

## HOT TUB CARE GUIDE





## **Table Of Contents**

Hot Tub Safety	I
Some Hot Tips on Caring for Your Hot Tub	2
Understanding the Chemistry of a Healthy Hot Tub	3
Step-I – Filling Your Hot Tub.	4
Step-2 – Balancing Your Hot Tub Water Calcium Hardness Alkalinity pH Levels	6
Step-3 – Sanitizing & Shocking Your Hot Tub Chlorine or Bromine	
Hot Tub Water Troubleshooting Guide	10-11
Routine Care	11
The Complete Line of Life Products	12-13



## **Hot Tub Safety**

- If you are pregnant or have a medical history of heart disease, low or high blood pressure, circulatory problems, or diabetes, you should consult your physician before using a hot tub.
- Do not use the hot tub for extended periods of time. Use a timer and set a limit. Prolonged immersion in hot water can result in hyperthermia.
- Avoid alcohol when using your hot tub.
- Hot tub users with long hair should avoid placing their head underwater near suction fittings.
- Use an accurate thermometer to test the water temperature before use. Do not heat the hot tub water to temperatures above 104 degrees.
- Never allow children to use the hot tub without adult supervision.
- When children are using the hot tub, the temperature should not be set higher than 100 degrees.
- Always add chemicals to water. Never add water to chemicals.
- Do not combine chemicals. Add separately.
- Maintain your sanitizer level.
- Keep chemicals away from children.
- Know how to disconnect power to your hot tub in case of emergency.



## Some Hot Tips on Caring for Your Tub

Just like any other investment, your tub requires periodic maintenance and care to keep it at its best.

The most important thing to monitor (at least weekly) is water balance. Remember, hot tubs are much different than swimming pools; they're small bodies of water that can become overloaded with swimmer waste quickly. High temperatures and the ratio of people to water means more residual soaps, skin care products, natural body oils and perspiration are released into the water. This can create excessive organic contaminants, which can only be eliminated using products that are specially formulated for tubs.

## Fresh water is a necessity when caring for your hot tub.

Chemical by-products and other contaminants quickly build up in hot tub water after continued use making the water more difficult to balance. How often you drain your hot tub depends upon the size of the tub and number of users. If your hot tub sees a lot of use, drain it once a month. If use is infrequent, drain it every 3 months.

## **Understanding the Chemistry of a Healthy Tub**

The biggest consideration is whether to use chlorine or bromine as your sanitizer. Both are effective in daily sanitizing. No matter which one you choose, more is not better when using these chemicals. When you overload your hot tub, you're setting yourself up for equipment failure due to corrosion.

#### Chlorine: Ideal Range, 2.0-4.0 ppm

Proper chlorine levels are crucial. Add Life® Chlorinating Granules as needed to maintain these levels.

#### Bromine: Ideal Range, 3.0-5.0 ppm

Bromine can be less harsh to the skin and works well in hot water. It's easy to maintain the proper level by using Life® Brominating Tabs in a floating dispenser.

Proper pH, alkalinity and calcium hardness levels must also be maintained to ensure the sanitizer can do its job effectively. When not in balance, your water can become corrosive attacking heating elements and other equipment.

#### pH: Ideal Range, 7.2-7.6

pH readings below 7 would be acidic, while readings 8 or above would be alkaline and potentially scale forming. If readings are below 7.2, add Life® Alkalinity & pH Up. Readings above 7.6 can be brought back into range using Life® Alkalinity & pH Down.

#### Alkalinity: Ideal Range, 80-120 ppm

Low alkalinity readings would also be acidic, while high readings are alkaline and potentially scale forming. If readings are below 80 ppm add Life® Alkalinity & pH Up. Higher readings can be lowered using Life® Alkalinity & pH Down.

#### Calcium Hardness: Ideal Range, 200-400 ppm

When levels are low, corrosion can occur, and the water can become foamy. When levels are too high, scale can form, and water becomes irritating to the skin and eyes. Low hardness can be corrected using Life® Calcium Booster. Use Life® Scale Defense when dealing with higher levels.

## Step-1 - Filling Your Hot Tub

**BEFORE** you fill your hot tub for the first time, bring a sample to your local swimming pool and hot tub professional for analysis. It's important to know what type of water you have and if it could cause damage or corrosion to hot tub surfaces or equipment.

Acing Water Tests – It's easy and you should do it often - at least once a week. Testing procedures vary, be certain to follow the label instructions for your test strips or kit.

#### Filling Your Hot Tub

- 1. Fill hot tub according to the manufacturer's recommendations.
- **2.** If using a garden hose, allow it to run briefly to flush out any build-up from inactivity.
- 3. Once tub is full, with circulation pump running, add 1 pint (16oz.) of Life® Metal Out around the waterline for every 625 gallons of hot tub water.
- 4. Circulate the water for 30 minutes.

