



USE & CARE

FOR
FIBERGLASS
SWIMMING
POOLS

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THANK YOU!



Thank you for your purchase of a fiberglass pool. We're excited to have you as part of the largest pool family in the world. We hope that our pool will bring lots of joy into your life. You are now over the installation part of your fiberglass pool, and it is now the time to review a few things regarding the maintenance of your staycation.

The primary focus of the Use and Care Manual for Fiberglass Swimming Pools is on pool care and maintenance. This package also includes important safety advice for all PENTARM POOLS customers. It is critical that you read and understand this Handbook for the safety of yourself, your family, and your visitors.

IMPORTANT SAFETY INFORMATION



Your fibreglass pool, like everything new, will be "showcased" to your family, friends, and neighbours. What's to stop you? You're rightfully proud of your pool and want everyone to see it. Yes, you might want them to have a swim in it. If you want to keep your pool private and avoid it becoming a community "swimming hole" you should consider creating some pool rules and regulations.

Before drafting your pool rules, please consider the following safety factors.

1. Diving and sliding head first into water causes more paralysis injuries than any other sport.

2. Drowning is the second most common cause of death due to an accident and is only second to traffic accidents in terms of frequency.

3. The most likely victims of diving accidents are young adults and children of adult height and size (5'-2" and weighing more than 120 lbs.). A "shallow dive" or a head-first slide are the most common causes of paralysis in the shallow end of the pool.

It is the pool owner's responsibility to:

- a)** Warn pool users about potential hazards.
- b)** Prevent unsafe misuse.
- c)** Address any dangerous situations.

Many people will be more irresponsible with your pool than with their own. This does not indicate that your visitors are "evil" but rather that they are human.

It's a good idea to evaluate your insurance coverage on the house or land where the pool is installed and determine whether you have enough coverage to defend yourself against a lawsuit. Homeowners insurance is usually less expensive than auto insurance, and increasingly larger quantities of coverage can be acquired at low prices.

Whether you're at the pool or not, it's your obligation to protect yourself against any form of misuse.

