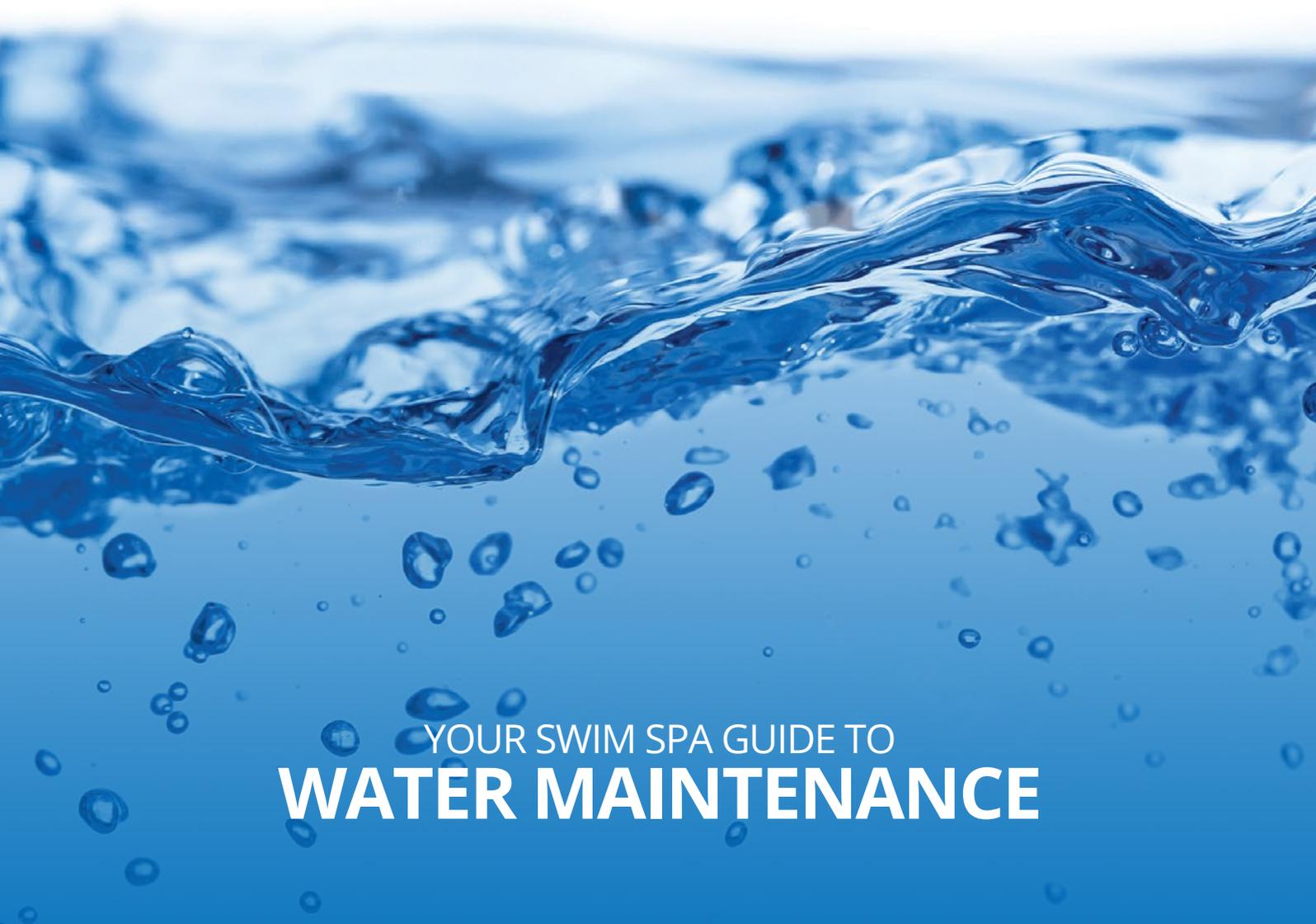




alpine**spas**™

# Water Care

HANDBOOK



YOUR SWIM SPA GUIDE TO  
**WATER MAINTENANCE**

# INTRODUCTION

## Water Maintenance Made Easy

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

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

You may have received a 'Water Care Startup Kit' with your purchase, which will be used along with this guide. If you do not have a kit, please purchase one from Alpine Spas or Spa Supplies.

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

Dual-zone swim spas work with both hot and cold water, so unless stated specifically, this guide can be applied to both. Spa zones will require more frequent draining than the swim zone.

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

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# SECTION 1

# Section 1

**BEGINNERS GUIDE TO WATER TREATMENT**

# Beginners Guide to Water Treatment

## What is Water Treatment?

Water treatment is the process of adding chemicals to your swim spa's water to keep it clean and safe to bathe in. Treating the water involves two parts - **Sanitising** and **Balancing**.

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### Sanitising the Water

Sanitising means adding a disinfectant such as chlorine into the water to kill bacteria. Without sanitising the water properly, you are putting the users health at risk and also potentially voiding the warranty of your swim spa.

Whether we like it or not, every time a swim spa is used, bacteria gets into the water along with oils and dirt. Without proper sanitising, bacteria will grow quickly and will turn the water into a foul smelling, discoloured and potentially dangerous environment.

To further help eliminate bacteria, your swim spa may also be equipped with automatic sanitising systems such as an ozone generator and/or a U.V system. These powerful systems will virtually kill all bacteria that passes through them, however bacteria can multiply quickly and hide in places they can't reach such as deep within the pipes.

