

GENERAL START-UP AND CHEMICAL BALANCING

IMPORTANT INFORMATION

Only fill the pool with fresh clean town water do not use Bore Water or re cycled water

Balanced water is essential for the long-term health of your pool and equipment. Unbalanced pool water will end up costing you time and money. If your chemical levels are too high/low, the water will attack your pool lining and equipment. On the other hand, if you're overusing chemicals it could lead to scale formation on the surface of your pool and on your pool accessories. It can also affect the sanitisation process. Talk to your local pool shop about balancing your pool water, most offer a free water testing service.

INITIAL START-UP PROCEDURE

Leave the hose running continuously, **DO NOT** turn it off until the water is half way up the skimmer box.

When the floor of the pool is approximately half full with water **ADD START UP TECH** (GEMTEX WILL SUPPLY THIS). This will help prevent calcium build-up; your pool is most vulnerable to calcium during the early start-up period. Start Up Tech is an additive that helps keep dissolved minerals, in their liquid form and prevents them from solidifying and causing 'scaling' on the interior surface and tiles. Start Up Tech is available from most pool shops.

Please refer to the instructions on the packaging for the dose rate and frequency required.

DO NOT enter the pool or walk on the fresh render for a minimum of 36 hours.

AFTER 18-24 HOURS turn the filtration system on and balance the PH levels, in most instances you will need to add acid to the pool water. Also at this time be sure to give the tiles, walls and floor a light brush down at least once or twice each day for 14 days to remove any calcium build-up on the interior surface. After brushing allow the residue to settle then manually vacuum up and backwash the filter. Repeat periodically during the normal cleaning process.

Once the pool has filled to half way up the skimmer box and stabilised for a 1-2 days , **if it is a salt water pool** run the pool on chlorine and acid **ONLY** for the first 2 weeks; after 2 weeks add the salt and any other chemicals that may be required and ensure the water is chemically balanced. **DO NOT ALLOW** the salt or other chemicals to sit un-dissolved on the pool floor they must be dispersed fully into the pool water.

DO NOT allow leaves, dirt, wood chip, pine bark or contaminants of any kind to sit on the interior as staining can occur and become difficult to remove.

DO NOT allow your pool to overflow or remain overflowed as this will cause problems with your waterline tiles and coping.

We recommend the fitting of an overflow to the rear of the skimmer box and drained to a suitable drainage point

With all pebble or bead linings it is part of the process that some loose pebble/bead particles will accumulate in the pool and the skimmer box during the initial stages as the lining is brushed down.

This will be filtered out over the first few weeks and is normal.

If you are unfamiliar with pool water balance it's a good idea to engage a professional from your local pool store to help you with this initially; either in-store or on site.

For hygienic trouble, free use of your pool, it is essential to keep the pool water chemicals in balance at all time's **summer and winter**. Records must be kept as these will be required in the event of a claim.

DEFINITIONS

Sanitising Pool Water - As the pool or spa owner it's important that you constantly maintain the health of your pool's

water through correct pool water sanitation. Sanitising pool water keeps it free from harmful bacteria like Cryptosporidium, Giardia or E. coli, which can grow easily in untreated pool water. Most bacteria are transferred from swimmers, animals and debris such as leaves and bugs.

Pool Water Balance - Maintaining the correct water balance in your pool prolongs then life of the interior finish, exposed metal and equipment. Left unbalanced, pool water may eventually corrode your pool plumbing and equipment, and cause scale formation pitting and delamination. The main factors that contribute to water balance are total alkalinity, pH, calcium hardness and temperature. And the correct levels must be maintained at all times. We recommend testing the water balance at minimum weekly intervals preferably more frequently in wet or hot weather.

Total Pool Water Alkalinity - Total pool water alkalinity is the measurement of all the chemicals in your pool water that resist pH changes. Alkalinity can be added to your pool with the addition of sodium bicarbonate. As the total alkalinity is affected every time the pH level is adjusted, it's necessary to periodically monitor both factors to ensure your pool alkalinity is within the correct range.