1. You are responsible for warning anyone engaging in risky behaviour and telling them to stop.

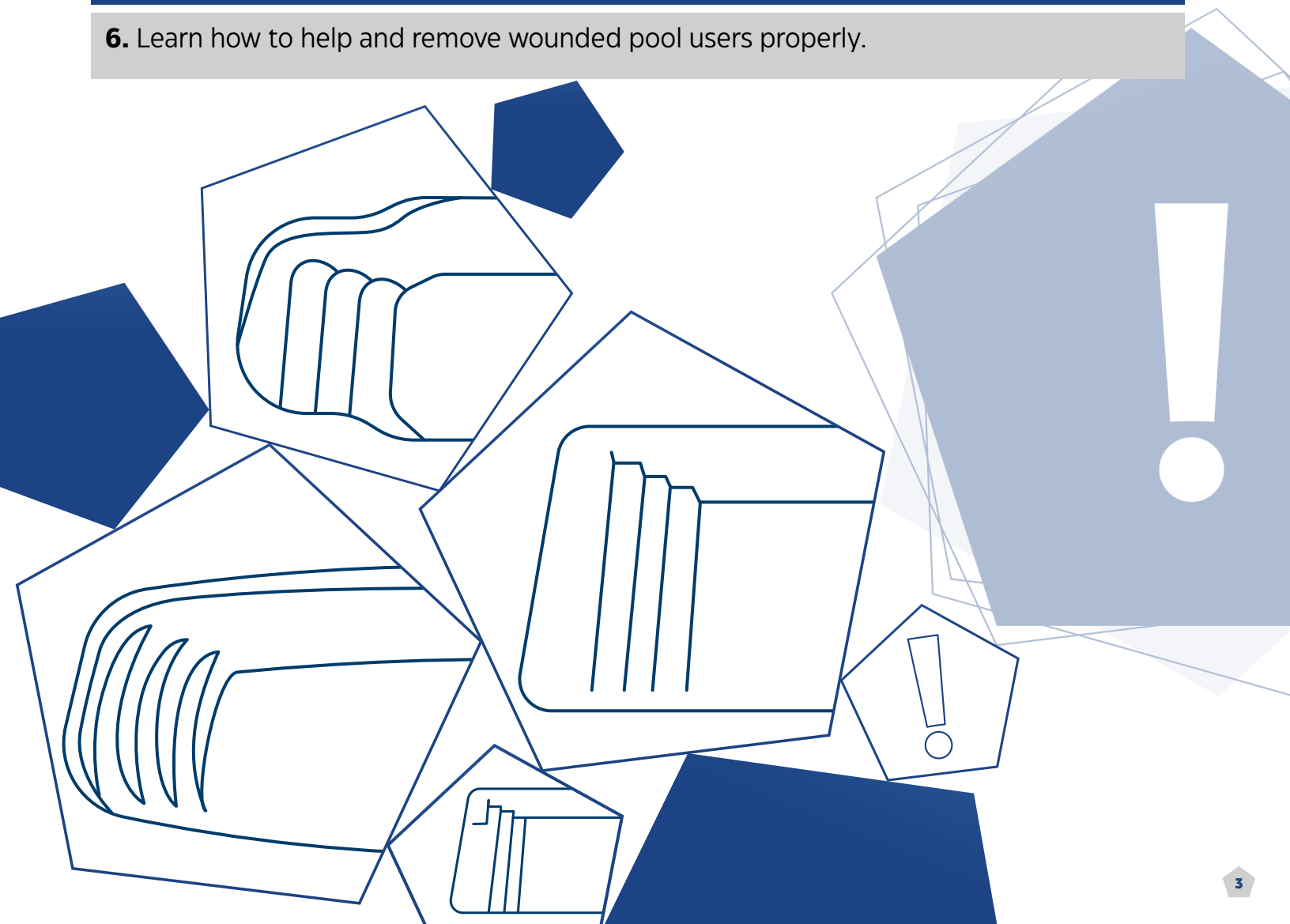
2. Never leave children alone near water, even if it's just to take a phone call.

3. Make sure that everyone who will be using your pool is aware of your rules and regulations. It is more beneficial to have the owner tell them rather than read it from a sign.

4. No glass of any kind should be allowed in the pool area, especially when children are around.

5. Save the phone number for the rescue or hospital on your phone. A guide for mouth-to-mouth resuscitation and CPR should also be displayed.

6. Learn how to help and remove wounded pool users properly.



Drowning is the second most common cause of death due to an accident. Drowning is most commonly caused by one or more of the following "no-no's" of pool ownership.

Lack of Supervision

When a child drowns, it is the responsibility of an adult. Never leave children alone, even if it's only for a few minutes while you answer the phone. When a child's lungs fill with water, they are unable to scream for aid. If anything dangerous happens, don't assume you'll hear it because there may be no sound.

Lack of Cover Use

A pool cover hides the water and deters children from exploring it. A pool cover also offers some protection to children or parents in the event of an unsupervised entry.

Lack of Protection & Fencing


When you are away from home, a good fence not only provides protection and privacy, but it also protects you from unexpected "guests". A "No Trespassing" sign should also be displayed on your fence.

Not Locking the Safety Gates

Make sure all enclosed pools have self-locking gates. For example, if the pool has a door leading to the house, ensure it is locked whenever kids are there.

Swimming Alone

Make sure all enclosed pools have self-locking gates. For example, if the pool has a door leading to the house, ensure it is locked whenever kids are there.



Alcoholic beverages are frequently served or consumed in close proximity to a swimming pool.

In a "party atmosphere" or a setting where alcohol is consumed, everyone's behaviour must be properly monitored. Horseplay, as well as diving and swimming competitions, can cause serious damage.

