

# SPASA FACT SHEET No. 10

## SPA POOL MAINTENANCE.....

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If you own a spa pool or hot tub, it is important to understand that it requires a certain amount of owner maintenance to ensure it operates properly and that the water remains clean and healthy.

The water treatment requirements for a spa pool differ from those for a swimming pool, because you are dealing with hot water. Hot water requires different treatment to prevent the growth of viruses, bacteria and algae.

The correct use of chemicals will maintain the water in a clean and healthy condition. The parameters that need to be regularly checked are, total alkalinity, pH and sanitiser (Chlorine or Bromine) level.

Your spa retailer or local SPASA pool shop should be able to supply a suitable test kit and advise on its correct use. It is advisable to test the water on a daily basis.

### Special note:

Do not mix chemicals

Do not add water to the chemicals, **only** add chemicals to the water

## CHANGING THE WATER

The spa water should be changed every three to four months, or remove and replace approx 30% or 1/3 of the volume of water every three to four weeks.

## TOTAL ALKALINITY

The total alkalinity should be in the range of 90 - 150 ppm (parts per million). A spa or hot tub with low total alkalinity would require constant adjustment of the pH.

To raise total alkalinity, add sodium bicarbonate in small quantities. To lower the total alkalinity, add acid (Hydrochloric Acid) in small quantities. Test in one hour.

## THE pH LEVEL

pH is the measure of the acid/alkaline level of the water. It is important to maintain the correct pH level as it effects the action of other chemicals.

The pH is measured on a scale of 1 to 14. Seven is neutral, below seven is acidic, and above seven is alkaline

Incorrect pH levels can cause poor chlorine or bromine efficiency, eye and skin irritations, corrosion of metal fittings, cloudy water and formation of scale on the pool walls and fittings. The pH should always be above 7.0 (measured at room temperature, not hot) to avoid possible corrosion of equipment. However, it should not be higher than 7.8, as this would reduce the efficiency of the sanitiser.

If the pH level needs to be increased, add soda ash; to reduce the pH level, add acid. Wait for one hour and test again.

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## SANITISING THE SPA

Sanitising your spa is essential for safe, healthy water, free of harmful micro-organisms. The most common forms of sanitiser are chlorine and bromine. Ozone may also be used, but because there can be no residual, chlorine or bromine must be used in conjunction with it. Salt Water Chlorinators must be of sufficient capacity to maintain the recommended chlorine residual.

The amount of disinfectant required depends on a number of factors, including, water temperature, the frequency of use and the number of people using the spa. It is most important to always keep the sanitiser level at 2.00 to 3.00 ppm. In very hot water the sanitiser can be used up very quickly, and should be checked regularly whilst the spa is being used.

After heavy use of the spa or on a weekly basis, the water should be shock dosed with chlorine or bromine. Be sure to check the level again before use.

If the spa or hot tub is not being used, add sanitiser every day to prevent contamination.

### RECOMMENDED LEVELS

* Total alkalinity	90 - 110 ppm
* pH	7.4 - 7.6
* Chlorine	2.00 - 3.00 ppm
or	
* Bromine	3.00 - 4.00 ppm

It is important to note that if the right pH and sanitiser levels are maintained, viruses and bacteria should not survive in the water.

In terms of general hygiene, it is important to keep the filter and pump clean. Clean the filter regularly and empty hair and lint from the pump as often as required.

### FOR SAFE AND ENJOYABLE USE

- Children should be supervised at all times when either in or near the spa or hot tub.
- Alcohol should not be drunk while using the spa.
- Be sure the temperature does not exceed 40 degrees. An ideal range is 35 to 38 degrees.
- Spa use should be restricted to approx 20 minutes to avoid heat stress.
- If you have any physical ailments you should see your doctor before using the spa or hot tub. People with heart or blood pressure problems and pregnant women should seek a doctors permission before use.
- Do not put your head under the water
- Store chemicals in a cool dry place, OUT OF THE REACH OF CHILDREN.

For further information on building, renovating or maintaining a pool, contact;

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