




Spa Pool **Water Care** Handbook

Easy to use illustrated guide to water maintenance.



 0800 99 33 88

 www.alpinespas.co.nz

 sales@alpinespas.co.nz

INTRODUCTION



Water Maintenance Made Easy

You don't need to be an expert to look after the water in your spa, you just need to know what to do and when to do it. This guide provides all the required information, in both simple and detailed form, so even the most absolute beginner will understand.

Just like a car, your spa pool needs care and general maintenance to keep it looking good and running smoothly!

To ensure your spa pool is ready and waiting to be used at all times, we need to ***treat and balance the water*** to keep it clean and fresh.

You will have received a Water Care Startup Kit with your purchase, which will be used to do just that. Identify if your kit is either Chlorine or Bromine (noted on your invoice) and follow the appropriate instructions found in this guide.

Successful water care consists of a simple startup procedure and implements an ongoing, easy maintenance care plan.

If you have a general idea about water maintenance or just want to get on with treating your spa pool, you can skip straight to startup in Section 2.

CONTENTS



SECTION 1

Beginners Guide to Water treatment



SECTION 2

Simple 8-Step Spa Startup Guide



SECTION 3

No Hassle Water Care & Dosing Guide



SECTION 4

Draining & Refilling Guide



SECTION 5

Troubleshooting!

SECTION 1



SECTION 1

BEGINNERS GUIDE TO WATER TREATMENT



What is Water Treatment?

Water treatment is the process of adding chemicals to your spa pool's water, ensuring clean, clear and healthy water for you to bathe in! Treating the water involves two parts - **Sanitizing** and **Balancing**.

Sanitizing the Water

Sanitizing means adding a disinfectant such as chlorine or bromine into the spa pool water to kill any existing bacteria. Without sanitizing the water, you are putting your family's health at risk and also potentially damaging and voiding the warranty of your new spa pool.

Whether we like it or not, every time the spa pool is used, bacteria, oils and dirt get into the water. Without proper sanitizing, bacteria will grow quickly in the water and can lead to nasty smells, colours and potentially even harbor diseases!

To further help eliminate bacteria, your Alpine Spa is also equipped with automatic sanitizers such as an Ozone Generator and an Ultra Violet Light Chamber (select models). Although these powerful systems will virtually kill all bacteria that they touch, bacteria can multiply quickly and hide in places that Ozone and UV can't reach.

So in order to make sure we remove all bacteria in the spa pool, we must also use a small amount of sanitizer such as Chlorine or Bromine (found in your Startup Kit!).

Chlorine comes in a powder form which is added manually by sprinkling into the spa pool. Bromine comes in tablet form which sits in a floating dispenser, slowly dissolving into the water over time.

Tip: Keeping an optimal level of sanitizer in the water at all times will ensure bacteria is being eliminated consistently.

SECTION 1



Balancing the Water

Sanitizing the water is easy, but we must also consider other factors and properties of the water if we want to be sure it is clear and comfortable to bathe in. This is where the balancing pH, Total Alkalinity and Calcium Hardness comes into play. It may seem overwhelming at first, but it's only these three factors (aside from sanitizing) we need to keep in check.

pH Levels

pH is the scale measurement of the acidity or alkalinity of a substance (in this case, our spa pool water). The scale runs from 0 (very acidic) up to 14 (very basic) with a pH of 7 being neutral.



Lemon juice sits at 2.0 on the scale (very acidic), while soapy water is around 12 (quite basic). Your skin and eyes prefer a pH level of between 7.2 to 7.8, which is one of the reasons why we need to keep the spa pool water in this range, so it's comfortable to bathe in!

The pH of the spa pool water will continuously change because as we bathe we are unintentionally adding in small amounts of body oils, soaps and shampoos. Unbalanced pH can cause a range of problems such as skin and eye irritation, pump corrosion, spa shell corrosion and more.

Keeping the pH in an optimal range of 7.2 - 7.8 not only keeps you and your spa safe, it also ensures your sanitizer can work effectively.

Generally the pH will only need decreasing from time to time with **PH DECREASE**. If it is very low, the pH can be raised with **PH INCREASE** (sold separately) or for small increases use the **PH BUFFER** supplied.



Total Alkalinity

Total Alkalinity (TA) is a measurement of the total amount of 'alkali' (not to be confused with alkaline) present in the spa pool water. It is measured in PPM (parts per million) and is displayed on your test strips.

The alkali act as a 'bodyguard' to your pH, helping to stabilize it by taking the brunt of any change to the water from acidic or basic substances that enter the spa pool.

Balancing your TA to between 80 - 120PPM will help to lock pH within the 7.2 - 7.8 OK range. It's important to set the TA first at startup, so your pH is much easier to balance going forward!

Calcium Hardness

Calcium Hardness or 'total hardness' is a term for the measurement of minerals in your water including calcium and magnesium. Sometimes we hear this referred to as soft water (low calcium) or hard water (high calcium).

It's important to have an optimal level of Calcium Hardness because:

Soft water will force the water to draw from other minerals such as copper and iron, wrecking havoc on your spa pool parts, corroding heating elements and pump seals.

Hard water will attempt to get rid of the excess calcium and will leave scale build up on your shell, inside your pumps and on your heater element - not good!

