



365-DAY GUIDE

to Swimming Pool
Maintenance



CHAPTER 1

Introduction

There is nothing quite like strolling out to your pool in the crisp, morning air, the dry, afternoon heat, or the quiet, moonlit night and being welcomed by the glittering, crystal clear waters.

Of course, all of that's ruined if you've let the maintenance routine slack off a little. If that's the case, you're more likely to be greeted by cloudy waters filled with leaves, sticks, and hygienically questionable materials.

Maintenance is a critical part of owning a pool, but most of us would much rather spend our time actually swimming than cleaning.

Getting 365 days of crystal clear pool water can be a challenge. Let's not kid ourselves about that. Maintaining clean, sanitized water requires a serious routine that must be strictly followed. You will need to make a habit of testing and adjusting the water regularly, but the results will be worth it.

With a good plan, the right tools, and a sufficient amount of pool chemicals, you can minimize the time spent cleaning the pool and maximize the time spent having fun.

Not everyone can use their pools year round, of course, so there are also some important maintenance tips for seasonal usage that will help ensure that every potential swimming day is filled with clear, clean, and safe water.

REMEMBER: It's not just about the look of the thing. When you properly take care of your pool, it will cost you less money in the long run, use up less water and cleaning chemicals, and cause less wear-and-tear on the pool equipment.



This guide is a detailed look at the necessary steps for maintaining your pool throughout the year, but it is not a substitute for reading and following the labels on the specific products you use.

CHAPTER 2

Inventory Your Supplies Each Season



It's amazing how fast the lack of proper equipment can lead to days of improper maintenance as you "get around" to ordering more supplies. If you take the time to inventory everything before the season starts, or before it's time to close the pool back down, you'll have everything you need to keep the routine moving.

Make sure you have sufficient supplies of:

- ✓ **Clarifier**
- ✓ **Pool shock**
- ✓ **Mineral sanitizers**
- ✓ **Pool salt**
- ✓ **Vinyl pool patch kits**
- ✓ **Pool maintenance parts & equipment**
- ✓ **Testing kits** – You should be able to test your pool chemical levels easily
- ✓ **Pool filter cartridges**
- ✓ **pH Up or pH Down**
- ✓ **Algaecide**
- ✓ **Pool sanitizers** – chlorine, bromine, etc.

CHAPTER 3

Before the Very First Swim

If you have just installed a new pool, chances are you and your family will be really excited to jump in and test it out.



Most pool installations are going to leave a lot of debris and dust swimming around in there. So if this is your very first swim, especially in a fiberglass or concrete pool, make sure you give the pool's filter a chance to run non-stop for at least 24 hours. By then, it will have cleared out the unwanted lingerers and you can enjoy your first swim unimpeded by installation leftovers

CHAPTER 4

Your #1 Goal with Pool Maintenance: Balance

Balance is the key to a great swimming experience.

We're not talking about perfect balance on the diving board right before you execute a flawless double back flip into the water. We're talking about the balance of the water and the pool chemical levels.

When you can achieve this balance, your water will be clearer, your swim more comfortable, and your costs much lower.

Balance is a delicate thing, though, and a lot of variables can throw it out of whack. So let's keep this simple. For a clean, hygienic, and enjoyable experience, you need to balance four things:

- ✔ pH
- ✔ Alkalinity
- ✔ Calcium hardness
- ✔ Sanitizer





pH

The pH level of your pool can be affected by a lot of things. Well, pretty much everything, really. Rainwater, swimmers, leaves, and dirt can contribute to its instability. If the pH gets low, the water gets more acidic, and when it's high, it's more basic.

Acidic pools are, not surprisingly, not exactly a comfortable environment for a nice swim. Then again, neither are pools that have more basicity.

If the pH balance is off, the acidity can also start to dissolve the materials in the pool walls and floor,



The proper pH level should be between 7.2 and 7.6

especially the tile grout and plaster walls, creating a welcoming environment for algae, allowing it to move in and start to grow.

Acidity can also corrode the metals in pipe fittings and pump connections, and the sulfides from those corroded metals can leave ugly stains in your pool.

If your eyes and nose start to burn, and your skin gets dry and itchy, it might be time to test the pH again.

Total Alkalinity

Alkalinity works as something of a buffer for the pH level, keeping it from getting too high or too low whenever those unexpected variables strike. The pH of your pool is a delicate thing, and the right level of total alkalinity will help it deal with sudden changes and stop the pH levels from swinging drastically and unpredictably.

Testing and correcting for total alkalinity should therefore be done before testing and adjusting the pH. That way you can be sure to get more accurate readings and balanced treatments.

