

A BASIC GUIDE TO

SPA POOL

TREATMENT



Spa Pool Chemical Treatment

Regular water maintenance is an excellent habit to form from the first use of your spa pool. Keeping on top of your water maintenance and correct use of your filtration and cleaning settings has the potential to significantly reduce the amount of sanitiser you need to add to your spa. To ensure a well-balanced and correctly sanitised spa pool it is vital that you have a test kit capable of undertaking the following water tests

- **Free Available Chlorine** or **Total Bromine**
- **pH**
- **Total Alkalinity**

These tests give the spa operator the information needed to maintain a well-balanced and clean spa pool. A sanitiser removes harmful bacteria and is essential for clean and safe water. Users may choose between a rapid acting sanitiser (**Spa Master Super Chlor**) or slow-release option (**Spa Master Bromine**) Water hardness levels are also important, but not tested for with standard test kits, it may be necessary to increase soft water hardness levels using **Spa Master Water Hardener**. Calcium hardness relates to the levels of minerals in the water. If the level is too low, the water will eat away at anything possible to get the needed minerals. If the mineral level is too high, scaling or calcium deposits will form.

Recommended Water Quality Criteria

Criteria or Test	Recommended Result	Most Desirable Level
pH	7.2 – 7.6	7.5
Free Chlorine	2 ppm – 4 ppm	3.5 ppm – 4 ppm
Total Bromine	2 ppm – 4 ppm	3 ppm
Total Alkalinity	80 ppm – 150 ppm	120 ppm
Calcium Hardness	80 ppm – 150 ppm	120 ppm

Note:

- ppm – parts per million as shown on your test kit
- Avoid testing immediately after a chlorine shock dose as high chlorine levels can alter test kit accuracy

Water Testing

pH and Free Chlorine / Total Bromine levels should be tested prior to use and adjusted accordingly. Testing can be carried out using either simple dip test strips or a tablet/dropper type test kit. The main jet pump/s should be running while dosing chemical to ensure rapid mixing and to avoid chemical remaining on the spa pool surfaces - let the pump/s run for one full turnover (around 10 minutes) in between chemical adjustments and before using the spa pool.

Shock Dosing Treatment

Where a spa pool is under continuous heavy loading, a minimum free available chlorine or total bromine level of 3 ppm should be maintained at all times. Shock treatment should also be carried out at least weekly to break down organic contaminants and unwanted chlorine products. A shock treatment is a single large dose of either **Spa Master Super Chlor** or **Spa Master Oxygen Shock** (20g per 1,000L of water). Due to the higher than normal levels of sanitisers after shock treatment, use of the spa pool should be avoided for 12-24h following treatment for comfortable use. Your pool likely is due for a shock treatment if you experience any of the following:

- **Loss of clarity**
- **No chlorine reading for extended periods**
- **After heavy loading**
- **Presence of chlorine aroma (indicates high chloramines)**
- **Change of water colour**

Additional Treatments

- **Spa Master Defoamer** can be used to remove excess foam or bubbles, commonly caused by moisturisers and excess shampoo
- **Spa Master Spa and Pool Clarifier** removes fine particles to produce clear sparkling water
- **Spa Master Spa Kleen** added prior to a water change helps clean pipes, jets and pumps

Spa Pool Loading - The number of uses per day

Spa pools can have heavy loading due to the comparatively small water volume and large number of bathers per day. If the spa pool water is not treated correctly, considerable numbers of disease producing and other microorganisms will accumulate, particularly in the surface layer of the water. Loading factor is also compounded by:

- **The close proximity of bathers in the spa pool which could allow the transfer of germs from a carrier to another person sitting next to the carrier. Consequently, there is only a short period of time in which to sanitise the water.**
- **The warm temperature of spa water promotes bacterial growth**
- **The fast transportation of germs throughout the spa because of rapid water movement**

It is therefore evident that the proper chemical treatment and efficient filtration must work together. The filter should operate for a minimum of three hours each day.

Change of Water

Water should be changed a minimum of every six to twelve weeks in private spa pools. Every six weeks is recommended for heavy loads, twelve for lighter use. The filter cartridge should be cleaned every 4 weeks with **Spa Master Cartridge Cleaner**. Changing the water is the only way to remove finely dissolved solids. Spa pool water should be changed if the following cannot be resolved with shock dosing

- **Loss of clarity**
- **Presence of Aromas**
- **Change in water colour**

Recommended Startup Treatment Procedure

- **Fill spa to slightly above the recommended line or where the skimmer operates most effectively.**
- **Turn the main jet pump/s on for dosing chemical - let the pump/s run for one full turnover (around 10 minutes) in between chemical adjustments.**
- **Test for total alkalinity and adjust with **Spa Master Alkalinity Up** (125g will raise total alkalinity approximately 80 parts per 1000L of spa water).**
- **When total alkalinity has been adjusted to 120 ppm, test and adjust pH to 7.5. Use **Spa Master pH Decrease** to lower (30g per 1000L will decrease reading by 0.6 parts) or **Spa Master pH Increase** to raise (30g per 1000L will increase reading by 0.6 parts).**
- **Depending on test reading, at start up, add **Spa Master Water Hardener** (100g will raise water hardness approximately 80 parts per 1000L of spa water).**
- **Add an initial dose of your chosen sanitiser - either 20g of **Spa Master Super Chlor** per 1,000L of water OR load your adjustable bromine dispenser with 2 tablets of **Spa Master Bromine** per 1,000L of water. A floating dispenser must be used for bromine tablets - when placed into the filter basket there is a high risk of damage to your pumps and filtration system over time.**
- **After the startup chemical treatments, the level of free chlorine should be allowed to come down to below 5 ppm before use for comfortable use.**

Depending on the size of the spa pool, filtration cycles will vary. Most spas will require a minimum of 3 hours of filtration a day. Every spa pool varies for one to another regarding chemical demand. You will become accustomed to your own spa and know what quantities of chemicals are required to make necessary adjustments.

Spa Master Chemicals



Super Chlor

An effective and convenient aid to prevent growth of bacteria and algae.



Bromine

A dissolving product suited to spa pools. Sanitises bacteria and algae.



Water Hardener

Used to raise the water hardness level to help prevent the corrosion of pump and heater parts.



Oxygen Shock

Removes odours and oxidises organic contaminants with an effervescent water clearing action



pH Decrease

pH is a scale measurement of the acidity of the water. 7.2 - 7.6 is the range in which chlorine is most effective as a sanitizer.



Spa and Pool Clarifier

Use when your pool is balanced but not sparkling or to remove mild cloudiness from your spa.



Alkalinity Up

Alkalinity is a measure of the waters ability to absorb pH balance.



Cartridge Cleaner

A concentrated cleansing solution for the removal of dirt, oil, body fats, grease and film from filter cartridges and bag filters.



pH Increase

pH is a scale measurement of the acidity of the water. 7.2 - 7.6 is the range in which chlorine is most effective as a sanitiser.



Defoamer

Breaks down foam caused by introduction of soaps, and air agitation of body fats and oils.



Spa Master Chemical Spa Pack

Complete chemical pack to suit your spa pool requirements.



Spa Kleen

A concentrated cleansing solution for your pipes, jets and pumps