Alcohol, rather than being a stimulant, is a depressant. People act "silly" after a few drinks because the region of the brain that exercises constraint and control over their actions is numbed, and the controls are weakened.

More of the brain gets numbed as the amount of alcohol ingested accumulates, and eventually, one can black out. If your friends or guests drink alcohol and then have to drive home, please be mindful of their safety and the safety of others on the road. Please do not use your pool or drive if you or your visitors have become intoxicated.

Avoiding Entrapment & Drains

WARNING

An unprotected drain's suction force can cause significant damage or death due to suction, hair, or limb entrapment. Drain covers must be installed on all drains. If a cover is damaged or missing, the pool must be closed until the cover is repaired or replaced. Children and adults should not be allowed to play with or near a drain or drain cover under any circumstances.

Additional items or designs that safeguard your pool from entrapment-related injuries may be available. For additional information, please contact your authorized PENTARM POOLS dealer.

Here are some guidelines for pool regulations that PENTARM POOLS suggests. Please feel free to duplicate and distribute these to your pool's users, including family, friends, and neighbours.



POOL RULES

The following cautions and rules have been prepared for you, the responsible owner, together with a set of guidelines that, if followed, will limit the chances of severe catastrophic or potentially fatal injury. According to the pool industry's research and data, the majority of injuries are caused by one or more of the following factors: head-first entry into shallow water, the use of alcohol or drugs, the lack of parental supervision, and the lack of first aid and/or CPR training.

In addition, the majority of diving injuries happen to first-time guests, who are mainly younger individuals, particularly at social gatherings. Small children who live in the house and are left alone are the most common drowning victims. Following are some effective pool safety practices based on this information:

- ◆ **1. Before entering the pool area, everyone should be notified of the pool rules.**
- ◆ **2. DIVING IS RESTRICTED AT ALL TIMES, AND ALWAYS GET IN THE POOL "FEET FIRST".**
- ◆ **3. Inspect the pool and pool surroundings before entering the pool.**
- ◆ **4. Never use a pool with a broken or missing drain cover; allow no one to play with or near drain covers.**
- ◆ **5. Horseplay of any type, including running on the deck, is not permitted in the pool or pool area.**
- ◆ **6. No one should be allowed in your pool if they look to be intoxicated or under the influence of medication, drugs, or alcohol.**
- ◆ **7. When you have visitors, don't assume anything; always ask, "Can you/your child swim?".**
- ◆ **8. It is not permitted to run and then jump or dive into the pool.**
- ◆ **9. Do not swim alone.**
- ◆ **10. There is no glass allowed in the pool area.**

- 11.** No electrical devices or appliances in or near the pool.
- 12.** When swimming after dark, the pool should be illuminated.
- 13.** Any pool game with the risk of injury should not be permitted in the pool or pool area.
- 14.** The pool owner should closely monitor all gatherings in or near the pool.
- 15.** Before and after each use, inspect the pool.
- 16.** Place emergency phone numbers near the pool.
- 17.** Always keep a first-aid kit near the pool.
- 18.** Keep basic life-saving equipment on hand at all times, including at least one of the following:
 - 19.** A light, robust, rigid pole of at least 12 feet in length; b) A minimum 1/4" diameter rope as long as 1-1/2 times the maximum width of the pool, firmly tied to a life ring buoy with an outside diameter of around 15 inches.
- 20.** The label on the Life Preserver should visibly show the coast guard's approval.
- 21.** Pool toys should be kept to a bare minimum and removed from the pool and the surrounding area after each usage.
- 22.** Swimming pool flotation devices should not be used for sleeping.
- 23.** Only adults should operate pool equipment and chemicals with appropriate Personal Protective Equipment (PPE).
- 24.** In the swimming area, there shall be no objects that may cause entanglement or injury to the pool user.
- 25.** Fences are used to keep children away from unsupervised entry into the pool or pool area. Fences with self-locking gates, safety coverings, and door and window alarms are all examples. On the other hand, none of these devices can replace continual adult supervision.
- 26.** When not in use, keep the pool fence secured and the gate closed when working in and around the pool.
- 27.** No one should ever sit, stand, or play on a safety cover.