In general, if the alkalinity is below 80 parts per million (ppm), then the pH won't stay in that safe range specified above. It will allow the acidity to rise, potentially damaging pool fixtures and equipment. When the alkalinity rises above 120 ppm, you may notice some cloudy water or the formation of scale.



Proper alkalinity level is between 80 to 120 parts per million (ppm).

Water that is too alkaline can also hinder the ability of chlorine to work effectively. This means you may end up using far more chlorine than normal to keep everything properly disinfected.

Swimming in this kind of high alkaline water is also likely to cause burning in the eyes and nose while irritating the skin.

Calcium Hardness

Calcium hardness (CH) refers to the amount of dissolved calcium content currently residing in the pool water.

Calcium is a natural part of your pool. It is left behind as the water evaporates, increasing the overall water hardness. This, in and of itself, isn't bad, as long as it doesn't get too high. If it does get out of control, you'll need to add a scale and stain control product.



Proper CH level is around 200 to 275 parts per million for plaster pools.

In general, if the amount of CH is above 500 ppm, then you may have to drain some of the hard water out and dilute the rest with fresh fill water. CH above 1,000 ppm is going to create cloudy water and could start leaving scale on pool surfaces and fittings.

On the opposite side of the spectrum, CH below 200 ppm can start to corrode pool equipment and create problems in plaster pools as the water tries to leach calcium from wherever it can get it. In these cases, adding some calcium hardness will help protect walls and equipment.



Sanitizer

The right level of sanitizer is important for continued comfortable pool usage. Too much can lead to skin and eye irritation while too little creates an environment that is less than hygienic.

There are several sanitizing products available on the market today, though the two most popular are chlorine and bromine. Each has its own advantages and disadvantages, and there are some variables you need to consider when you are choosing the type and amount of sanitizer. Let's look at each one and see what they offer.

Chlorine – This chemical is the most widely used chemical for pool sanitization. It works through a chemical reaction that oxidizes bacteria until they are destroyed or neutralized. It is

stable and can be stored for long periods, and is available as a liquid or solid. However, chlorine can dissipate fairly quickly after it is added to the pool, so it needs to be regularly tested and balanced.

Proper level of free chlorine is 1-3 parts per million.

Bromine – This chemical works in a similar fashion to chlorine, but the byproducts it produces are somewhat different. These byproducts actually have a beneficial impact on the swimming pool water because they maintain some of the same sanitizing characteristics. It is also more stable than chlorine at warmer temperatures, it has less of a chemical smell, and it can fight against contaminants for longer periods of time. However, it is a weak oxidizer and is a little pricier than chlorine.

Proper level of free bromine is 2-4 parts per million.



Balance for Safety, Economy & Fun

Balancing these four components is important for personal comfort, fun, and safety, but it is also a great way to help save money in the long run.

A proper balance means:

- ✔ **Your metal equipment and accessories won't corrode**
- ✔ **Plaster surfaces won't get etched and damaged**
- ✔ **Scale won't form on your equipment**
- ✔ **You can minimize stains and eliminate cloudy water.**

This will also extend the time you can actually spend in the pool because it will reduce eye, nose, and skin irritation.

Like they say, an ounce of prevention is worth a pound of cure. If you stay ahead of the game, testing and balancing your pool according to a schedule, it will make it easier to jump in and enjoy the season rather than just working so hard to clear the algae or improve the balance.

CHAPTER 5

Temporary Unbalance: Shocking



There are some times when you will need to purposefully and temporarily upset that balance.

Shocking the pool refers to the process of adding – all at once – a lot more chlorine than you normally would. It's an important part of the maintenance process because this kind of concentrated blast can help ensure that bacteria and organic contaminants (algae) aren't building up in the nooks and crannies of your pool.

Delivering the Best Shock

You should shock the water when opening or closing the pool, but there are many other times when you might need to give it another good shock. Let's take a look at some of the things you should consider.

Often, the best time to shock the pool is at sundown. This way the chlorine can do its job without the sun's ultraviolet rays bombarding it, and the water will have plenty of time to clear up before the morning. You should also leave the pool uncovered after shocking the pool.



In general, you should shock the pool at least every other week. If you set a schedule and always shock the pool at the same time on the same day each week, it will be easier to remember to do this task.