Pool pH levels - pH levels refer to how acidic or alkaline your pool water is. Pools with unbalanced pH levels will cause skin and eye irritations, and reduce the effect of chemicals such as chlorine and will cause the deterioration of your pool interior.

Calcium Hardness in Pool Water - Calcium or water hardness refers to the amount of calcium and magnesium in pool water. If your pool water's hardness is too low, it will dissolve the calcium from your pool's cement/render causing the interior to pit and delaminate. If the hardness is too high, it will eventually cause calcium scaling on the surface.

Pool Water Temperature - Higher temperature pool water will speed up the chemical processes in your pool water, including chlorine decomposition and bacteria growth.

TESTING YOUR POOL WATER

Testing your pool water can be done with a pool kit purchased from your local pool store professional. It is advisable to, calibrate your test kit or purchase a new one at the start of every swimming season, check which type is recommended and works best with your pools chlorination type.

There are four tests that you should do regularly:

Testing Pool Alkalinity - You should conduct a total pool alkalinity test, before any other tests are performed. It is measured in 'parts per million' – you should aim to keep your alkalinity levels between 80 – 120 PPM.

Testing Pool pH Levels - The pool pH scale runs from 0 (acidic) to 14 (basic), where 7 is considered neutral. The optimal pH range for a pool is 7.2 - 7.6.

Testing Pool Chlorine Levels - Chlorine is a sanitiser that controls the growth of bacteria and algae in your pool. In the pool water, chlorine exists as free chlorine and combined chlorine.

When buying a pool chlorine test kit, look for one that shows its readings as parts per million (PPM). When testing your pools water, test for both free chlorine and total chlorine (the sum of free and combined). Your free chlorine level should be between 1.0 – 3.0 PPM.

Calcium Hardness Test - The calcium hardness test measures the calcium concentration in your pool. Take a sample of your water to your pool professional; they can test it for calcium hardness and total dissolved solids. Your calcium hardness level must be between maintained between 180 - 250 PPM.

INFLUENCES ON WATER QUALITY

Rain and lightning - Contaminants can be introduced to your pool water from rain run off and air pollution. These contaminants can alter the pool's chemical levels, effecting the water balance and sanitation. Lightning does not affect the water's chemistry, but it is advised that you do not swim during storms.

Bore water - Using bore water may stain your pools. You can try to stop this staining by using metal-sequestering agents,

otherwise known as chelants, or metal out.

Pool blankets - A pool blanket allows more of the heat absorbed by the water to be retained when it gets colder which can have an effect on water balance and chlorine decomposition.

Winter Maintenance - Summer or Winter your pool water and equipment should still be maintained and balanced. If your unused pool is allowed to go unchecked, it can cause staining amongst other problems, and will be costly to restore.

THE BEST TIME FOR POOL TESTING AND TREATMENT

Run your pump and filter for at least 30 minutes before sampling and testing your pool water balance. Add the required total alkalinity chemicals/hardness chemicals on the first day. On the following day, repeat the testing process. Continue adjusting your water's balance until it is in the right ranges. Adjust your pH on the following day. We suggest that you collect your sample water at the same time and location as previously collected. Adjust your pool levels slowly and give them time to take effect and settle.

EQUIPMENT MAINTENANCE

Swimming pool maintenance and preventative action is the key to a long and healthy pool life.

Regular Pool Maintenance - Inspect your pool for cracks in the tiles, surface or liner. Check the skimmer and skimmer baskets for any cracks or splits. Go over your plumbing and valves, looking for signs of wear or leaking.

Seasonal Pool Maintenance - Inspect the automatic pool cleaner body and hoses for leaks and cracks. Recheck the automatic pool cleaner wheel rotation and water flow. Make sure the pool pump is working properly and not making unusual sounds. Check the pool pump basket for cracks.

Automatic Pool Cleaners - Run your pool cleaner 1 – 3 hours per day. Straighten your pool hose – disconnect the hose and lay it straight in the sun. Don't coil the pool hose. Use the pool pulse to measure the flow in your pool, as outlined in your owner's manual.