Generally city supply water is soft and will only need raising slightly on startup with **CALCIUM HARDENER**. Calcium Hardness is also measured in PPM (parts per million) with the ideal range between 250 - 500 PPM.

SECTION 1



Other Regular Maintenance

These steps don't need to be carried out as regularly in your water maintenance plan but are still key factors in achieving crystal clear water.

Shocking (Shock Dose)

Once a week, and/or after heavy usage, the spa should be 'shock dosed' with a large dose of **SPACHLOR** found in your Startup Kit. Shocking oxidizes excess organic materials or 'leftovers' and will help to quickly clean up cloudy or green water.

Filtering

Depending on the model, your spa has 1 or 2 filter cartridges that help to skim the water and remove excess debris. These are a vital part of keeping your water clear and work within a 'filter-cycle', an automatic process in which your spa controller runs the circulation pump twice daily for a set duration of time. During this time, the Ozone and UV System (select models) help disinfect the water, lowering the amount of additional sanitizer you need to manually add.

Ensuring your filter cartridges are clean is an important factor for a healthy spa. Clogged filters will result in a range of water chemistry issues, not to mention the extra load placed on the pumps and components which can void the warranty.

Check your filters a minimum of once per week and wash thoroughly with a hose. Once a month, wash the filters in a filter cleaning solution (you can find more on this in your spa manual).

Tip: Remember to check your filters regularly and clean them thoroughly (in-between the filter papers). You may find that a simple clean will help make your water easier to balance.



We recommend the following filter times based on usage:

USAGE PER WEEK (DAYS)	SET FILTER CYCLE DURATION	FILTER CYCLES PER DAY
2-3x	Leave as default (2 Hours)	2 (default)
4-5x	Set to 4 Hours	2 (default)
6+	Set to 6 Hours	2 (default)

General Cleaning

It's a good idea to keep your spa as clean as possible by removing any large debris and wiping away any build up of scale or grime. Leaves, dirt and dust can affect the pH of the water and be working against you to keep within the optimal range of 7.2 - 7.8.

Summary

We must sanitize and balance the water to ensure it is clean and safe to use. This is done with our Start-up Kit which contains all the necessary products, including test strips that can tell you what to add and how much.

- Sanitizer should be added regularly (see section 3).
- pH should be kept in the ideal range of 7.2 to 7.8 (OK).
- Total Alkalinity ideal range (OK) is between 80 - 120PPM.
- Calcium Hardness ideal range (OK) is between 250 - 500PPM.

Now that you have a basic understanding of whats involved with treating spa pool water, you can move on to the next sections which explain the startup process and how to use your Start-up Kit products to balance and sanitize the spa pool water.

SECTION 2



SECTION 2

SIMPLE 8-STEP SPA STARTUP GUIDE

Simple 8-step Spa Startup Guide



Please ensure you have followed the 'Pre-Fill Guide' in your Spa Pool Manual before following these steps.



1. Grab your spa Startup Kit, check power to the spa pool is off and remove the cover.



2. Place your hose in the filter box (remove any pre-installed filters) and fill the spa pool up to the internal perimeter LED lights that surround the inner spa acrylic.



3. Once full, turn on power to the spa pool. A 'priming cycle' will automatically run. This tests the components, while also preparing itself to heat up (allow 5-10 minutes).



4. Run your pump/s and 'shock dose' the water using '**SPACHLOR**'. (Follow the instructions found in section 3).



5. Test the water's PH and Total Alkalinity levels and add appropriate chemicals to balance if required (see section 3).



6. Allow pumps to circulate for 10 minutes so the chemicals can mix. Check your set temperature is at the desired setting.



7. Replace cover and allow to heat (12+ hours).



8. Enjoy your new Spa Pool! Test for Calcium Hardness after 1-2 days and adjust as necessary (see section 3).

SECTION 3



SECTION 3

NO HASSLE WATER CARE & DOSING GUIDE



Treatment Procedure and Tips

This section provides the information you need to effectively **treat the water** and maintain clear healthy water to bathe in at all times.

Here is what good minimum water care practice looks like on a daily/weekly/monthly basis:

	BALANCE WATER	SANITIZE	SHOCKDOSE	CLEAN FILTERS	DRAIN
STARTUP	✓	✓	✓		
DAILY		✓			
WEEKLY	✓		✓	✓	
EVERY 3-4 MONTHS					✓

Be sure to follow the below guidelines/warnings:

Test Strips

- Turn off pumps before dipping test strip.

Mixing Chemicals

- Completely remove cover before adding products.
- Turn on pumps and sprinkle products into jet stream.
- Never mix dry chemicals together.
- Remove headrests when shock dosing.
- Pumps may need to be turned back on.

Measuring/Dosing

Measure your products with the container's cap or a teaspoon. The dosage tables on pages 22-25 are displayed with these icons:



= 1 Level Capful



= 1 Level Teaspoon

SECTION 3



A Look Inside your Water Care Kit

You will have received either a Chlorine or Bromine Startup Kit which contains the following necessary products to keep your spa pool water clean and fresh:

Chlorine kit contains:



SPA CHLOR



CALCIUM HARDENER



PH BUFFER



PH DECREASE



TEST STRIPS

Bromine kit contains:



BROMINE w/
DISPENSER



CALCIUM HARDENER



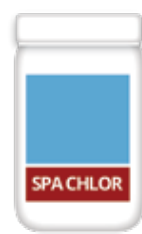
PH BUFFER



PH DECREASE



TEST STRIPS



SPA CHLOR
(For shocking only)

Recommended extra products to have on hand:



FILTER CLEANER
(Assists cleaning of filter cartridge)



CRYSTAL CLEAR
(Clears up cloudy water)



NO FOAM
(Removes foam from water)



ALGAECIDE
(Kills algae if present)



PIPE CLEANER
(Cleans out pipes)

These products can be purchased instore or over the phone from Alpine Spas.



