

Liquid Lithium Cheat Sheet

Water in your Spa should only be treated for anywhere from 1-3 months, after which the water should be dumped and re-filled with new tap water and repeat the initial start-up procedure. This is due to the high build-up of oils, hair & skin product, dissolved salts, etc.

Always add chemicals to water and never the other way around. We recommend at least the circulation pump to be running when adding chemicals. Leave air blower off. For dry chemicals, dissolve into a bucket with water. Liquid Lithium has a built-in measuring device.

- 1 Teaspoon = 6-8 grams Approx.
- 1 Tablespoon = 18 grams Approx.

THINGS YOU NEED:

Essentials:

- Liquid Lithium Sanitiser Sanitizer. Kills microbes. Heat resistant. Very mild chlorine.
- Spa Shock Chlorine-free shock. Destroys used chlorine & dead microbes.
- SpaCare Minerals Magnesium Minerals. Softens water. Relaxing and makes water feel amazing.
- Alkalinity Increaser Raises pH & Total alkalinity.
- 3 in 1 Test Strips or 5 in 1 Test Strips

Additional Products:

- Water Hardener Helps prevent corrosion.
- **pH Reducer** lowers pH
- <u>Bio-Klenz</u> Helps prevent biofilm and scum forming in the pipework. Add to water Monthly.
- Instant Filter Klenz Spray on filters to remove oils, grease, fats
- System Klenz Used to degrease pipes before emptying spa and refilling
- No More Foam add to prevent bubbling and foaming of water. Use sparingly!
- Spa Vacuum Telsa 05 or Vektro Mini for smaller spas / Telsa 30 or Vektro V200 for swimspas
- Spare Filters (optional) We have all types listed on our website. Buy multiples to save \$\$.

What to Add / How to Adjust Chemical Ranges:

Total Chlorine (Used & Free chlorine combined): If High = (but Free Chlorine is low), add Shock Right Plus and run blower with lid off. May need to drain and change some water.

Free Chlorine: If low = Add Liquid Lithium \leftarrow 2-4ppm \rightarrow If high = Open Lid or Change water.

pH: If low = Add Alkalinity Up \leftarrow 7.2-7.8 \rightarrow If high = Add pH Down by the teaspoon.

Total Alkalinity: If low = $Add \ Alkalinity \ Up \leftarrow 120-200ppm \rightarrow If \ high = Add \ pH \ Down \ by the teaspoon.$

Re-Test Water a couple of hours after adding chemicals. If you notice that it appears you are using more Theralux Shock & Swim than normal, you may need to drain some water, and top up with new water. We recommend emptying and refilling once every 6 weeks.

SETTING YOUR SPA UP FOR USE:

STEP 1: FILL YOUR SPA

- Try to use fresh water, rather than tank water
- Fill through the skimmer to ensure pumps can prime easily.

STEP 2: Add Start-Up Chemicals

- Run all Jets, but not the Blower
- Alkalinity Increaser: 300 grams per 1000 Litres, then wait 1 hour
- Liquid Lithium Sanitiser: 80mLs per 1000 Litres
- Spa Shock: 30 grams per 1000 Litres

STEP 3: SANITISING YOUR SPA (Daily or As Needed)

- **Daily or As Needed:** Add Liquid Lithium Sanitiser approximately 20 minutes before you get into your Spa. 40mL per day per 1000L may be suitable, but check regularly to maintain 2.0-4.0ppm Free Chlorine
- **Weekly:** Add a "double-shot" of Liquid Lithium Sanitiser, plus 30 grams of Shock Right Plus

Extra Steps: Usually Monthly

- Clean Filter Cartridges with Instant Filter Klenz, or Spa Bath & Cartridge Clean.
- Add 250ml Bio-Klenz to the water and run jets. This helps prevent build-up in pipes.

We recommend draining a *well-used 1000-litre spa* every 6-12 weeks, <u>or</u> when it seems you are using more sanitiser than normal.

NOTE THIS IS A GUIDE ONLY AND YOU MAY HAVE TO USE MORE OR LESS FROM TIME TO TIME

The daily dose suggested above is a guide only and is based on 2 people using the Spa 2-3 times per week.

Every spa is different, and setups and equipment can be different. This is only a guide.

