



TAURANGA POOL & SPA

Aquarius Spas

143 Totara Street, Mount Maunganui,

Tauranga, Bay of Plenty, New Zealand, 3116

How to Balance Hot Tub Water

Balancing your hot tub water is the most important thing to do if you want to maximize the life, efficiency and enjoyment of it.

Each time you go in and enjoy time in the tub, you are making changes to the water which can lead to the growth of bacteria or affect the overall comfort.

When changes have happened to water in your hot tub we call this is out of balance, such as when alkaline levels get too high, this can cause the walls to erode and permanently damage equipment and other parts of your hot tub. To avoid this use test strips to check the water, then follow the steps below to balance your hot tub water.

Step 1: Check pH Levels

Hot tub pH is often considered to be the most critical component of balanced water. By measuring the pH, you can take the appropriate action to rebalance your water and prevent your hot tub from being damaged. Heating elements, pump seals, and the internal workings are sensitive to both extremes of high or low pH.

High pH

- Promotes growth of bacteria
- Creates cloudy water
- Decreases effectiveness of **filters**
- Irritates eyes and skin

Low pH

- Promotes growth of bacteria
- Corrodes metals and equipment
- Irritates eyes and skin
- Stains or etches plaster

You should test the pH level in your hot tub using test strips

The ideal pH level for hot tubs ranges from 7.2 to 7.8. If the pH is too high, you can add PH decrease to bring it down. If the pH is too low, Use PH increase to bring it up. However, to ensure levels maintain a steady rate without requiring you to add chemicals too frequently, you have to manage alkalinity.

PH increase will raise your PH level

PH decrease lowers both PH and Alkalinity

Step 2: Manage Alkalinity

The total alkalinity is critical for maintaining a balanced pH level. There is a difference between total alkalinity and pH.

If the alkalinity is too low, it can cause drastic fluctuations in pH readings.

This is also the cause of hot tubs eroding and promoting the growth of algae. .

Alternatively, if the alkalinity is too high, it can result in unhealthy water because it impacts the ability of chlorine/Bromine/ sanitisers to combat algae and bacteria. This can also affect the calcium levels and create a hard, crusty layer to form.

To avoid these problems, manage alkalinity at levels between 80 to 120 ppm.

PH buffer will raise your Alkalinity level

PH decrease lowers both PH and Alkalinity

Step 3: Maintaining Water Hardness

Water hardness is often associated with the amount of calcium in your hot tub. If the calcium in your hot tub is too high, it can lead to cloudy water. If too low, you may see foam on the water's surface or the metals eroding.

You want to have some calcium in your water to maintain some hardness. Without calcium, the metals in your heating unit, pump seals, and other parts will be drawn into the water (i.e. copper, aluminium, and iron). This is the process of erosion.

To maintain your water's hardness, you can use Calcium hardener to increase the calcium in your water. Water in Tauranga is very soft, ideally, you want calcium levels between 250 to 450 ppm.

Calcium Hardener raises water Hardness

Step 4: Add Sanitizing Solutions

Finally, to maintain balanced hot tub water you'll want to have the right amount of sanitizer to prevent bacteria and viruses.

We recommend

Chlorine granules

Chlorine granules can easily be sprinkled into the spa when necessary to help maintain a level of 1 to 3 ppm

Bromine Tablets in a floating dispenser

Bromine is our most popular choice added to hot tubs to maintain healthy waters. If you choose to use bromine, the ideal levels are between 2 to 6 ppm.

Simple silver

Will balance your water for you, PH, Alkalinity, hardness and sanitiser are all done with a single permanent tablet which lasts 12 months. **(Filters must be cleaned weekly and replaced twice annually)**

Shock sanitising your tub

Regular use of your spa or use with a lot of people at a time can cause the sanitisation to drop below the recommended levels.

When this happens, you may notice the spa water has lost its clarity, or turned cloudy.

At this point a shock tablet or granules will give a needed boost to the spa and clear the water.

If this is happening regularly a weekly shock is not uncommon, and you may need to consider raising your sanitisation level to the higher end of the allowed range, cleaning the filters more often and possibly running the filtration cycles for longer.

Shocking a spa can eliminate unwanted odours and reduce irritating contaminants. This can also help to remove built-up waste and maintain clear, balanced water.

Keep water balanced – **check test strip (minimum weekly)**

Run your spas filtration for 6 hours per day (minimum)

Clean filters – **every 1 -2 weeks (replace annually Minimum)**

If your water is cloudy – repeat the above

A usual home spa chemical cabinet should contain

Bromine tabs

Shock tabs

PH buffer

PH decrease

PH increase

Calcium hardener

Insta test strips

Filter cleaner solution

(approx. \$130)

If you are stuck or need help pop in or give us a call.

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