**WELCOME
TO THE STRONGEST
& LARGEST
POOL FAMILY
IN THE WORLD**

A swimming pool is a source of enjoyment and relaxation for everyone. It offers fun, relaxing and healthy activities for everyone in your family, regardless of age or preference.

Once you have finally gotten to know your pool, you will discover that keeping it in good shape is just as simple and enjoyable as swimming in it. There are a few simple, fundamental truths to be aware of in order to get the most enjoyment and service out of your pool.

This user manual will guide you on how to care for and operate your pool, along with the information you received from your authorized PENTARM POOLS dealer.

Investing in a fibreglass pool is an exciting and wise decision. It is one of the most beautiful and easy-to-maintain types of pool.

You now have a great place for healthy relaxation and family fun, a great place for outdoor social gatherings, a natural "spa" for mental and physical therapy, a muscle training and body strengthening area, and an architectural feature that adds to the appeal and value of your home.

When your pool is new, you may have a propensity to over-care for it, much like you would with a newborn. Our maintenance suggestions are designed to give you more time to enjoy yourself while still preserving crystal clear water and keeping the pool shell safe.

Your pool was created for fun, and you'll have a lot more fun swimming in clear, sparkling water that's been treated to ensure the comfort and safety of you, your family, and your visitors.

The water chemistry and filtration systems are the two main systems involved in maintaining water cleanliness and purity. Both systems must function properly; one cannot be used in place of the other.

The water in your pool may appear hazy or muddy when you initially fill it. Don't be concerned.

You presume your pool is crystal clear since it is filled with drinking water, the same water you use at home. It's easy to be deceived by appearances. Most tap water, such as a glassful, will appear clear in tiny amounts. That clarity often vanishes in considerably larger levels, such as a full pool.

Water that is entirely suitable for your regular household use may be completely unsuitable for use in your pool. This is why you should get your pool water tested and balanced professionally every three to six weeks.

There are five main steps for maintaining water chemistry at home.

MANTAINING WATER CHEMISTRY



pH Control

Your test kit determines the pH, which is a measure of the water's acidity or alkalinity. The appropriate bacterial action of chlorine, swimmer comfort, and the prevention of damage of the equipment and the pool itself are all dependent on proper pH balance. The pH level for your fiberglass pool water should be between 7.4 and 7.6. Your pool should ideally be kept at a pH of 7.6 and not more than 7.76.

Suppose the pH is too high (over 7.76) after testing the water. In that case, chlorine efficiency is diminished, scaling of surfaces and equipment may occur, water may become hazy, and filter runs may be shortened. A pH decriaser is put straight into the water to treat this imbalance.

For your fiberglass pool, the granular form is advised. Without professional assistance, never use more than one pound of sodium bisulphate or one pint of muriatic acid per 10,000 gallons of pool water.

If the pH is too low (below 7.4), the chlorine will disperse more quickly, the water may irritate swimmers, and equipment and surfaces will corrode. A pH increaser is introduced straight into the water to address this problem. Without professional advice, never use more than one pound of pH increaser per 10,000 gallons of pool water.

Frequent Disinfection

Chlorine treatment is used to keep water pure. A good chlorine residual is 1.0 ppm on average. The pool can be carried in a concentration as low as 0.6 parts per million (ppm) or as high as 2.0 parts per million (ppm). The lower level would be more vulnerable to system failure, while the higher level would result in higher operating costs. As a result, the 1.0 ppm operating level is a good compromise that ensures water quality while lowering running expenses.

Mixing multiple types of chlorine is never a good idea. The weekly chlorine usage rate will be between half and one pound per 10,000 gallons of pool water. Follow the directions on the container for use, just as you would with any other pool chemical. Always consult with pool service professionals and your authorized dealer for further guidance.