However, there are other times when you might consider an extra dose, such as:

- ✔ **After a lot of swimmers made use of the pool all at once**
- ✔ **After a serious storm that involved wind and rain**
- ✔ **After extremely bright, sunny days**
- ✔ **When the pool starts to have a questionable odor**
- ✔ **When swimmers say they feel the burn in their eyes and nose**
- ✔ **When the water starts to look dull, hazy, or cloudy**
- ✔ **When you start to spot signs of algae growth**

Only shock your pool while the pump and filter are operating correctly, and never do it while there are swimmers in the water.

CHAPTER 6

Go Season by Season for 365 Days of Clean

Getting a perfectly clean pool 365 days out of the year is definitely a good challenge. Even regular, professional weekly cleanings can't guarantee you that.



It's an admirable goal, though, and it is achievable if you're ready to follow the steps and procedures necessary to make it happen. You'll also have to pay attention to the individual characteristics of your pool. You will have to know how it reacts to environmental changes and heavy use. You will have to do your part on top of whatever the professional service is doing. Take care of preventative maintenance, always have a full stock of cleaning supplies, and test your water as much as necessary (daily if you're really serious about 365 days of crystal clear water).

For some people, a year-round program isn't necessary, since the pool is shut down every winter. However, those with indoor pools will have to continue their efforts even through the colder months.

So let's take it season by season and look at how your maintenance schedule should change to deal with the amount of pool usage and the environmental factors.



Spring Startup

Your spring startup routine is all about making the water nice and clear and inviting as fast as possible so you can jump right in and start enjoying the season. No one wants to waste time cleaning when they could be swimming instead.

Follow these steps to get everything up and running for your first swim of the season:

- ✔ Remove anything from the top of the pool cover that landed there over the winter.
- ✔ Remove the pool cover and give it a thorough cleaning with a cover cleaner to make sure mildew doesn't build up while you store it away for the season.
- ✔ Check the filter, pumps, and drains to make sure they're clear.
- ✔ Start the pool pump and filter and reconnect any other connections that may have been detached when you shut it down before winter.
- ✔ Check all the cleaning equipment and make sure they're in working order.
- ✔ Clean all of your cleaning equipment.
- ✔ Clean the surface of the water of any debris that may have gotten there.
- ✔ Take a wall brush to the pool walls and give them all a good scrubbing.

- ✔ If necessary, use a pool vacuum to get any buildup in the pool.
- ✔ Set your filtration system to run at least 8 to 12 hours in every 24-hour period (8 is okay, but 12 is much better).
- ✔ Give the pool at least 12 hours to circulate all the water before you start treating the water.

These first steps will get you up and running, but there are still a few more things you will have to do at startup, but also on a more ongoing basis (we'll delve a little deeper into that when we talk about summer maintenance).

These activities include:

- ✔ Take a sample of the pool water and test it for pH, total alkalinity, chlorine (or bromine) level, and calcium hardness.
- ✔ Balance the water with the pool startup chemicals, like alkalinity increasers/decreasers, pH increasers/decreasers, and calcium hardness increasers/decreasers.
- ✔ Give the pool a shock treatment to wake it up.
- ✔ Add your sanitizer of choice until it reaches the proper level.
- ✔ Brush any visible algae and add an algaecide.



Summer Maintenance

Your pool is going to need constant attention to get 365 days of clarity. It won't accept a passing attention. It really wants to know you care about how it feels, how it's changing every day, and what it's becoming as it gets older.

Some of the standard summer maintenance program is automatic. Just turn it on and go. Others require action on a daily basis.

First Things First

- ✔ Run the pump every day for at least 8-12 hours. This alone can prevent many problems, so keep it running because it can take care of the things you can't see.
- ✔ Clean out the skimmer and pump strainer basket.

Things to Do Throughout the Summer

These are activities that may not require a regular schedule, but should be done more than once during the swimming season.

- ✔ Backwash the filter regularly (according to manufacturer's instructions) or clean the cartridges
- ✔ Use a chemical filter cleaner at least twice a season

Daily Tasks

If you really want that crystal clear water to greet you every time you go for a swim, you're going to have to stick to a daily routine. Your daily tasks should include:

- ✔ Skimming the surface for floating debris

- ✔ Brushing areas where algae is growing
- ✔ Testing the pH
- ✔ Testing the chlorine or your other choice of sanitizer
- ✔ Checking the water level

Once-a-Week Necessities

You don't need to do these tasks every day, but you should do them at least every week.

- ✔ Test the total alkalinity
- ✔ Shock the pool (you may need to do this more than once a week if you notice cloudy water, algae growth, or other contaminants)
- ✔ Scrub the floor and walls of the pool, and use a pool vacuum if necessary

It's also important to remember that the heat of the summer season is particularly conducive to algae growth, so make sure that you have enough algaecide on hand to make it through the hottest months.