Testing Strips: *(Page 16-17)*

Without test strips, all the products listed below are useless! These are vital for balancing water as it reports the exact state of the water and shows which components needs balancing and by how much.

Sanitizer (Chlorine or Bromine): *(Page 21)*

As explained in the Beginners Guide, bacteria and viruses can grow quickly in hot water. A Sanitizer is used to effectively disinfect the water and keep it clean.

pH Decrease (Lower pH & Alkalinity): *(Page 25)*

If your pH is too high, the water is too alkaline/basic and can cause problems such as cloudy water and skin/eye irritation. You need to lower the pH to within the normal range (7.2 - 7.8) using a decreasing product.

pH Buffer (Raise Alkalinity & pH): *(Page 23)*

If your alkalinity is not in optimal range, you will have trouble maintaining a stable pH level as it is easily affected by changes to the water. Use pH Buffer to increase the Total Alkalinity to the correct range which helps to 'lock-in' your pH level.

Calcium Hardener: *(Page 23)*

Also referred to as 'Total Hardness', this product raises calcium in the water. Generally city water contains an optimal amount of calcium and shouldn't require little balancing.

SECTION 3



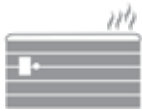
How to Test the Water



1. Turn off any jet pumps (circulation pump is okay).



2. Take a test strip from out of the bottle.



3. Quickly dip the test strip into the spa water, closest to the middle as possible and down 10-15 cm.



4. Give it a light flick to remove excess water, wait 15 seconds, then compare the colored tabs on the strip with the color chart on back of the test strip bottle (see example below).



5. Write down your readings and add the right amount of chemicals to adjust your levels if need be.

Testing Strips

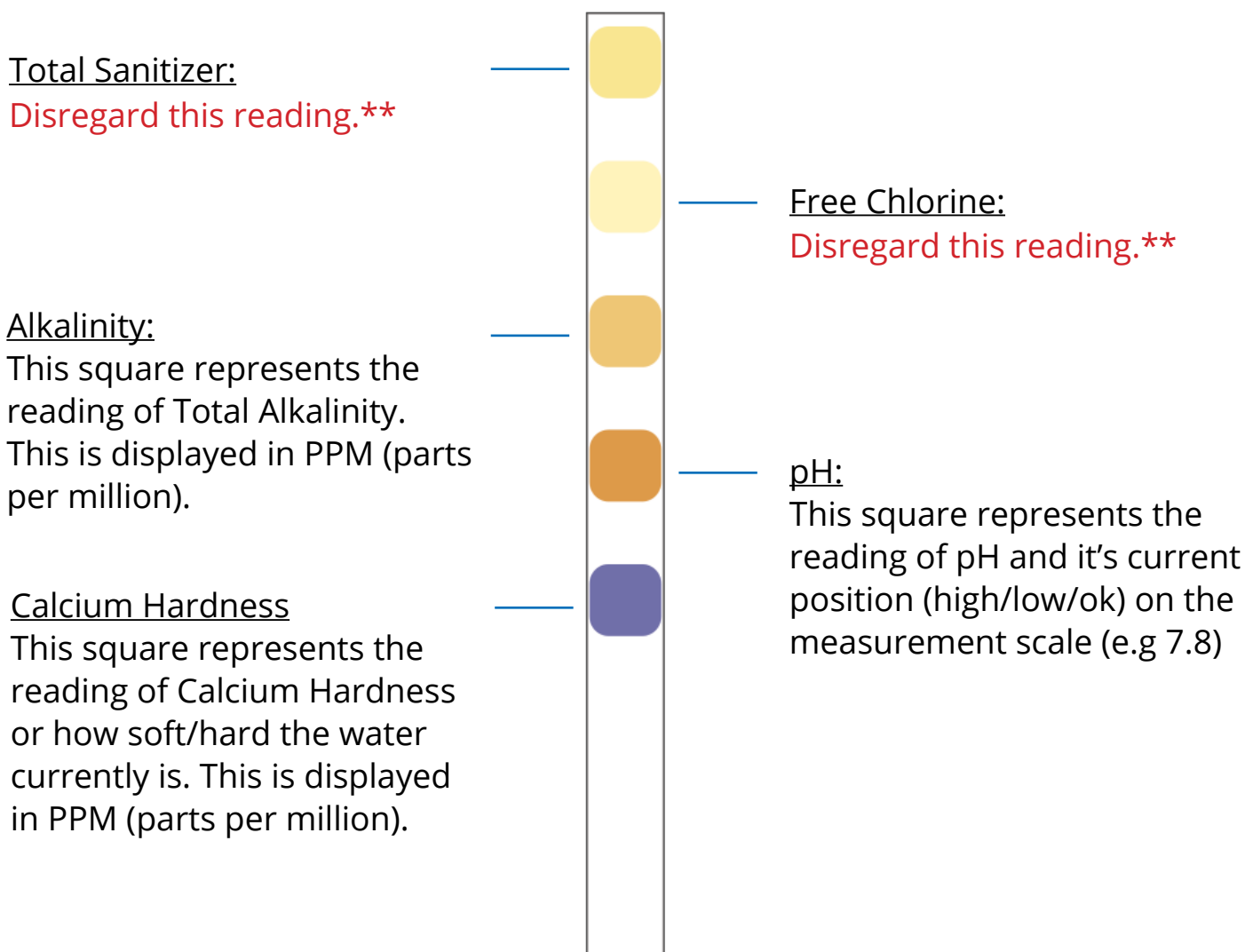
Your spa water should be tested and balanced a minimum of once a week (or more often depending on bather load/frequency).