So in order to make sure all bacteria in the swim spa is removed, you must also use a small amount of primary sanitiser such as Chlorine (included in a 'Water Care Startup Kit').

Chlorine comes in a powder form which is added manually by dissolving into a bucket of warm water first, then pouring into the swim spa while the jets are switched on.

*Tip: Adding a primary sanitiser such as Chlorine on a regular basis will help prevent an outbreak of bacteria growth.*

# SECTION 1

## Balancing the Water

Sanitising the water is easy, but you 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 sanitising) that need to keep in check.

## pH Levels

pH is the scale measurement of the acidity or alkalinity of a substance (in this case, swim spa 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 swim spa water in this range, so it's comfortable to bathe in!

The pH of the swim spa water will continuously change because as you bathe you 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 swim spa safe, it also ensures your sanitiser 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.

# Beginners Guide to Water Treatment

## Total Alkalinity

Total Alkalinity (TA) is a measurement of the total amount of 'alkali' (not to be confused with alkaline) present in the swim spa 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 swim spa.

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 this referred to as soft water (low calcium) or hard water (high calcium). It is also measured in PPM (parts per million) with the ideal range between 120 - 250 PPM.

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 swim spa 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.

Be sure to check your water's total hardness and add some **CALCIUM HARDENER** if required.

# 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.

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### Shocking (Shock Dose)

Once a fortnight and/or after heavy usage, the swim spa should be 'shock dosed' with a larger than normal dose of **SPA CHLORINE**. Shocking oxidizes excess organic materials or 'leftovers' and will help to quickly clean up cloudy or green water. Always dissolve chlorine for a shock dose in a bucket of water first and add to the water with the jets on.

### Filtering

Your swim spa has filter cartridge/s 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 swim spa controller runs the circulation pump at dedicated periods during the day. During this time, any automatic systems (ozone / U.V) help to disinfect the water, lowering the amount of additional sanitiser you need to manually add.

Ensuring your filter cartridges are clean is an important factor for a healthy swim 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 you should wash the filters in a filter cleaning solution (you can find more on this in your swim spa manual). Replace filters every 6 months.

*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.*

# *Beginners Guide to Water Treatment*

Filter cycles can be programmed via the control panel. If you have a heavy bather load (a lot of users on a regular basis) it may be worth increasing the duration and/or frequency of the filter cycles. Consult your manual for settings and recommendations.

## **General Cleaning**

Always keep your swim spa as clean as possible by removing any 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**

You must sanitise and balance the water to ensure it is clean and safe to use. This is done with the Water Care Startup Kit which contains all the necessary products, including test strips which will tell you what products to add and how much.

- Sanitiser should be added regularly - Follow the instructions found in 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 100 - 250PPM.

Now that you have a basic understanding of whats involved with treating swim spa water, you can move on to the next sections which explain the startup process and how to use your Water Care Startup Kit products exactly to balance and sanitise the swim spa water.

# SECTION 2

# Section 2

## SIMPLE 8-STEP SWIM SPA STARTUP GUIDE

# Simple Water Setup Guide

**Please ensure you have followed any 'Pre-Fill Guides' in your swim spa manual before starting these steps.**



1. Grab your Water Care Startup Kit, check power to the swim spa is off and remove the cover. Apply these same steps for dual-zone models.



2. Place your hose in the filter box (remove any pre-installed filters) and fill the swim spa up to the recommended fill line (see manual).



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



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



5. Allow pumps to circulate for 20 minutes (or press the **CLEAN** button if your swim spa has one) with cover off so the Spa Chlorine can mix. Check your set temperature is at the desired setting.



6. Replace cover and allow to heat.



7. After 24 hours, test the water's PH and Total Alkalinity levels and add appropriate chemicals to balance if required. Follow the instructions found in section 3.



8. Enjoy your new swim spa! 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**

# 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 an example minimal water care schedule for 3x weekly usage for a family of 3. Heavier usage may require weekly shockdose and filter cleaning.

	BALANCE WATER	SANITISE	SHOCKDOSE	CLEAN FILTERS	DRAIN
STARTUP	✓		✓		
WEEKLY	✓	Per Guidelines (Page 21)		✓	
FORTNIGHT			✓		
EVERY 8 - 12 MONTHS					✓

Spa zones require draining every 3 - 4 months.

Be sure to follow the below guidelines and warnings:

### Test Strips

- Turn off all pumps before dipping test strip.
- Test strips may give more accurate results when dipped horizontal.

### Mixing Chemicals

- Completely remove cover before adding products.
- Turn on pumps and sprinkle products into jet stream. Large doses should be mixed in a bucket of water first.
- Never mix dry chemicals together.
- Remove headrests when shock dosing.

### 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

Approx 115g



= 1 Level Teaspoon

Approx 7g

# SECTION 3

## A Look Inside your Water Care Startup Kit

The Water Care Startup Kit contains the following necessary products to keep your swim spa pool water clean and fresh:

### Water Care Startup Kit contains:



SPA CHLORINE



CALCIUM  
HARDENER



PH BUFFER



PH DECREASE



TEST STRIPS

### 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)



ILUKA BRILLIANCE  
(Pipe Cleaner and  
improves water  
quality)

*\*Products available to purchase online from [spasupplies.co.nz](http://spasupplies.co.nz)*

# No Hassle Water Care & Dosing Guide

## **Testing Strips:** *(Page 16-20)*

Without test strips, you won't know how much to dose. These are vital for balancing water as it reports the condition of the water and shows which parameters need balancing and by what amounts.