Shock and Super Chlorination

Shocking the pool or super chlorinating is a chemical treatment that removes non-filterable wastes from the pool water. To obtain a chlorine reading of 8.0 to 10.0 ppm, a granular chlorine product is utilized. Super chlorinating chemicals come in compact one-pound packets or bulk supplies ranging from 25 to 75 pounds. Please consult your authorized dealer or pool service professionals for additional guidance.

Calcium hypochlorite should always be pre-dissolved before introducing it to a fibreglass pool to avoid bleaching or damage to the surfaces. One pound of calcium hypochlorite is used per 10,000 gallons of pool water. Always consult your authorized dealer and/or pool service professional for the dosage and guidance.

Algae Prevention

Contaminants in the rain and wind can rapidly decrease the pool's chlorine supply. In the case that the pool's chlorine supply is depleted, a high-quality algaecide acts as a chemical backup system.

After a one-time first treatment, add a maintenance treatment every other week or every week to the pool. Algae may occur in your pool for many reasons, the most important of them being poor and inconsistent maintenance.

Staining Prevention

A metal chelation product is used to avoid discoloration of the inner pool walls. This product helps remove metals from the pool introduced by fill water, rain, and corrosion of metal equipment.

Metal chelation chemicals are usually added every other week after initial treatment. This product should never be used in conjunction with a shock treatment. Definitely talk to your authorized dealer and pool service professional if planning to use metal chelation products.



GENERAL POOL CHEMICAL INFORMATION

A chemical disinfectant must be used to maintain (and preserve) the purity of your pool from the moment it is filled. Enough of it must "reside" in the water to kill disease-carrying bacteria and algae introduced by bathers, wind, rain, and other factors.

The amount of chemical "residual" that must be present in pool water is measured in parts per million parts of water, abbreviated "ppm" The same quantitative measure is used to express the amount of any other chemical that has been applied to or is already present in the water.

For swimming pools, chlorine is the most extensively used and acceptable disinfectant. When chlorine is used as a disinfectant, at least 0.6 ppm of "free residual chlorine" must be present in the pool water at all times to destroy and kill bacteria and algae and maintain the water's purity. This "residual" as important as it is for pool quality, is a very little amount of chemical. If the chemical is 100 percent active, less than one drop of chlorine in every 1,000,000 drops of pool water is adequate to disinfect the pool.

The following is a list of the most prevalent factors that affect chlorine's in-pool longevity.

1. POOL USAGE - The number of people swimming in your pool at any given time. The more swimmers there are, the more disinfection is used up.

2. SUNLIGHT - Unless the pool is balanced, the disinfectant "residual" dissipates faster as the sun's intensity increases.

3. WATER TEMPERATURE - When the water temperature surpasses 85 degrees, the chlorine elimination process is substantially accelerated. The warmer the pool's temperature, the shorter the chlorine life.

4. RAIN & WINDS - Bring dust, bacteria, algae spores, and other material into the pool, overworking chemical disinfectants and diminishing their disinfection ability.

5. WATER pH BALANCE - As the pH of the pool water rises, disinfectant action slows. To maintain the appropriate "residual" more disinfectant must be added.

Disinfectant chemicals can be added by hand or by a chemical feeder to maintain your pool's bacteria-killing residue. Depending on your pool's chemical requirements, disinfectants' feed rates can be increased or decreased by adjusting the feeders.

Disinfectants in the form of granules are simply sprinkled into the pool water. Start in the deep end. Circumambulate the pool fully, dispersing it evenly throughout the pool. Some granular disinfectants must be pre-dissolved before being added to the pool, which might cause cloudiness.



ADDITIONAL pH INFORMATION

The pH of pool water should be between 7.4 and 7.6. The pH value of neutral water, which is neither basic nor acidic, is 7.0. On a scale of 1 to 14, this is the pH level in the middle.