In your Startup Kit you will find a bottle of test strips which we can use to tell us the current state of the water. With the results we can work out which chemicals are needed to balance the water to the ideal levels and how much of each product is required to achieve this.



Matching Results to your Test Strip.

The test strip contains 5 squares that represent the levels of Sanitizer, pH, Calcium Hardness and Total Alkalinity as shown below. The below is an AquaChek Spa 6-in-1 test strip.



***Note: Because your spa pool is fitted with efficient automatic sanitizers such as the Ozone Generator and UV System, we can ignore the first two squares at the top of the test strip as they will not produce accurate readings. Instead we will follow a sanitizing plan which doesn't require the use of test strips (see page 21 for more detail).*

SECTION 3



Reference Chart

The test strip chart is found on the back of the test strip bottle. Once a test strip has been dipped in water, the pads will change colour and your job is to match them as closely as possible to the chart.

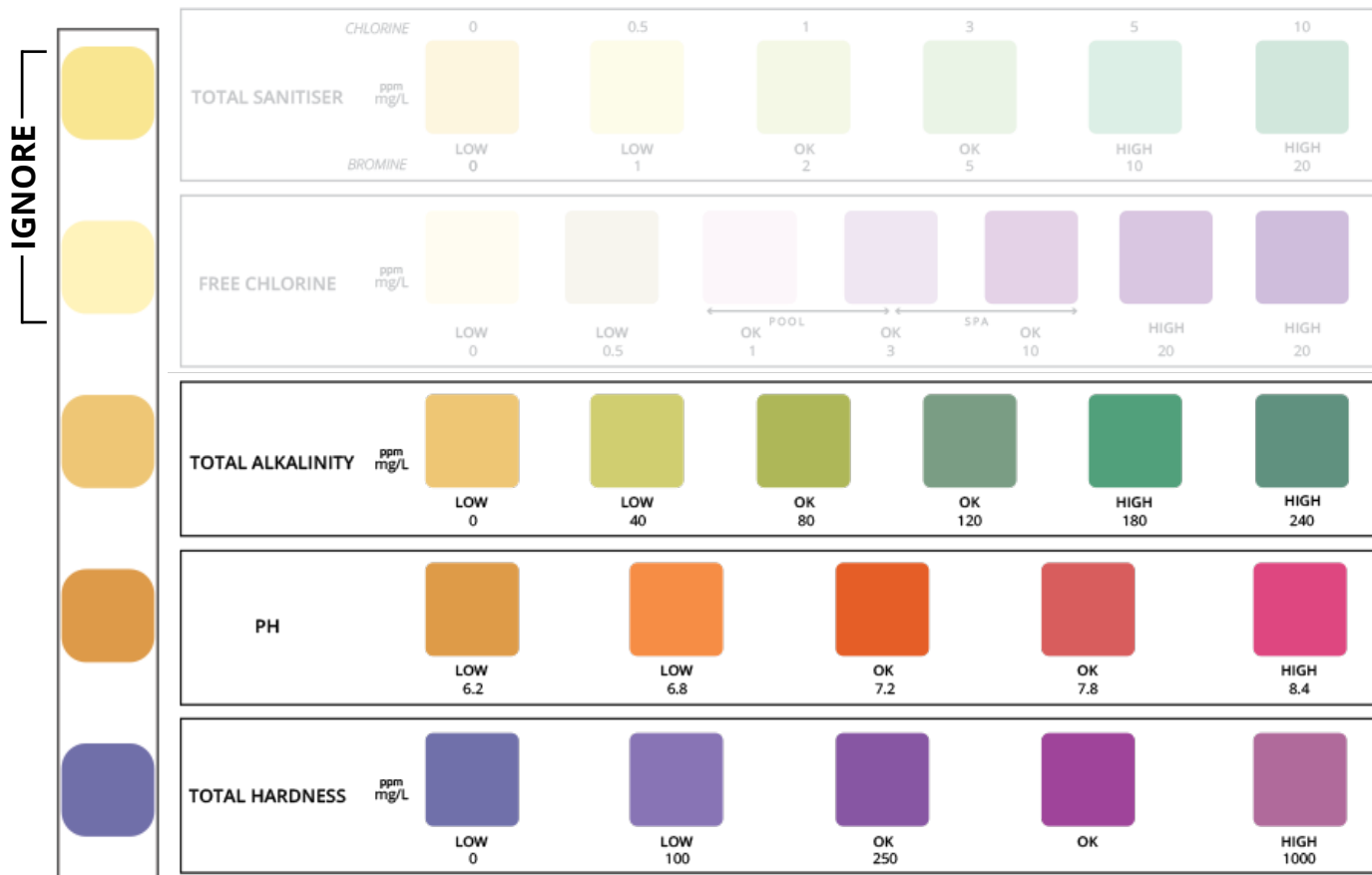
Remember: Ignore the Total Sanitizer and Free Chlorine readings (top two squares) as the readings they produce are not applicable.