## **Sanitiser (Chlorine):** *(Page 21-22)*

As explained in section 1, bacteria and viruses can grow quickly in hot water. A Primary sanitiser such as chlorine is used to effectively disinfect the water and keep it fresh.

## **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 24)*

Also referred to as 'Total Hardness', this product raises calcium in the water. Town supply generally contains an optimal amount of calcium and should require minimal balancing.

## **pH Decrease (Lower pH & Alkalinity):** *(Page 24-25)*

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.

# SECTION 3

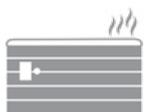
## How to Test the Water



1. Turn off jet pumps (circulation pump on 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. You may find dipping the strip horizontally can produce more accurate results and help prevent the colours from running.



4. Gently remove the test strip horizontally and wait 15 - 30 seconds, then compare the colored tabs on the strip with the color chart on back of the test strip bottle.



5. Write down your readings and add the right amount of chemicals to adjust the levels as required.

## Testing Strips

Swim spa water should be tested and balanced a minimum of once a week. This may need to be adjusted accordingly if you are finding the water has changed considerably in one week (try every third day until the water is corrected and then reduce testing to weekly again).

In the Water Care Startup Kit is a bottle of test strips which can be used to assess the current condition of the water. The results of the test strips can be used to indicate which chemicals should be used to balance the water and the dosage required to achieve the optimal ranges.

# No Hassle Water Care & Dosing Guide

## Matching Results to your Test Strip.

The test strip contains 5 squares that represent the levels of Calcium Hardness, Sanitiser, Total Alkalinity and pH as shown below.

### Total Hardness

This square represents the reading of Calcium Hardness or how soft/hard the water currently is. This is displayed in PPM (parts per million).

### Total Chlorine:

**Disregard this reading\***  
See sanitising plan page 21.

### pH:

This square represents the reading of pH and it's current position (high/low/ok) on the measurement scale (e.g. 7.8)



### Free Chlorine:

**Disregard this reading\***  
See sanitising plan page 21.

### Alkalinity:

This square represents the reading of Total Alkalinity. This is displayed in PPM (parts per million).

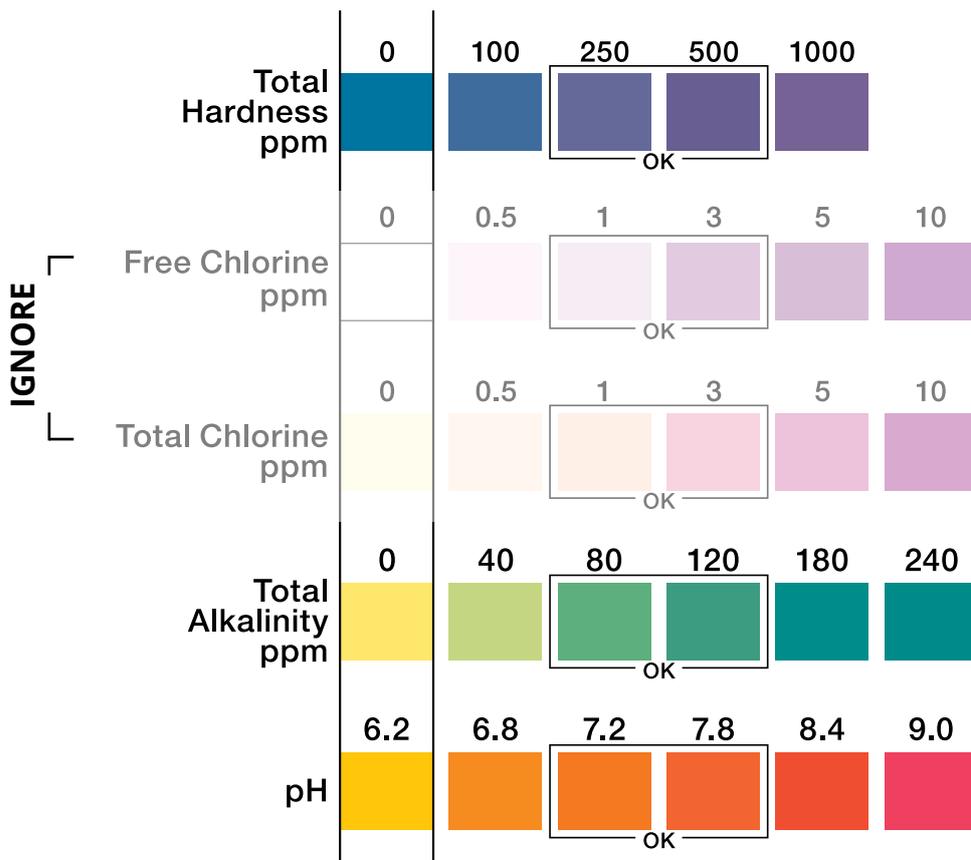
*\*This guide assumes your swim spa is equipped with an automatic sanitiser such as Ozone or U.V. system. Such systems may breakdown certain parts of the sanitiser that is picked up on the test strip, resulting in blank results for Free & Total Chlorine. To combat this, we recommend following a consistent sanitising plan which doesn't require checking the Free & Total Chlorine (see page 21 for more detail). A swim spa without these systems would be aiming to maintain consistent level of Free & Total Chlorine of around 2-3 ppm.*