This might be very new to you. Do not be overwhelmed, you'll just "get it" over time. ©



TROUBLESHOOTING & NOTES:

- Foamy Spa: the foam is due to detergents left over in clothing. It can be exacerbated by high pH. Add a cap or two of Anti-Foam. Use sparingly, as it can block filters. If foam persists, empty and refill spa.
 Cloudy Water: Check pH and Total Alkalinity and adjust if necessary. Try to Avoid using any type of clarifier from a pool shop. This is only a mask and will end up clogging up your filters and coating the inside of the spa pipes.
 - If Chlorine Levels are low, double or triple your normal Liquid Lithium and Add extra Shock Right Plus dose. Run pumps & filter until water clears up. Check sanitizer levels.
- Bad Odour & Cloudy / Murky / Smelly Water: Check pH and Total Alkalinity and adjust if necessary.
 Clean filters
 - If Chlorine Levels are low, double or triple your normal Liquid Lithium and Add extra Shock Right Plus dose. Run pumps & filter until water clears up. Check sanitizer levels.
- **Filters Blocking Easily / Quickly**: Soak filters in a degreaser and clean thoroughly. Many pool shops sell various clarifiers and 'combination chemicals' that include clarifiers. Clarifiers mask water issues and will cause the filters to get sticky and block more quickly.
- Remove cover during warmer months to let it dry out. Spa covers have a life span before water penetrates the Styrofoam through osmosis. This is impossible to avoid. It can happen in as little as two years. Do not leave cover face-up in direct sunlight.
- **Blue Water or Blonde Hair turning Green** This is caused by Copper in the water. If you have a gas heater, and notice a blue tinge to the water, this is likely due to water out of balance, and is stripping copper from the heat exchanger.

OTHER MAINTENANCE:

Annually:

 Your spa should be professionally serviced by a qualified person with electrical & plumbing qualifications, *NOT* a "Pool Guy." 99% of Pool technicians have no electrical or plumbing qualifications or licenses.

6-12 Monthly, depending on use:

Degrease and empty your spa to clean out all pipes of oils and freshen up the water.



WARNINGS: (This list is not exhaustive)

- All Pools & Spas must have a Resuscitation (CPR) chart visible near the spa. We have them
 available online or in-store.
- *** EXTREMELY IMPORTANT *** Make sure your spa is on an RCD (Residual Current Device or "Safety Switch). This is extremely important. If unsure, ask us. If you don't have one, we can organize one for you. This is a potentially life-saving device and is required by law. Many older spas and some newer ones are installed without this.
- *** EXTREMELY IMPORTANT ***- Pregnant women should not use a Hot Spa.
- *** EXTREMELY IMPORTANT ***- Hyperthermia (overheating) can occur after long periods in a hot spa. Drink plenty of fluids when using the spa. Get out after a reasonable time.
- *** EXTREMELY IMPORTANT ***- Alcohol effects may not be noticed while sitting in the spa, but the physical effects such as fainting, light-headedness and blood pressure changes are very real problems with alcohol and hot spas.
- *** EXTREMELY IMPORTANT ***- Anyone with heart conditions, high or low blood pressure, persons on medications, etc should consult a Doctor before using a spa
- All spas in Victoria must have pool safety barriers around them.
- Low pH & Total Alkalinity (typically with Bromine usage) is the biggest cause of damage to spa electric & gas heaters. It also damages mechanical seal faces and corrodes the backs of jets. It can also damage the acrylic shell beyond repair. NEVER let a Pool Shop sell you Bromine and tell you that's "all you have to add." It is often sold by Pool Shops due to ignorance and ease of use. Any spa expert or equipment manufacturer will tell you the same. Many Warranties are void when Bromine is used or misused.
- Never use Pool Chlorine for similar reasons above and due to it being far too strong for a spa. Some forms are also very acidic. Chlorines containing Trichloroisocyanuric acid *will* damage your spa. Trichlorisocyanuric can destroy a gas heater or pump seals within weeks. Trichlor is generally sold as a Pool Tablet or Powder. Cheap Calcium-based chlorines will also damage a spa and equipment.
- **Don't let children or adults repeatedly press buttons on touchpads**. This can cause pumps to spin backwards or shorten the life of equipment.
- **Keep ears above water** if possible, due to the jets being able to force water deep into the ear cavity.
- Never put weight on spa cover.
- Always fill your Spa from the filter box to avoid pump air locks.
- Only wear clothes in your Spa that have been rinsed in water and don't contain residue washing powder.
- Make-up, Fake Tan, etc can clog filters and stain your spa. Fake tan can also penetrate the porous headrest pillows and cannot be cleaned.
- Leaving a spa empty and dry can cause seals to shrink and dry out. Always keep spa full & well-balanced.
- **Do not leave spa exposed to sunlight for very long periods**. Sunlight will cause acrylic liner to crack & blister. An uncovered spa shell can reach temperatures of +80°C. The same goes for all plastic fittings.