The above chart is an example only and cannot be used as a reference for comparing your test strip against. Always use the chart located on the test strip bottle.



Comparing the Test Strips



Your aim is to match the Total Alkalinity, pH and Total Hardness pads on the test strip to the colours on the chart as closely as possible. If they match the coloured squares in the OK range, the water is balanced correctly. If they don't, then some work is required to get them into the OK ranges.

Note the numbers underneath the low, ok, high range - These are your indicators which will help you work out how much of which product to add to the water to balance it correctly.

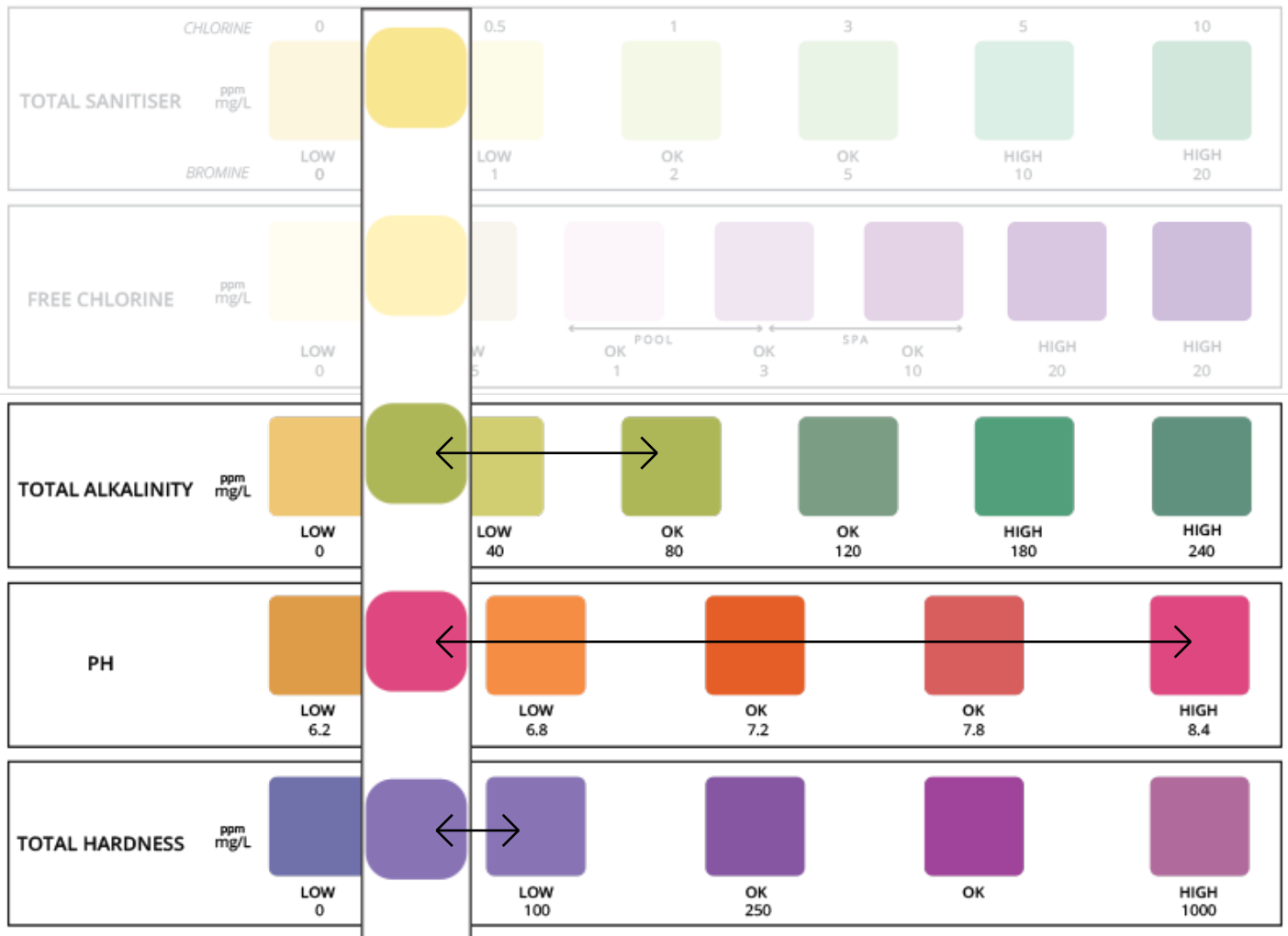
- Total Alkalinity indicators are listed in PPM (parts per million).
- pH indicators are the reference to how acidic or alkaline the current spa water is on the pH scale.
- Calcium Hardness indicators are also listed in PPM (parts per million).

The above chart is an example only and cannot be used as a reference for comparing your test strip against. Always use the chart located on the test strip bottle.