# 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 on the bottle (not against this guide).

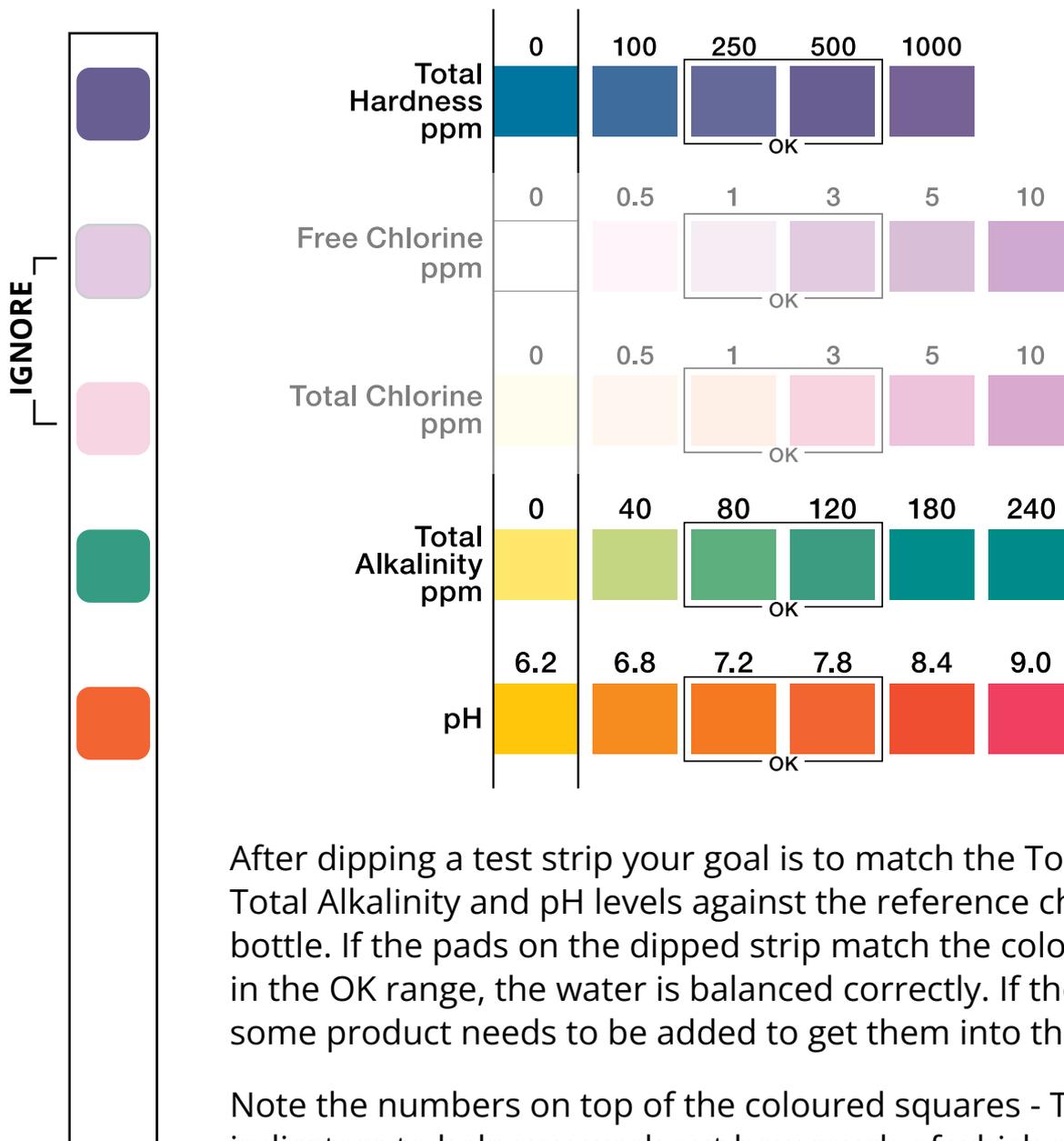
*Remember: With a Ozone or U.V system ignore the Total Chlorine and Free Chlorine readings as the readings they produce are not applicable.*



*The charts on these pages are an example only and cannot be used as reference for comparing your test strip against. Always use the chart located on the test strip bottle.*