Life® Metal Out prevents metal staining & corrosion. Be certain to add it with fresh water additions or when you drain and refill your hot tub.

## Step-2 – Balancing Your Water

Balancing your water is a very important step to a clean hot tub. Proper pH, alkalinity and calcium hardness levels must be maintained to ensure the sanitizer can do its job effectively. When not in balance, your water can become corrosive attacking heating elements and other equipment.

# Adjust 1<sup>st</sup> – Calcium Hardness: Ideal Range, 200-400 ppm Have a sample of the hot tub water tested by your local swimming pool and hot tub professional. They will be able to determine your calcium hardness level

When levels are low, corrosion can occur, and the water can become foamy. Adjust low calcium hardness using Life® Calcium Booster.

- 1. With the circulation pump running, add 2 tbs. of Life® Calcium Booster to increase the calcium of a 500 gallon hot tub 10 ppm.
- 2. Circulate for I hour.

When levels are too high, scale can form, and water becomes irritating to the skin and eyes. Use Life® Scale Defense when dealing with higher calcium levels to prevent destructive scale build-up.

- 1. With the circulation pump running, add 1 oz. of Life® Scale Defense for up to 400 gallons of water.
- 2. Circulate for I hour.
- 3. Repeat treatment weekly for equipment protection.

#### Adjust 2<sup>nd</sup> – Alkalinity: Ideal Range, 80-120 ppm

Total Alkalinity acts as a buffer to keep pH levels from fluctuating. Always adjust the alkalinity before adjusting the pH of your hot tub water. Test alkalinity levels using the included test strips. Low alkalinity readings would mean the water is acidic and corrosive. If readings are below 80 ppm add Life® Alkalinity & pH Up.

- **1.** Dissolve I oz. (2 tbs.) of **Life® Alkalinity & pH Up** in a small plastic bucket and add to hot tub water with circulation pump running.
- 2. Allow water to circulate for 30 minutes.
- **3.** Retest alkalinity level and repeat, if necessary, until the recommended level is reached

High readings are alkaline and potentially scale forming. Higher alkalinity readings can be lowered using Life® Alkalinity & pH Down.

- 1. Turn on air blower or filter system.
- 2. Premix I oz. of Life® Alkalinity & pH Down with water in plastic pail and add diluted product to hot tub.
- 3. Retest water after 30 minutes.
- **4.** Follow steps 1-3 until pH and total alkalinity are in the range of 7.2-7.6 and 80-120 ppm respectively.
- **5.** NOTE: Do not add more than I oz. at a time. Always wait 30 minutes between doses and test water before each addition of this product.

#### Adjust 3rd - pH: Ideal Range, 7.2-7.6

Acidic water, or water low in pH, is aggressive and corrosive. Acidic water can cause skin and eye irritation, corrode equipment or cause damage to the finish of the hot tub. Water high in pH is considered alkaline and can also cause swimmer discomfort, make the water cloudy or potentially form destructive scale build-up. Test pH levels using test strips. pH readings below 7 would be acidic. If readings are below 7.2, add Life® Alkalinity & pH Up.

- **1.** Dissolve I oz. (2 tbs.) of **Life® Alkalinity & pH Up** in a small plastic bucket and add to hot tub water with circulation pump running.
- 2. Allow water to circulate for 30 minutes.
- **3.** Retest water and repeat, if necessary, until the recommended level is reached.

Readings 8 or above would be alkaline and potentially scale forming. Readings above 7.6 can be brought back into range using Life® Alkalinity & pH Down.

- 1. Turn on air blower or filter system.
- **2.** Premix I oz. of Life® Alkalinity & pH Down with water in plastic pail and add diluted product to hot tub.
- 3. Retest water after 30 minutes.
- **4.** Follow steps 1-3 until pH and total alkalinity are in the range of 7.2-7.6 and 80-120 ppm respectively.
- 5. NOTE: Do not add more than I oz. at a time. Always wait 30 minutes between doses and test water before each addition of this product.

## Step-3 – Sanitizing & Shocking Your Hot Tub

#### Chlorine or Bromine?

The biggest consideration is whether to use chlorine or bromine as your sanitizer. Both are effective in daily sanitizing. No matter which one you choose, it is necessary to maintain your sanitizer at the recommended level at all times. More is also not better when using these chemicals. When you overload your hot tub, you're setting yourself up for equipment failure due to corrosion.

#### Chlorine: Ideal Range, 2.0-4.0 ppm

Proper chlorine levels are crucial. Add Life® Chlorinating Granules as needed to maintain these levels.