Pool water has an alkaline pH of greater than 7.0. The more alkaline the pool water, the higher the pH scale it tests.

Pool water has an acidic pH below 7.0, the more acidic the pool water is, the lower it tests on the pH scale.

For a variety of reasons, keeping your pool slightly alkaline (note that the suggested pH level of 7.4 to 7.6 is above the neutral point, hence alkaline) is vital.

Chemicals used to disinfect pools take longer to function when the water is overly alkaline (above 7.6). Water tests may show a sufficient residual, but they may not perform their intended killing purpose. Additionally, the scale may develop on or inside pool pipework, particularly on the heater's coils.

On the other hand, acidic pool water can leave stains on the pool's interior surface, irritate the eyes, and erode the equipment and piping.

Follow the guidelines on your test kit to determine the pH of the pool water. Avoid adding test chemicals directly to the pool and avoid refilling the pool with water after testing. Your pool's pH reading may be impacted by high chlorine residual. Take the pH reading before adding chlorine if your test kit lacks a chlorine inhibitor. Holding your finger over the test tube's top while it's being mixed could result in a misleading test result due to acidosis (body acid).



ADDITIONAL TOTAL ALKALINITY INFORMATION

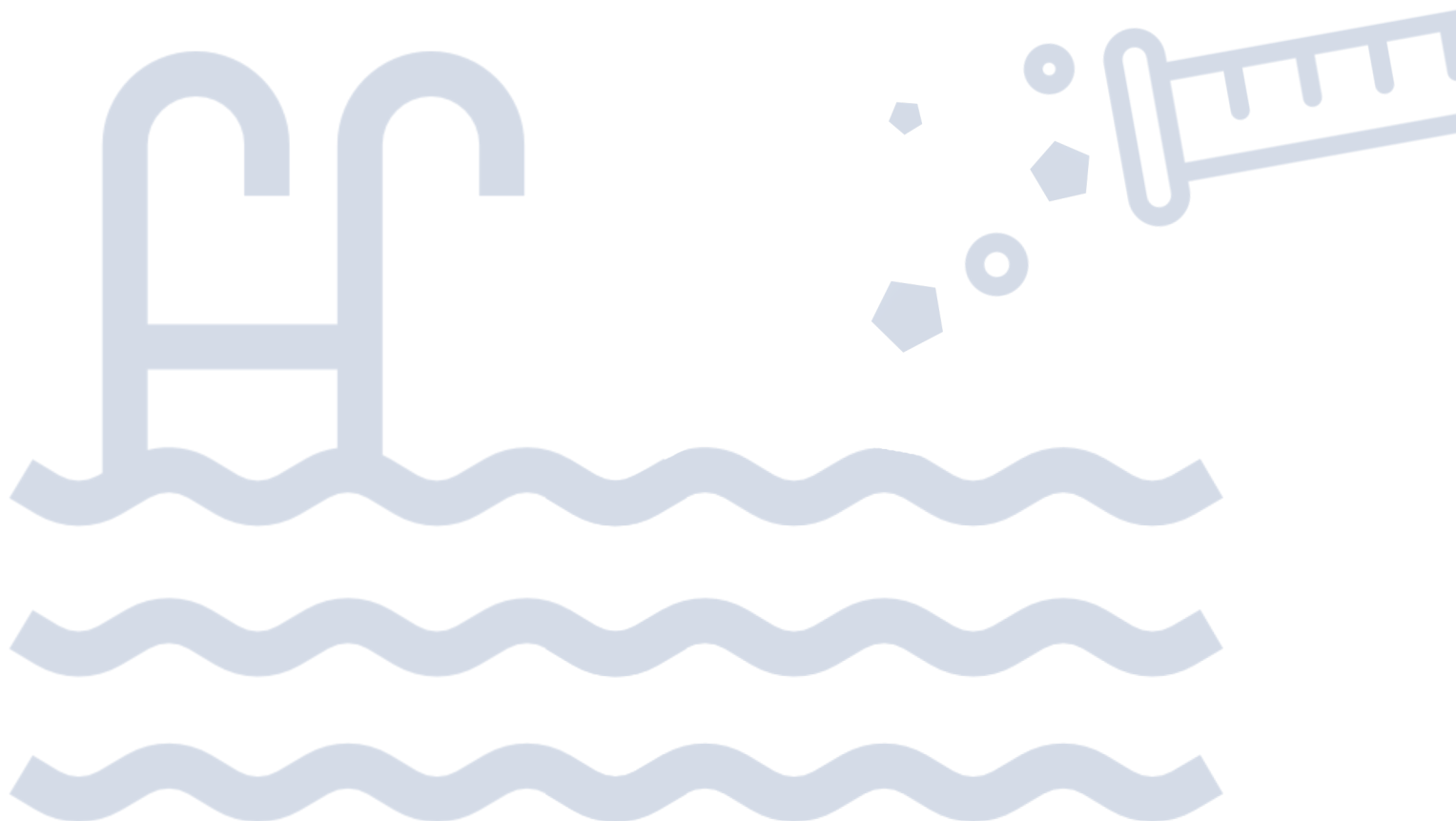
A "total alkalinity" test should frequently be performed on the pool water. The overall amount of alkaline substances in the water is measured as total alkalinity. It alludes to the pool water's "buffering capacity" or degree of resistance to pH fluctuation. Between 80 ppm and 120 ppm is the ideal alkalinity range.