Vacation Time

Summer is a great time for swimming, but it's also the time many of us go on vacation and leave our homes for extended periods. Some pools feature automatic treatment systems and that can be very helpful.

But, if your pool doesn't, and you're going to be away for more than a week, you will need to take a few extra precautions to make sure you don't come home to an algae-infused swamp.

- ✔ **Cover the pool**
- ✔ **Set the circulation pump to run daily, but for half the time it normally does**
- ✔ **If you have a sand filter, backwash the filter once before you leave**
- ✔ **If you have a cartridge filter, clean it out**
- ✔ **Use a dosing floater to keep the water disinfected while you're gone**

Even if the pool looks clear when you get back, double check the filters and test the water again. You may need to shock the pool just to be on the safe side.

Autumn Winding Down Time

When autumn rolls around, the weather starts to cool off, but there are still many good swimming days left. Even so, you know winter is coming, and that means you're going to have to close it down in the near future. If you focus on a little extra maintenance now, it can ensure that your remaining swimming days are filled with clean, clear, and hygienic water, and the final closure will go more smoothly.

Your job is simple. Continue the above maintenance until it's time to start packing up the equipment and putting things away.

Keep an eye on the weather, though. You don't want an unexpected freeze to sweep in and ruin your equipment that still has water running through it





Winterizing Your Pool

Closing the pool properly will help you save money on maintenance and repairs. More than that, when you do things right at the end of the season, everything will be in good shape and it will be easier to get up and running next spring.

- ✔ Take a final test of the alkalinity, pH, and calcium hardness of the water
- ✔ Balance the water with the proper chemicals
- ✔ Give the pool a final and good cleaning with brush or vacuum (or both)
- ✔ Shock the water one last time
- ✔ Add pool closing chemicals, such as a winterizing dose of algaecide and chlorine
- ✔ Run the filter for 24-48 hours straight (manually remove any leftover debris)
- ✔ Clean and flush the chlorine feeder connections (if that's what your type of pool uses)
- ✔ Drain your pool, according to the manufacturer's instructions, so the final water level is below the skimmers and inlet lines
- ✔ Cover properly
- ✔ Make sure that nothing can get blown under the cover throughout the winter

You also need to winterize all your cleaning equipment at this point. Doing so will ensure that it lasts longer and is ready to go when you are.

Finally, if your diving board is longer than eight feet, and you regularly get snow in your area, be sure to remove it and store it inside for winter.

CHAPTER 7

Safety First



Maintaining your pool and keeping it clean requires a lot of chemicals. These products have been well tested and are completely safe, when they're used properly.

It's important to fully understand how to use pool chemicals, because if they're used improperly, they could be harmful to humans and animals.

So, always follow the instructions that come with each individual product. But on top of that, here are some general guidelines to follow and make sure your swimming season is both fun and safe.

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Safety Guidelines

- ✔ Keep all pool chemicals out of reach for children and where animals can't get into them.
 - ✔ Always wear protective clothing when working with chemicals. Rubber gloves and goggles should be standard equipment.
 - ✔ When you're done using the chemicals, wash your hands immediately and get your clothes in the washer.
 - ✔ If your skin contacted any of the chemicals, flush immediately with cold water for 15 minutes, and call a physician if you had extended contact and feel significant irritation that doesn't go away.
 - ✔ Always store the chemicals according to the instructions and follow dosage instructions to the letter.
 - ✔ Measure chemicals in clean, dry measuring equipment.
 - ✔ Don't mix water in with the chemicals.
 - ✔ Don't mix chemicals. Ever.
- ✔ Don't try to put spilled chemicals back into the container. It will be contaminated.
 - ✔ Don't let dry chlorine get wet or even damp.
 - ✔ Do not ever store chemicals near an open flame.
 - ✔ Always discard your empty containers according to state or federal regulations. Do not try and reuse the containers for anything.
 - ✔ Never add chemicals to the pool when swimmers are in the water.



CHAPTER 8

365 Days of Clean, Fresh, and Fun Swimming



Maintaining your pool all year may seem like a challenge, but once you get into a routine, you can easily keep the water clear, sparkling, and hygienic. Every time you step up to the edge of the pool and see it sparkle, you'll just want to dive right in.

Maintenance is a critical part of owning a pool. Be prepared to put in the time and the results will be worth it. Have a plan, keep the tools and equipment in good shape, and you'll be able to get the most out of every swimming season.



For all of your swimming pool needs, including
tools, equipment, chemicals and more.