#### **START-UP (FRESHLY FILLED)**

- **1.** Turn on the circulation system and ensure that it is operating properly.
- **2.** Add 6 tsp. of Life® Chlorinating Granules for each 500 gallons of water.
- **3.** Check the free available chlorine (FAC) and, if below 4-5 ppm, repeat as needed.
- **4.** Do not enter the hot tub until the (FAC) has dropped to 3 ppm.

#### **REGULAR LISE**

- **1.** Turn on the circulation system and ensure that it is operating properly.
- 2. Add 6 tsp. of Life® Chlorinating Granules for each 500 gallons of water.
- **3.** Check the free available chlorine (FAC) and, if below 4-5 ppm, repeat as needed.
- 4. Do not enter the hot tub until the (FAC) has dropped to 3 ppm.

#### Bromine: Ideal Range, 3.0-5.0 ppm

Maintain the proper level by using Life® Brominating Tabs in a floating dispenser and Life® Bromine Booster as an activator.

- 1. Add ½ oz. of Life® Bromine Booster per 100 gallons of hot tub water to establish a bromide reserve before using bromine tablets for the first time, and whenever the hot tub is drained and refilled.
- **2.** Place 3 tablets of Life® Brominating Tabs per 300 gallons in your floating feeder or automatic brominator. Adjust the feeder or brominator to obtain an active bromine level of at least 2 ppm at all times.
- **3.** For maintenance use, fill your feeder every 5-7 days with 3 Life<sup>®</sup> Brominating Tabs per 300 gallons of water. Do not enter the hot tub until the bromine level falls between 2-5 ppm.

## **Shockingly Important**

To maintain the perfectly balanced hot tub, you should shock after every use or at least once a week, whichever is more frequent. Life® Oxidizing Shock, a non-chlorine shock, can be used in chlorine or bromine sanitized tubs. It eliminates odors and reduces irritants, contaminants and extends the life of your sanitizer. In a bromine-sanitized hot tub, it should be applied after a reserve of bromine has been established.

- 1. After every use, add 2 oz. of Life® Oxidizing Shock per 500 gallons of water.
- 2. Allow product to fully circulate in the water before using hot tub.
- 3. Run the pump for at least 30 minutes.
- 4. NOTE: Non-chlorine shock is not a substitute for a sanitizer.

#### **Chlorine Shock Option:**

If you use chlorine to sanitize your hot tub, you may also use Life® Chlorinating Granules as a shock treatment.

- 1. Turn on the circulation system and ensure that it is operating properly.
- **2.** Add 9 tsp. per 500 gallons of Life® Chlorinating Granules over the surface of water.
- 3. Do not enter the hot tub until the FAC has dropped to 3 ppm.

## **Hot Tub Water Troubleshooting Guide**

Problem	Possible Cause	Solution
	Water is out of balance	Test your pH and alkalinity. Apply Life® Alkalinity & pH Up and Life® Alkalinity & pH Down, as needed.
	Sanitizer level is low	Test the level and apply Life® Brominating Tabs or Life® Chlorinating Granules, as needed.
	Water is not circulating enough	The water should circulate 4-6 hours per day.
My water is cloudy	Filter is dirty	Use Life® Filter Cleaner to soak your filter once a month. A clean filter will remove most contaminants that create cloudy water. Apply 2 oz. of Life® Natural Clarifier to eliminate impurities and clear the water quickly.
	The calcium hardness level might be too high	Test with a calcium hardness test or take your water to your hot tub professional for testing. Use Life® Calcium Booster to raise low calcium levels and Life® Scale Defense when controlling high levels.
	Organic contaminants such as oils, lotions, perspiration	Shock with Life® Oxidizing Shock and add I oz. of Life® Scum Free per 250 gallons to remove organic contaminants too small for your filter to remove.
My water is brown or green	Usually caused by metals in water	Apply a full bottle (I pint) of Life® Metal Out.Then test for pH and adjust as needed.

### We have a solution!

Problem	Possible Cause	Solution
My Water is Foamy	Build-up of bather oils and other contaminants	To eliminate foam, apply 1-3 oz. of Life® Foam Free directly to the foam.
	The calcium hardness level might be too low	Test with a calcium hardness test or take your water to your hot tub professional for testing. Use Life® Calcium Booster to increase low calcium levels.
	Water is out of balance	Test your pH and alkalinity. Apply Life® Alkalinity & pH Up and Life® Alkalinity & pH Down, as needed.
My water irritates my eyes, skin	Organic Contaminants	Shock with Life® Oxidizing Shock and add I oz. of Life® Scum Free per 250 gallons to remove organic contaminants too small for your filter to remove.
	Water is not circulating enough	The water should circulate 4-6 hours per day.

