY WATER	Excessive organic contaminants or lack of sanitizer Buildup of unfilterable material pH or total alkalinity out of balance Dirty filter Calcium too high	Shock treat with RENEW or OZ Tabs. Check and adjust sanitizer level. Use SPA BRIGHT & CLEAR. Test water and adjust pH and total alkalinity as necessary using SPA UP or SPA DOWN. Use FILTER CLEAN on a monthly basis. Use SPA DEFENDER on a weekly basis.
CHALKY, WHITE SCALE DEPOSITS <small>(calcium buildup)</small>	High mineral content in water	Use SPA DEFENDER on a weekly basis. Check water balance and adjust as necessary.
CLOUDY GREEN WATER	Low sanitizer level	Shock treat with RENEW or if using ozone, OZ Tabs. Check and adjust sanitizer level.
CLEAR GREEN WATER	Dissolved copper or iron in spa water	Add SPA METAL GON to sequester minerals in the water. Check pH level.
BROWN WATER	High iron or manganese content	Add SPA METAL GON to sequester minerals in the water. Check pH level.
ODOR	Excessive organic contaminants	Shock water with RENEW or if using ozone, OZ Tabs. Check and adjust sanitizer level.
EYE/SKIN IRRITATION	Chloramines or excessive organic contaminants pH or total alkalinity out of balance	Shock water with RENEW or if using ozone, OZ Tabs. Test and adjust pH and total alkalinity.
SCUM DEPOSIT ON WATERLINE	Oils, lotions and detergents from bathers have caused buildup	Use SCUM GON on a weekly basis.
EXCESSIVE FOAMING	Buildup of body oils, cosmetics and detergents from bathers Calcium Hardness is too low Large amount of Total Dissolved Solids	Add SPA FOAM DOWN. Shock with RENEW or OZ Tabs. Add CALCIUM BOOSTER to obtain 150-400 ppm calcium level in the water. Change water.

Safety

Leisure Time wants to ensure relaxing in your spa is safe, as well as enjoyable. Before using your spa, please review these important safety tips.

- + Never heat your spa or hot tub above 104°F.
- + Do not drink alcohol while using.
- + Always shower before entering.
- + Limit your time in the spa or hot tub to 15 minutes.
- + Maintain a proper sanitizer level.
- + Do not combine different chemicals before adding to the water.
- + Add each chemical separately.
- + Always add chemicals to water, not water to chemicals.
- + Always store chemicals according to the manufacturer's label instructions and keep them out of reach of children
- + If you are pregnant, have high blood pressure or a cardiovascular condition, consult your physician prior to using the spa.
- + Do not allow children to use the spa without adult supervision.