Pool Chlorine Generators - Check regularly for calcium build up – Even reverse polarity (self-cleaning) salt cells require manual cleaning from time to time. Check the cell for any debris or calcium (or scale) deposits and use phosphoric acid to remove build-up. Only use refined salts when adding salt to your pools water. Common salt stains pool surfaces. As it does not evaporate like chlorine, salt is generally only required at the start and end of the swimming season. The ideal salt concentration is 4000 PPM. Don't allow your salt level to fall below 3000 PPM as this can damage your chlorinator.

Pool Blankets - A pool blanket allows more of the heat absorbed by the water to be retained when it gets colder which can have a significant effect on water balance and chlorine decomposition. If you have a pool blanket on your pool during winter reduce the output of your chlorine generator, remove your cleaner from the pool and store it with the hose laid flat.

SPA WATER MAINTENANCE

Although there is less water in a spa than a pool, that doesn't mean a spa needs less care. Actually a spa requires more specialised water treatment to keep it sparkling, clean and healthy.

Spas and Pools are both filled with water and need to be tested and treated regularly, but that's where the similarities end. Understanding the uniqueness of a spa or hot tub - its higher temperatures, smaller volume, jetted water and the likelihood of high bather loads are important to establish a proper testing and treatment regime.

Typically, hot water combined with jet action encourages the release of bodily wastes and bacteria growth. Hot water and high bather loads leads to your sanitiser being used up which allows harmful bacteria to thrive.

WATER BALANCE LEVELS

The figures below should be used as a general guide for water balance levels and how often you should test the levels for the first month:

CHLORINE 1.0 - 3.0 PPM Test the Chlorine levels weekly, and adjust if required. Chlorine is crucial in maintaining the health of your pool water. Most bacteria are transferred from swimmers, animals and debris such as leaves and bugs.

PH 7.2 - 7.6 Test every day for the first week, every second day for week two, then every third or fourth day for weeks 3 and 4. Your pH will rise rapidly over the first month, to lower pH add hydrochloric acid as required. When adding acid, it is best not to add more than half a litre at a time. If you need to add more than half a litre, add it in equal amounts, one hour apart. Ensure that the acid is well diluted in water before adding to your pool, then spread the diluted mixture evenly over the entire pool. The reason for this is that acid is far heavier than water and will sink to the bottom of your pool and may have a detrimental effect on the surface.

TOTAL ALKALINITY 80 – 120 PPM Test Total Alkalinity weekly and adjust as necessary. If Total Alkalinity is lower than 100 PPM (parts per million), increase within recommended levels by adding total alkalinity increaser (refer to pool shop for detailed information)

CALCIUM HARDNESS 180 - 250 PPM Your calcium hardness should be tested regularly for the first 4 weeks and add if required, but the levels will increase over the first few weeks as the cement in your concrete shell and in the Gemtex render cures.

AFTER THE FIRST 4 WEEKS Test pH level, Total Calcium Hardness and total alkalinity on a maximum weekly basis and balance to the levels recommended, and add hydrochloric acid and total alkalinity increaser as required. Also, regularly clean the walls and floor of your pool with a nylon pool brush, this will help prevent chemical and mineral build-up and the growth of algae.

If you are a first-time pool owner or are unfamiliar with water balancing, we recommend seeking the advice of your local pool supplies professionals. Most offer a free water analysis service (either instore or onsite), and can supply the necessary chemicals and offer assistance with water balancing. For hygienic trouble, free use of your pool, keep the chemical levels in balance at all times.

EMPTYING YOUR POOL Always seek professional advice before emptying your pool. Once emptied the Hydro Valve must be released immediately and remain released for the duration the pool is empty. Gemtex recommend the pool only be left empty for a short period and be re filled as soon as possible.

INFORMATION IN THIS DOCUMENT IS A GUIDE ONLY, REMEMBER TO ALWAYS OBTAIN ADVICE FROM YOUR LOCAL POOL SUPPLIES PROFESSIONAL BEFORE ADDING ANY TREATMENT TO YOUR POOL