SECTION 3



Example Post Dip Test Strip



This example of a post-dipped test strip shows how to match the colours of the pads to the reference chart. Here are the results of the above water test:

	PARAMETER	RESULT (INDICATORS)	SOLUTION / ACTION
	Total Alkalinity	Showing as OK, indicator 80PPM	OK range, no action required
	pH level	Showing as HIGH, indicator 8.4 on the pH scale	Lower with pH Decrease
	Total Hardness	Showing as LOW, indicator 100PPM	Raise with Calcium Hardener

We can take the resulting indicators and use them with the tables over the page to know how much of each product is required to balance out the water.

The above chart is an example only and cannot be used as a reference for comparing your test strip against. Always use the chart located on the test strip bottle.



Sanitizing your Spa Pool

Whether it's Chlorine or Bromine you're using, this guide will help you keep your spa bacteria free.

Sanitizing with Spa Chlor (Chlorine Kit) **RECOMMENDED**

SPACHLOR comes in granular form in a 1KG tub. It needs to be sprinkled directly into the water on a regular basis to ensure bacteria-free water.

Our test strips won't give us accurate readings of Chlorine because the UV and Ozone System strip out the part that the test strip picks up on as a measurement. Instead, we can follow a simple routine to ensure there is enough sanitizer present at all times to provide effective sanitization:

USAGE	ADD SPACHLOR AFTER USE:
Spa Unused	No, unless water is cloudy or smells then shock dose and add 3 tsp.
1-2 Bathers	Add 2 tsp after use, run pumps.
3-4 Bathers	Add 3 tsp after use, run pumps.
5+ Bathers	Shock dose as per page 22.

Sanitizing with Bromine (Bromine Kit)

BROMINE comes as dissolvable tablets form in a 1KG tub, with a dispenser unit. It's easy to manage as the only maintenance is making sure the tablets are always topped up (4-5 tablets will fit in the dispenser at one time).

The dispenser floats around the pool, continuously releasing bromine into the water ensuring continuous disinfection. The bottom of the dispenser can be adjusted to increase/decrease the rate of release, but should generally be fully open unless it is only 1-2 bathers using the spa. Bromine may not be able to keep up with heavy usage of spa pool, in this case it may be best to switch to a chlorine kit.

Tip: Fully submerge the Bromine dispenser under the water and release to remove any air locks that may be present in the dispenser unit.

SECTION 3



Shocking with SPACHLOR

SPACHLOR should be sprinkled directly into the water. Make sure you fully remove the cover, the bromine dispenser (if using one) and also the headrests as these can be damaged in the oxidizing process.




























Shocking should be done at least once a week regardless of use.

 = 1 level teaspoon approx 8grams.  = 1 level capful approx 84grams.		<h3>SHOCK DOSE SPA POOL.</h3> <p>Startup Kit Product: SPACHLOR. How to use: Remove spa cover & add directly into spa pool water with jets running. Wait 15 minutes before bathing.</p>				
SPA MODEL	DUO LUX3 MONT BLANC	MAKALU FIESTA4 CUB	NOVA WHISTLER MATTERHORN SUMMIT LUCIANA SPLASH6 BLACKBURN YUKON FRONTIER	MCKINLEY ELBRUS REVIVE5	VANCOUVER MUNRO EVEREST K2 GRAND5 OASIS ARTIC GLACIER	
Upon Startup/Fill	4  (28 GRAMS)	1/2  (42 GRAMS)	3/4  (63 GRAMS)	1  (84 GRAMS)	1  (84 GRAMS)	
After Heavy Usage	2  (16 GRAMS)	2  (16 GRAMS)	4  (28 GRAMS)	1/2  (42 GRAMS)	1/2  (42 GRAMS)	
Weekly	2  (16 GRAMS)	3  (21 GRAMS)	4  (28 GRAMS)	1/2  (42 GRAMS)	1/2  (42 GRAMS)	



Balancing Total Alkalinity

Balancing Total Alkalinity is done with the **PH BUFFER** or **PH DECREASE** products. Both are powder form products and are to be sprinkled directing into the water.

 = 1 level teaspoon approx 7grams.  = 1 level capful approx 115grams.	<h3>RAISE TOTAL ALKALINITY.</h3> <p>Startup Kit Product: PHBUFFER. How to use: Remove spa cover & add directly into spa pool water with jets running.</p>				
	DUO LUX3 MONT BLANC	MAKALU FIESTA4 CUB	NOVA WHISTLER MATTERHORN SUMMIT LUCIANA SPLASH6 BLACKBURN YUKON FRONTIER	MCKINLEY ELBRUS REVIVE5	VANCOUVER MUNRO EVEREST K2 GRAND5 OASIS ARTIC GLACIER
20PPM	2 1/2  (17 GRAMS)	4  (27 GRAMS)	4 3/4  (34 GRAMS)	6  (41 GRAMS)	7  (48 GRAMS)
40PPM	5  (35 GRAMS)	1/2  (62 GRAMS)	1/2  (68 GRAMS)	3/5  (85 GRAMS)	3/4  (85 GRAMS)
60PPM	7  (51 GRAMS)	3/4  (81 GRAMS)	1  (102 GRAMS)	1 1/4  (136 GRAMS)	1 1/3  (143 GRAMS)
80PPM	1/2  (62 GRAMS)	1  (102 GRAMS)	1 2/5  (136 GRAMS)	1 1/2  (163 GRAMS)	1 2/3  (190 GRAMS)
100PPM	3/4  (85 GRAMS)	1 1/4  (136 GRAMS)	1 1/3  (170 GRAMS)	1 4/5  (204 GRAMS)	2  (238 GRAMS)

See next page for lowering Total Alkalinity.