# No Hassle Water Care & Dosing Guide

## Comparing the Test Strips



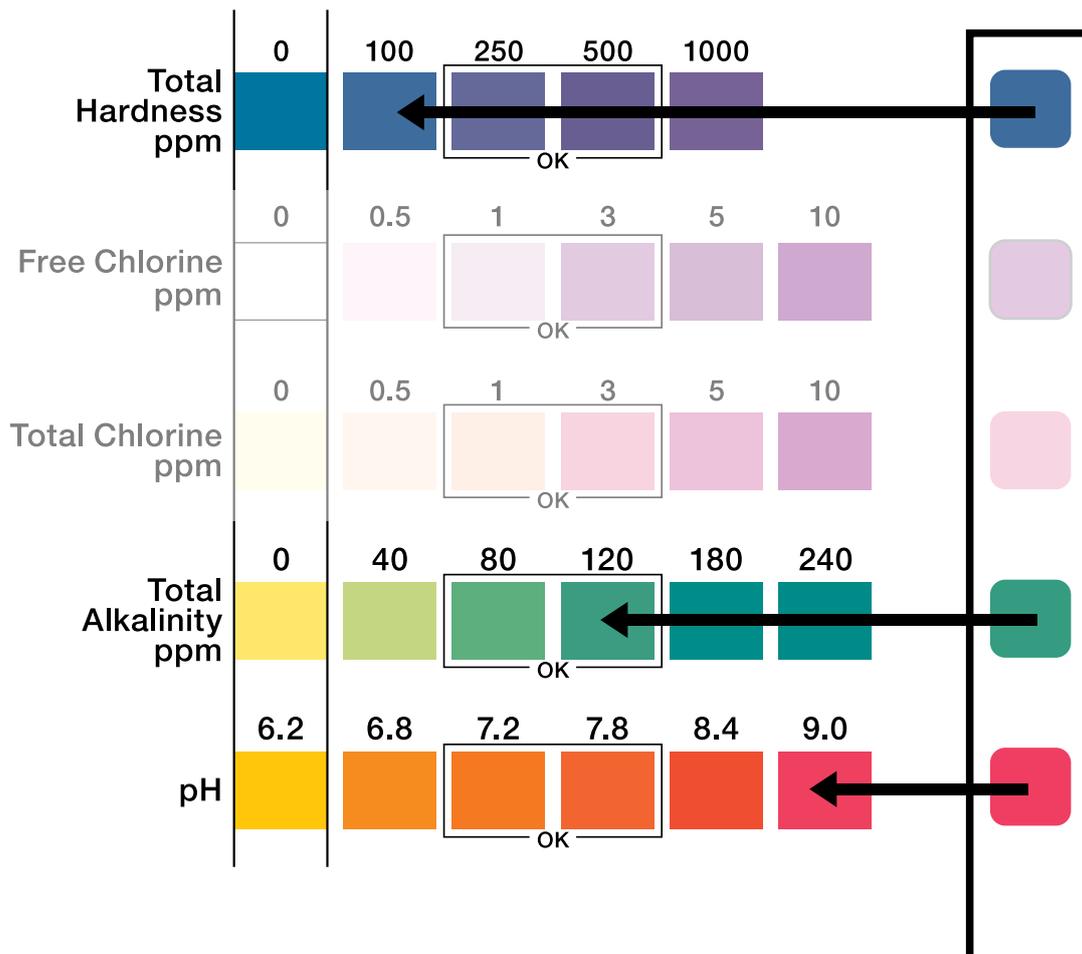
After dipping a test strip your goal is to match the Total Hardness, Total Alkalinity and pH levels against the reference chart on the bottle. If the pads on the dipped strip match the coloured squares in the OK range, the water is balanced correctly. If they don't, then some product needs to be added to get them into the OK ranges.

Note the numbers on top of the coloured squares - These are indicators to help you work out how much of which product to add to the water to balance.

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

# 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 example test:

PARAMETER	RESULT (INDICATORS)	SOLUTION / ACTION
 Total Hardness	Showing as LOW, indicator 100PPM	Raise with Calcium Hardener
 Total Alkalinity	Showing as OK, indicator 120PPM	OK range, no action required
 pH Level	Showing as HIGH, indicator 9.0 on the pH scale	Lower with pH Decrease

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.

# No Hassle Water Care & Dosing Guide

## Sanitising your Swim Spa

*Chlorine is the safest and most proven method of water disinfection.*

### Sanitising with Spa Chlor

**SPA CHLOR** 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.

As some sanitising systems (ozone & U.V) strip out the part that the test strip picks up on for Total & Free Chlorine, you may end up with blank results. To combat this we can follow a simple routine to ensure there is enough sanitiser present at all times to provide effective sanitisation:

USAGE	SWIM ZONE	SPA ZONE
Unused	No, unless water is cloudy or smells foul then consider a shock dose.	No, unless water is cloudy or smells foul then consider a shock dose.
1-2 Bathers	Add 5tsp* after use, run pumps.	Add 3tsp* after use, run pumps.
3-4 Bathers	Add 8tsp* after use, run pumps.	Add 4tsp* after use, run pumps.
5+ Bathers	Add 10tsp* after use, run pumps.	Add 5tsp* after use, run pumps.

It can be difficult to gauge the sanitiser requirements for users as there are a lot of variables at play. For example, two bathers showering before use compared with two users jumping in straight after exercising will introduce completely different amounts of bacteria and/or organic residues into the water.

\*You may find that there is plenty of chlorine available in the swim spa when following the above chart. If this is the case you can lower the dosage slowly until you notice a negative change in the condition of the water. If you are not seeing satisfactory disinfection following the chart above, increase the dosage until you see improvements in water quality.

*Please add product to a bucket of water first to dilute the sanitiser, then pour into the swim spa. Do not add large quantities of any chemical directly into the water with out mixing it first.*

# SECTION 3

## Shocking with SPACHLOR

**SPACHLOR** should be added to a bucket of water and mixed before adding to the swim spa when performing a shock dose. Make sure you fully remove the cover, and also the headrests as these can be damaged in the oxidizing process.