Due to a lack of buffering capacity, low alkalinity water makes pH control challenging (or poor resistance to pH change). To prevent the pool water from being acidic, the alkalinity of the water must be raised.

Numerous waters have high pH and total alkalinities. It is vital to eliminate some of the alkalinity to reduce the pH and bring the water into the "safety zone" of a swimming pool.

Muriatic acid can be added to achieve this goal.

Metal content, calcium hardness, cyanuric acid, and total dissolved solids are further important variables. Your pool service professional should check these variables at least once every six to eight weeks to ensure they are within the recommended ranges.



POOL CHEMICAL HANDLING AND STORAGE



The majority of pool chemicals are stable and, when properly stored, retain their potency and effectiveness for an adequate length of time.

Please review the following:

- 1.** Make sure that children cannot access any of the chemicals.
- 2.** Each chemical bottle/package should have a date.
- 3.** Make sure all lids are properly secured and keep the original lids on all chemical containers.
- 4.** Chemicals should be kept in a dry and cool area.
- 5.** Chemicals containing chlorine are concentrated substances that can be harmful if not handled carefully. They should never be combined with anything other than water.
- 6.** Use scoops, measures, and spoons made of plastic, glass, etc. and make sure they are dry, clean and not used for any other purpose.
- 7.** Follow the instructions for measuring and adding pool chemicals independently. Before adding them to the pool, do not combine any of them.
- 8.** Concentrated forms of the majority of pool chemicals are toxic to shrubs, grass, and plants. Therefore, plants next to the pool should not be exposed to pool chemicals.
- 9.** When dispensing pool chemicals, hands should be clean and dry. After treating a pool, thoroughly wash your hands (Gloves and masks are highly suggested when dispensing chemicals).
- 10.** Before using pool chemicals, read all labels thoroughly and always follow instructions precisely.

SWIMMING POOL WATER TEST



Accurate chemical readings are ensured by proper testing methods. It is highly recommended to have your pool water tested by a pool service professional, especially if it is your first time testing the swimming pool water. However, you can also take a small portion of your pool water to a pool store and have it tested by professionals. Last but not least, you can test your swimming pool water with both digital and non-digital test kits.