SECTION 3



DESIRED PPM DECREASE	LOWER TOTAL ALKALINITY				
	DUO LUX3 MONT BLANC	MAKALU FIESTA4 CUB	NOVA WHISTLER MATTERHORN SUMMIT LUCIANA SPLASH6 BLACKBURN YUKON FRONTIER	MCKINLEY ELBRUS REVIVE5	VANCOUVER MUNRO EVEREST K2 GRAND5 OASIS ARTIC GLACIER
60PPM	3/4 (75 GRAMS)	1 (120 GRAMS)	1 1/3 (150 GRAMS)	1 1/2 (160 GRAMS)	1 2/3 (210 GRAMS)
80PPM	1 (100 GRAMS)	1 1/3 (160 GRAMS)	1 3/5 (200 GRAMS)	2 (240 GRAMS)	2 1/3 (280 GRAMS)
100PPM	1 1/5 (125 GRAMS)	1 3/5 (200 GRAMS)	2 (250 GRAMS)	2 1/2 (300 GRAMS)	3 (350 GRAMS)
140PPM	1 4/5 (175 GRAMS)	2 1/3 (280 GRAMS)	3 (350 GRAMS)	3 1/2 (420 GRAMS)	4 (490 GRAMS)

Balancing Calcium Hardness

CALCIUM HARDENER comes in granular form and should be sprinkled directly into the water. City supply water should be close to the OK range by default on first fill, but rural/tank water can be quite 'hard'. If you need to lower Calcium Hardness, drain 1/4 of the spa pool and refill with fresh water with a softener.

DESIRED PPM INCREASE	INCREASE CALCIUM HARDNESS				
	DUO LUX3 MONT BLANC	MAKALU FIESTA4 CUB	NOVA WHISTLER MATTERHORN SUMMIT LUCIANA SPLASH6 BLACKBURN YUKON FRONTIER	MCKINLEY ELBRUS REVIVE5	VANCOUVER MUNRO EVEREST K2 GRAND5 OASIS ARTIC GLACIER
100PPM	1 (70 GRAMS)	1 1/2 (112 GRAMS)	2 (140 GRAMS)	2 1/2 (168 GRAMS)	2 4/5 (196 GRAMS)
200PPM	2 (140 GRAMS)	3 1/4 (224 GRAMS)	4 (280 GRAMS)	4 4/5 (336 GRAMS)	5 4/5 (392 GRAMS)







No Hassle Water Care & Dosing Guide














Balancing pH

Lowering pH is achieved with the **PH DECREASE** product. Both products come in powder form and are to be directly sprinkled into the water.

NOTE: Wait 1 day before re-testing pH after adding decriaser to the water as results will not appear straight away until thoroughly circulated and mixed in.

 = 1 level teaspoon approx 8grams.	DECREASE PH LEVEL				
	Startup Kit Product: pH Decrease. How to use: Remove spa cover & add directly into spa pool water with jets running. Wait 1 Day before re-testing for accurate results.				
TEST STRIP LEVEL READING 8.4	DUO LUX3 MONT BLANC	MAKALU FIESTA4 CUB	NOVA WHISTLER MATTERHORN SUMMIT LUCIANA SPLASH6 BLACKBURN YUKON FRONTIER	MCKINLEY ELBRUS REVIVE5	VANCOUVER MUNRO EVEREST K2 GRAND5 OASIS ARTIC GLACIER
To Lower to 7.6:	1 1/4  (10 GRAMS)	2  (16 GRAMS)	2 1/2  (20 GRAMS)	3  (24 GRAMS)	3 1/2  (28 GRAMS)

pH won't normally need too much of an increase but if you are finding low pH readings, you will need to purchase a **PH INCREASER** product.

 = 1 level teaspoon approx 8grams.	RAISE PH LEVEL				
	Startup Kit Product: PHINCREASE (Purchased separately, not in startup kit). How to use: Remove spa cover & add directly into spa pool water with jets running.				
DESIRED PH INCREMENT INCREASE	DUO LUX3 MONT BLANC	MAKALU FIESTA4 CUB	NOVA WHISTLER MATTERHORN SUMMIT LUCIANA SPLASH6 BLACKBURN YUKON FRONTIER	MCKINLEY ELBRUS REVIVE5	VANCOUVER MUNRO EVEREST K2 GRAND5 OASIS ARTIC GLACIER
0.3	3/4  (5 GRAMS)	1  (8 GRAMS)	1 1/4  (10 GRAMS)	1 1/2  (12 GRAMS)	1 3/4  (14 GRAMS)
0.6	1 1/4  (10 GRAMS)	2  (16 GRAMS)	2 1/2  (20 GRAMS)	3  (24 GRAMS)	3 1/2  (28 GRAMS)
0.9	2  (15 GRAMS)	3  (24 GRAMS)	3 3/4  (30 GRAMS)	4 1/2  (36 GRAMS)	5 1/4  (42 GRAMS)

SECTION 4



SECTION 4

DRAINING & REFILLING GUIDE



Your spa pool water should be drained every 3-4 months.