Run the jets/pumps to mix in for at least 40 minutes (two time out cycles). A high level of chlorine will be present in the water afterwards so we recommend waiting 24 hours before bathing. More aeration of the water (running pumps for longer than one cycle when mixing will reduce the chlorine levels faster).

Shocking should be done at least once in a fortnight regardless of swim spa use as it helps to remove excess organics and non-organics from the water. Skip the fortnightly shock dose if you have shocked recently for cloudy water and the water appears clear and fresh.

 = 1 level teaspoon approx 7grams.  = 1 level capful approx 115grams.		<h3>SHOCK DOSE SWIM SPA.</h3> <p><b>Water Care Startup Kit Product:</b>  <b>How to use:</b> Dissolve in a bucket of water first &amp; then add directly into water with jets running. Leave cover off and let jets time out, then replace cover. Wait 24 hours before bathing.</p>						
SWIM SPA MODEL	JUPITER COLUMBUS ATLANTIC	JUNO TRIUMPH	SIGNATURE D MOMENTUM D CHALLENGER 19D CHALLENGER 18D	FORCE D CHALLENGER 15D HERCULES OLYMPIA	NEPTUNE TITUS	MISSOURI	SPA ZONES CHALLENGER 19D MOMENTUM D TITUS JUPITER COLUMBUS ATLANTIC	
START UP / FILL	160g	140g	200g	180g	230g	300g	30g	
AFTER HEAVY USE <small>(WATER IS CLOUDY)</small>	80g	70g	100g	90g	115g	150g	15g	
FORTNIGHTLY	80g	70g	100g	90g	115g	150g	15g	

# No Hassle Water Care & Dosing Guide

## Balancing Total Alkalinity

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

 = 1 level teaspoon approx 7grams.  
 = 1 level capful approx 115grams.

### RAISE TOTAL ALKALINITY.

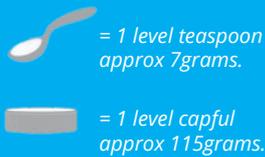
**Water Care Startup Kit Product: PH BUFFER.**  
**How to use:** Remove cover & add pre-mixed bucket of PH BUFFER into water with jets running and allow to mix for at least one 20 min timeout cycle.

SWIM SPA MODEL	JUPITER COLUMBUS ATLANTIC	JUNO TRIUMPH	SIGNATURE D MOMENTUM D CHALLENGER 19D CHALLENGER 18D	FORCE D CHALLENGER 15D HERCULES OLYMPIA	NEPTUNE TITUS	MISSOURI	SPA ZONES CHALLENGER 19D MOMENTUM D TITUS JUPITER COLUMBUS ATLANTIC
RAISE 20PPM	220g	185g	250g	240g	300g	405g	40g
RAISE 40PPM	440g	330g	500g	480g	600g	770g	80g
RAISE 60PPM	660g	515g	750g	720g	900g	1175g	120g
RAISE 80PPM	880g	700g	1000g	960g	1200g	1580g	160g



The total litre of your swim spa pool should be printed on the side of your swim spa on a silver plaque. It can also be found on page 33 of this manual.

# SECTION 3



## LOWER TOTAL ALKALINITY.

Water Care Startup Kit Product: **PH DECREASE**

**How to use:** Remove cover & add pre-mixed bucket of PH DOWN into the water with jets running and allow to mix for at least one 20 min timeout cycle.

SWIM SPA MODEL	JUPITER COLUMBUS ATLANTIC	JUNO TRIUMPH	SIGNATURE D MOMENTUM D CHALLENGER 19D CHALLENGER 18D	FORCE D CHALLENGER 15D HERCULES OLYMPIA	NEPTUNE TITUS	MISSOURI	SPA ZONES CHALLENGER 19D MOMENTUM D TITUS JUPITER COLUMBUS ATLANTIC
DECREASE 60PPM	1000g	850g	1200g	1100g	1400g	1850g	180g
DECREASE 80PPM	1330g	1130g	1600g	1450g	1865g	2460g	240g
DECREASE 100PPM	1660g	1415g	2000g	1800g	2330g	3075g	300g

## Balancing Calcium Hardness

**CALCIUM HARDENER** comes in granular form and should be sprinkled directly into the water. Town supply 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 swim spa and refill with fresh water with a softener.



## INCREASE CALCIUM HARDNESS

Water Care Startup Kit Product: **CALCIUM HARDENER.**

**How to use:** Remove spa cover & add directly into spa pool water with jets running and allow to mix for at least one 20 min timeout cycle.

SWIM SPA MODEL	JUPITER COLUMBUS ATLANTIC	JUNO TRIUMPH	SIGNATURE D MOMENTUM D CHALLENGER 19D CHALLENGER 18D	FORCE D CHALLENGER 15D HERCULES OLYMPIA	NEPTUNE TITUS	MISSOURI	SPA ZONES CHALLENGER 19D MOMENTUM D TITUS JUPITER COLUMBUS ATLANTIC
INCREASE 100PPM	700g	550g	950g	800g	1000g	1250g	130g