Please review the following:

- ✓ **1.** Carefully read and adhere to the testing instructions that are included with your test kit.
- ✓ **2.** Prior to filling the tubes for testing, rinse the test kit tubes with pool water.
- ✓ **3.** The accuracy of the test will be impacted if you take a water sample from the pool's surface water. It is recommended to take the water sample from a minimum of 12 inches deep in the pool.
- ✓ **4.** View the test findings against a white background at all times.
- ✓ **5.** Always check the pH after checking the chlorine.
- ✓ **6.** Store your test kit in a dry, cool environment.
- ✓ **7.** Change test agents annually. Due to exposure to heat and sun, the reagents become less accurate.



WHEN TO TEST THE POOL WATER

PH LEVEL

Every day, or every other day or twice a week if there isn't a noticeable difference.

TOTAL ALKALINITY

Every 4 to 6 Weeks

CALCIUM HARDNESS

Every 2 to 3 Months

CHLORINE RESIDUAL

Every day, or every other day or twice a week if there is no noticeable change.

METAL CONTENT

Every 2 to 3 Months

TOTAL DISSOLVED SOLIDS, CYANURIC ACID

Every 6 Months

After each significant rain or after adding more than 8 inches of fresh water, the pool water should be tested for copper, iron, calcium hardness, pH level, total alkalinity, and residual chlorine.

MAINTAINING WATER LEVEL IN A SWIMMING POOL



Maintain your pool's water level near to the skimmer's centre point at all times. By allowing air enter the system, a lower level can harm the pump and filter. The effectiveness of the skimmer decreases as the water rises.

**YOUR FIBERGLASS POOL
SHOULD NOT BE DRAINED AT ANY TIME!
DRAINING YOUR POOL
VOIDS YOUR WARRANTY!**

Your fibreglass swimming pool is designed to always have water in it. If you ever require assistance draining your pool, contact your authorized pool dealer for professional analysis.

The pool shell will bow and crack if it is emptied without first releasing hydrostatic pressure on it. The owner is liable for any damage to the pool shell brought on by draining the pool without the expert analysis and assistance of your authorized fibreglass pool dealer.

CARE AND MAINTENANCE OF YOUR POOL SURFACE



If you follow these straightforward instructions, taking care of your fiberglass pool surface will be smooth and easy.



ABOVE THE WATERLINE

For fiberglass pools, the "bathtub" ring—which is brought on by body oils, suntan lotions, and airborne contaminants—is simply cleaned with warm water and an approved swimming pool surface cleaner.

Use of steel wool, metal scrapers, wire brushes, abrasive cleansers, and other metal objects will all result in irreversible damage to the gel coat surface.

Dull marks can be repaired by applying a body compound first, then a layer of high-quality wax (Designed for Fiberglass).

Your fiberglass pool's gel coat finish can be scratched, just like any other glossy surface.

However, deeper scratches are unlikely to occur. In most cases, you don't need to worry about them. Draining your pool voids your warranty, so please don't do it!

Your fiberglass pool's gel coat surface may occasionally develop tiny cracks. If anything like this happens, we strongly recommend you contact your authorized pool dealer or a certified pool company and ask them for advice.

UNDER THE WATERLINE



Our advice is to brush and circulate more often rather than vacuum. Your skimmer and filter can capture a sizable portion of the dirt, dust, soil, etc., that settles to the bottom if your pool is circulated continuously at a low speed. Simply brushing the sediment will frequently enable the circulation system to remove dirt from your pool if you run it on a timer. After a storm, heavy rain, etc., large excesses should be cleaned away (see below). Take off the leaves with your leaf rake. You may clean your pool of all particles by vacuuming it. The vacuuming procedure that is advised is as follows. Ask your authorized dealer to provide instructions for vacuuming a pool.

SWIMMING POOL EQUIPMENT CARE



Please consult and fully review the manufacturer's instructions for each of your equipment regarding its functioning, maintenance, repairs and warranty.



**ENJOY
AND CREATE LOTS
OF MEMORABLE
MOMENTS
WITH YOUR FIBERGLASS
POOL**



Experience The Difference