1. Pipe cleaner (purchased separately) should be used every second water dump. If applicable, now is the time to add it to the water and run your pumps for a few hours with the cover off before the next steps.



2. **Turn off power to your spa pool.**



3. Drain the water via the drain valve located on the side of the spa pool cabinet. You can attach a hose to empty the water further away if required. A small amount of water left in the foot well is okay, but you can use a sponge and a bucket to completely empty if desired.



4. Wipe down the spa pool shell with a general household all-purpose cleaner, but use sparingly. A microfibre cloth can help to remove scale buildup. Clean around intakes in the foot well if required.



5. Rinse the spa pool down if required and bucket out excess water.



6. Remove filters and wash in filter cleaning solution or replace if necessary (filters last 10-12 months). Remember to place them back in before turning on power to the spa.



7. Proceed to startup/refill guide on page 11.

SECTION 5



SECTION 5

TROUBLESHOOTING



Common Issues

The following problems are usually a result of a poorly maintained spa pool, with the maintenance routine suggested in this guide having been neglected. Your spa pool water will get more difficult to treat as it gets older due to build up of waste products, so remember to refill every 3-4 months.

My water is cloudy

Cloudy water is usually a result of high/low pH, or a build up of bacteria.

1. Check your filters are clean and do not need replacing.
2. Check your pH/Alkalinity levels and adjust as necessary (page 22-25).
3. Give your spa pool a small shock dose.
4. Add 'Crystal Clear' or a similar clarifier and run the pumps to filter.

If above steps fail – drain ½ water and replace with fresh water. Re-balance chemicals.

My water smells or looks discoloured (green/yellow)

Foul smelling / strange coloured water is usually caused by build up of bacteria. To prevent this from occurring, we need to keep an optimal level of sanitizer in the water (see page 21). If you are following the recommended dosage as per this guide, you may need to increase the frequency and dosage of sanitizer and/or shocking.

1. Check your filters are clean and do not need replacing.
2. Check your pH/Alkalinity levels and adjust as necessary (page 22-25).
3. Give your spa pool a large shock dose, repeat again 6 hours later if there has been little improvement.
4. Return to your chlorine sanitizing plan. If using bromine, ensure the dispenser is topped up and fully open.

If above steps fail – run pumps, use a pipe cleaner/algaecide, then drain/refill water.

SECTION 5



My water is foamy?

Foamy water is usually a result of excess body oils or detergents in the spa. Can be a result of heavy bather loads or incorrect pH levels. Bathers showering beforehand and/or rinsing swim wear before entering water can help reduce foaming.

1. Check your filters are clean and do not need replacing.
2. Bucket out excess foam from surface of water.
3. Check your pH/Alkalinity levels and adjust as necessary (page 22-25).
4. Increase filter duration time (see manual for the spa control panel).

If above steps fail - Add 'No Foam' or a similar anti-foam product and run the jet pumps to mix and clean up the water.

My water is irritating my skin/eyes?

Itchy or irritated skin/eyes is usually a result in poorly balanced pH levels, or a too high/too low level of sanitizer.

1. Check your filters are clean and do not need replacing.
2. Check your pH/Alkalinity levels and adjust as necessary (page 22-25).

If above steps fail - Drain $\frac{1}{4}$ of the spa water and add fresh water, balance chemicals.

Dirt/Scum line around edge of spa?

A build up of substance around the inner edge of the spa pool acrylic (just above water line) is usually a sign of excess lotions, body oils, makeup etc, but can also be a sign of high calcium.

1. Check your filters are clean and do not need replacing.
2. Check your pH/Alkalinity/calcium hardness levels and adjust as necessary (page 22-25).
3. Clean line regularly with a microfiber cloth.
4. Shower before using the spa, remove makeup and tie up hair.

If above steps fail - Drain $\frac{1}{4}$ of the spa water and add fresh water, re-balance chemicals.



My water has excessive amount of particles/bits floating in it ?

This can be due to many factors, the most common being a breakdown of organic material that has settled in the pipes, or excess glue from the jet seals.

1. Check your filters are clean and do not need replacing.
2. Bucket out excess bits.
3. Clean pump intakes at bottom of spa foot-well.
4. Increase filter duration time (see manual for the spa control panel) and wash filters every few hours as they will be filtering out the bits.
5. Shock dose spa with SPACHLOR.

If above steps fail - drain spa and flush pipes with a hose, refill and repeat above process.

ISSUE	SOLUTION
EXCESS FOAM	Shower before use. Use 'No Foam'* for immediate results.
CLOUDY WATER	Shock dose, filter water and/or add 'Crystal Clear'*
GREEN/BROWN WATER	Shock dose or add Algaecide*. Low/high pH or Alkalinity can tint water strange colours.
EXCESSIVE ALGAE	Algaecide* dosage, repeat twice if necessary. Drain spa and refill with fresh water
HIGH CALCIUM HARDNESS	Drain 1/4 of the water and fill with fresh water.
LOW CALCIUM HARDNESS	Add Calcium Hardener
HIGH PH	Add pH Decrease
LOW PH	Add pH Buffer or pH Increase*
LOW ALKALINITY	Add pH Buffer
HIGH ALKALINITY	Add pH Decrease
FILTERS CLOGGED	Wash with hose and soak in Filter Cleaner*

**Products not included in Startup Kit, can be purchased separately.*