# 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 7grams.  = 1 level capful approx 115grams.		<h3>DECREASE PH LEVEL</h3> <p><b>Water Care Startup Kit Product: PH DECREASE.</b>  <b>How to use:</b> Remove spa cover &amp; add directly into spa pool water with jets running and allow to mix for at least one 20 min timeout cycle. Wait 1 Day before re-testing for accurate results.</p>					
SWIM SPA MODEL	JUPITER COLUMBUS ATLANTIC	JUNO TRIUMPH	SIGNATURE D MOMENTUM D CHALLENGER 19D CHALLENGER 18D	FORCE D CHALLENGER 15D HERCULES OLYMPIA	NEPTUNE TITUS	MISSOURI	SPA ZONES CHALLENGER 19D MOMENTUM D TITUS JUPITER COLUMBUS ATLANTIC
PH FROM 8.4 TO 7.6	230g	200g	280g	260g	320g	430g	40g

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 7grams.  = 1 level capful approx 115grams.		<h3>RAISE PH LEVEL</h3> <p><b>Water Care Startup Kit Product: PH INCREASE (Purchased separately).</b>  <b>How to use:</b> Remove spa cover &amp; add directly into spa pool water with jets running and allow to mix for at least one 20 min timeout cycle.</p>					
SWIM SPA MODEL	JUPITER COLUMBUS ATLANTIC	JUNO TRIUMPH	SIGNATURE D MOMENTUM D CHALLENGER 19D CHALLENGER 18D	FORCE D CHALLENGER 15D HERCULES OLYMPIA	NEPTUNE TITUS	MISSOURI	SPA ZONES CHALLENGER 19D MOMENTUM D TITUS JUPITER COLUMBUS ATLANTIC
PH FROM 6.2 TO 7.2	225g	190g	270g	250g	310g	415g	40g
PH FROM 6.8 TO 7.2	90g	75g	110g	100g	125g	165g	16g

# SECTION 4

# Section 4

## DRAINING & REFILLING GUIDE

## Draining & Refilling Guide

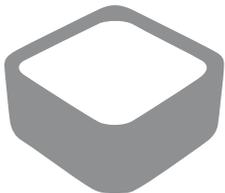
**Swim zone's should be drained every 8-12 months.  
Spa zone's should be drained every 3-4 months.**



1. **Turn off power to your swim spa.**



2. Drain the water via the drain valve located on the side of the swim spa 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.



3. Wipe down the swim spa 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. Rinse the swim spa down if required and bucket out excess water.



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



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



To keep your pipes clean and prevent build up of bacteria, use Iluka Brilliance regularly. Refer to the instructions on the bottle or contact us for info.

# SECTION 5

# Section 5

## TROUBLESHOOTING

## Common Issues

*The following problems are usually a result of a poorly maintained swim spa, with the maintenance routine suggested in this guide having been neglected. Your swim spa water will get more difficult to treat as it gets older due to build up of waste products, so remember to refill every 8-12 months.*

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### **My water is cloudy**

Cloudy water is usually a result of imbalanced water, excess personal products (Moisturiser, sun-screen, fake tan, etc) 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.
3. Give your swim spa pool a shock dose, repeat again 6 hours later if there has been little improvement.
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 caused by build up of bacteria. To prevent this from occurring, we need to maintain an optimal level of sanitiser in the water. If you are following the recommended dosage as per this guide, you may need to increase the frequency and dosage of sanitiser and/or shocking.

1. Check your filters are clean and do not need replacing.
2. Check your pH/Alkalinity levels and adjust as necessary.
3. Give your swim spa a shock dose, repeat again 6 hours later if there has been little improvement.
4. Return to your chlorine sanitising plan.

If above steps fail – consider using a product like Iluka Brilliance to help clean out the pipes in your swim spa.

Lastly, consider emptying your swim spa and refilling it with fresh water.

# SECTION 5

## **My water is foamy?**

Foamy water is usually a result of excess body oils or detergents in the swim 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.
4. Increase filter duration time (see manual for the swim spa control panel).

If the steps above 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 sanitiser.

1. Check your filters are clean and do not need replacing.
2. Check your pH/Alkalinity levels and adjust as necessary.

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

## **Dirt/Scum line around the edge of the swim spa?**

A build up of substance around the inner edge of the swim spa 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.
3. Clean line regularly with a microfiber cloth.
4. Shower before using the swim spa, remove makeup and tie up hair.

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

# Troubleshooting

## **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 pipe 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 swim spa foot-well.
4. Increase filter duration time (see manual for the swim spa control panel) and wash filters every few hours as they will be filtering out the bits.
5. Shock dose swim spa with SPA CHLORINE.

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

<b>ISSUE</b>	<b>SOLUTION</b>
<b>EXCESS FOAM</b>	Shower before use. Use anti-foam* product for immediate results.
<b>CLOUDY WATER</b>	Shock dose, filter water and/or add water clarifier* product
<b>GREEN/BROWN WATER</b>	Shock dose or add Algaecide*. Low/high pH or Alkalinity can tint water strange colours.
<b>EXCESSIVE ALGAE</b>	Algaecide* dosage, repeat twice if necessary. Drain swim spa and refill with fresh water
<b>HIGH CALCIUM HARDNESS</b>	Drain 1/4 of the water and fill with fresh water.
<b>LOW CALCIUM HARDNESS</b>	Add Calcium Hardener
<b>HIGH PH</b>	Add pH Decrease
<b>LOW PH</b>	Add pH Buffer or pH Increase*
<b>LOW ALKALINITY</b>	Add pH Buffer
<b>HIGH ALKALINITY</b>	Add pH Decrease
<b>FILTERS CLOGGED</b>	Wash with hose and soak in Filter Cleaner*

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

# SECTION 6

# Section 6

## LIST OF MODELS & LITRES

# List of Models & Litres

## Spa Litres

You will need to know the total amount of litres in your swim spa to use the charts in this guide. Consult your manual or retailer for this information.