#### **Routine Care**

- 1. Test your hot tub water at least once each week. Maintain all levels within the acceptable ranges by adjusting as necessary with the appropriate chemicals.
- 2. Clean your filter once a month to ensure the system continues to work properly. Use Life® Filter Cleaner, which is specially designed to improve filtration by removing oils and scale build-up.
- 3. Drain | Clean | Refill. It is recommended your hot tub is emptied and refilled with fresh water every 60-90 days depending on use. Heavily used hot tubs may require more frequent emptying and refilling.

## The Complete Line of Life® Products

#### Sanitizers and Shock:

- Life® Spa & Hot Tub Essentials Oxidizing Shock:
  Fast-acting, quick dissolving non-chlorine shock that helps keep hot tub water clear. Ouickly oxidizes irritating contaminants.
- Life® Spa & Hot Tub Essentials Chlorinating Granules:
   Quick dissolving sanitizer that helps keep water clean and clear. Kills bacteria and destroys organic contaminants.
- Life® Spa & Hot Tub Essentials Brominating Tabs:
  Easily maintain proper levels with this slow dissolving sanitizer. I" tablets provide consistent sanitizer and fit most hot tub feeders.
- Life® Spa & Hot Tub Essentials Bromine Booster: Establishes a quick bromide reserve in not tub water. Use before adding Life Brominating Tabs.

#### Water Balancers:

- Life® Spa & Hot Tub Essentials Calcium Booster:
   Increases low levels of Calcium Hardness. Properly balanced levels help prevent corrosion and reduce foaming.
- Life® Spa & Hot Tub Essentials Alkalinity & pH Up: Increases low pH and Total Alkalinity levels. Properly balanced levels help prevent corrosion. Compatible with all sanitizers.
- Life® Spa & Hot Tub Essentials Alkalinity & pH Down:
   Decreases high pH and Total Alkalinity levels. Properly balanced levels increase sanitizer effectiveness. Compatible with all sanitizers.
- Life® Spa & Hot Tub Essentials pHerfect Balance:
   Locks pH levels and eliminates drift! Reduce the need for frequent balancing adjustments and save time caring for your tub. Add Life pHerfect Balance every time you refill your hot tub.

#### Kits:

- Life® Spa & Hot Tub Essentials Bromine Start-Up Kit
- Life® Spa & Hot Tub Essentials Chlorine Start-Up Kit
- Life® Spa & Hot Tub Essentials Fresh Start Maintenance Kit:
   Recommended every time you drain and refill, the Life® Fresh Start Maintenance
   Kit contains everything you need to keep your hot tub clean inside and out: Life®
   Purge & Jet Line Cleaner, Life® Filter Cleaner, Life® Waterline & Surface Cleaner,
   and Life® Cover Cleaner & Conditioner.

## The Complete Line of Life® Products

#### **Specialty Products:**

- Life<sup>®</sup> Spa & Hot Tub Essentials Foam Free:
   Highly effective in quickly eliminating foam buildup. Fast-Acting! Apply weekly if necessary.
- Life® Spa & Hot Tub Essentials Leak Sealer:
   Seals minor cracks & leaks
- Life® Spa & Hot Tub Essentials Purge & Jet Line Cleaner: Cleans hot tub plumbing lines without harsh chemicals. Keeps hot tub and jetted tub plumbing clear of organics, oils, dirt and minerals.
- Life® Spa & Hot Tub Essentials Cover Cleaner & Conditioner:

  Specially developed to extend the life of your hot tub cover. This easy-to-use application restores color and has a built in UV protectant.
- Life® Spa & Hot Tub Essentials Filter Cleaner:
   Improves filtration and effectively removes oil and scale buildup. No soaking required. Spray-On & Hose-Off!
- Life® Spa & Hot Tub Essentials Waterline & Surface Cleaner:

  Specially developed to clean the hot tub waterline and more. Clean stains and deposits from the interior and exterior of your hot tub. Remove dirt, oil and scum from the hot tub shell and cover.
- Life® Spa & Hot Tub Essentials Metal Out:
  Helps prevent metal staining and corrosion. Add the initial dose with every fresh
  fill. Add any time source water, especially well water, is added to the tub.
- Life® Spa & Hot Tub Essentials Natural Clarifier:
   Works to improve filter performance while keeping hot tub water crystal clear.
   Clears cloudy water quickly. Prevents buildup of oils and scum lines. Eliminates impurities.
- Life® Spa & Hot Tub Essentials Scum Free:
  Natural enzyme cleaner that removes scum lines. Eliminates oils, lotions and organics that cause scum and odors in hot tub water.
- Life<sup>®</sup> Spa & Hot Tub Essentials Scale Defense:
   Prevents stains and discoloration from Iron, Prevents stains and discoloration from Iron, Copper, Magnesium and other minerals. This concentrated formula helps prevent scale formation when dealing with higher levels of Calcium Hardness.





To find the store nearest you, scan the QR Code or visit: **swimmingpool.com** and click on Find a Pool Pro