### List of Alpine Spa Models and Litres Guide to Follow

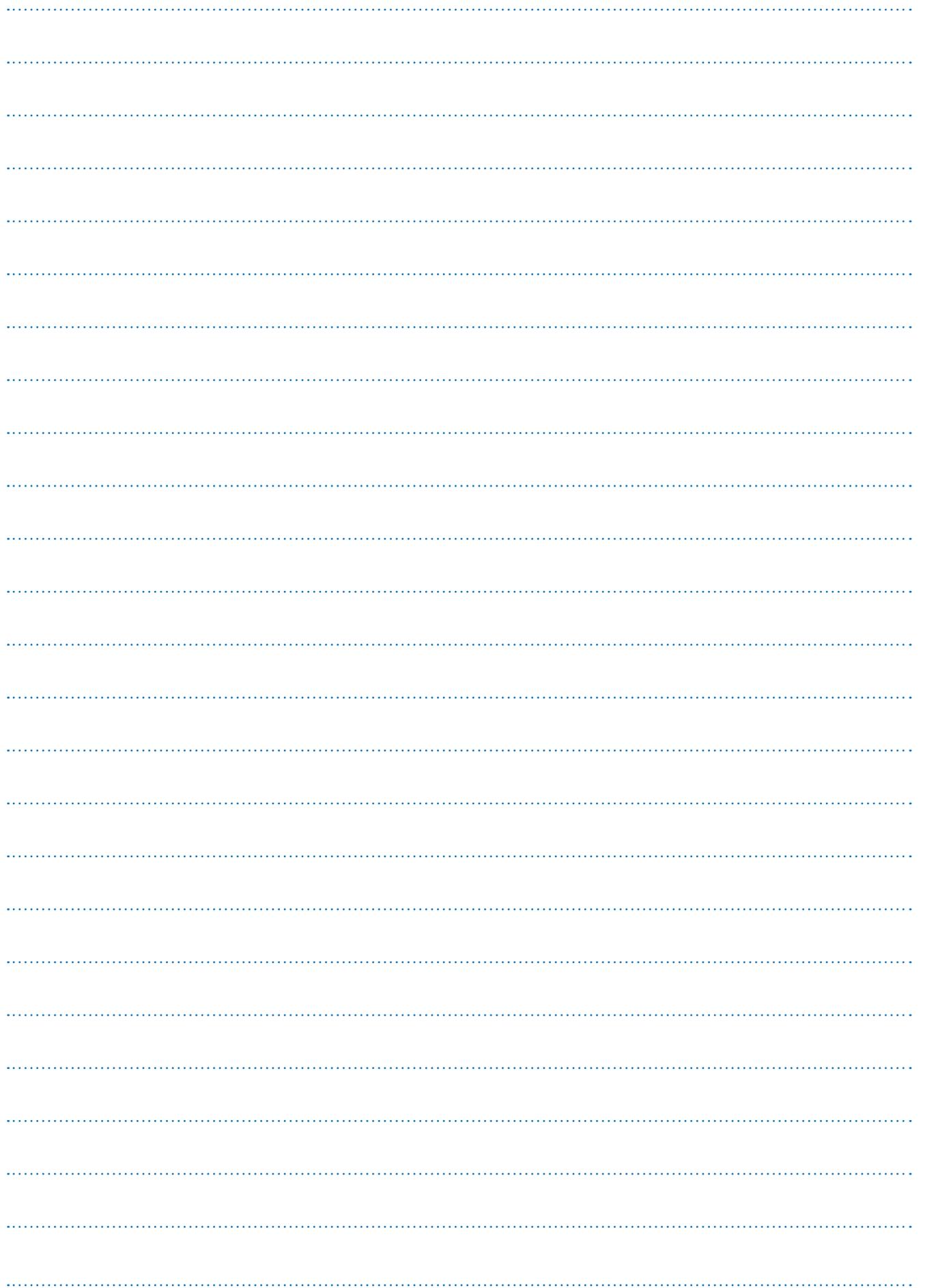
Use the below table to find your Alpine swim spa model and the corresponding litres to use as your guide. Your swim spa may have slightly more or less total litres than what is shown in the table below but rounding by 100-200 litres will not have a significant impact on water balancing.

Spa Model	Swim Spa Volume (L)	Spa Zone Volume (L)
Juno	4920	-
Triumph	5680	-
Hercules	7080	-
Missouri	10650	-
Neptune	9280	-
Titus	9000	1500
H2X Challenger 15D	7306	-
MP Force D	7325	-
H2X Challenger 18D	7874	-
H2X Challenger 19D	7610	1040
MP Signature D	7874	-
MP Momentum D	7760	1040
Jupiter	5900	1500
Columbus	6140	1500
Atlantic	6500	1000
Olympia	7325	-



Model not featured? The total litres of your swim spa may be printed on the side of your spa on a silver plaque.







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 0800 000 828

 [sales@spasupplies.co.nz](mailto:sales@spasupplies.co.nz)

 [www.spasupplies.co.nz](http://www.spasupplies.co.nz)