

# POOL STARTUP CHEMICALS

The chemical care that you give your pool water will pay dividends in protecting your pool surfaces and preventing poor water conditions that are expensive and time consuming to correct.

Today we cover the chemical steps to take for Spring Pool Openings, New Pool Startup and Salt Water Pool Start up processes.

## Spring Pool Opening Chemicals



For pools that are covered and winterized, long periods of stagnation can affect your water balance, and by the time the pool cover comes off, winter algaecides and floaters are depleted.

What pool opening chemicals do I need is often asked by new pool owners, and a reply often given is that it depends on what type of pool you have, and what type of pool start-up is being done.

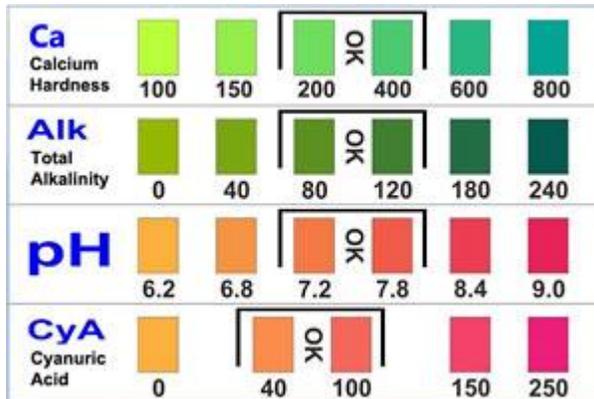
**Step 1 - Water Balance First!** Before adding any of your spring start up chemicals, it's important to test and adjust all water balance parameters, so that your [pool opening chemicals](#) work at their best, and to prevent staining and scaling during treatment. Put away your start-up kit, and pull out your test kit – verify that your pool chemical levels are within these ranges:

**To adjust Calcium Hardness:** Add [Calcium Increaser](#) to raise water hardness levels, and when too high, dilute with softer, fresh water. 3/4 lb. of Calcium Up will increase hardness by 10 ppm in 10,000 gallons of water.

**To adjust Alkalinity:** Add [Alkalinity Increaser](#) to raise total alkalinity levels and when too high, use pH Reducer. 1 lb. of Alkalinity Up will increase alkalinity by 10 ppm in 10,000 gallons of water, and 1 lb. of pH Down will reduce alkalinity by 10 ppm in 10,000 gallons of water.

**To adjust pH:** Add [pH Increaser](#) to raise pH levels and when too high, use [pH reducer](#). 1/4 lb. of pH Down will decrease pH by 1 decimal point, in 10,000 gallons of water, and 1/4 lb. of pH Up will increase pH by 1 decimal point, in 10,000 gallons of water.

**To adjust Cyanuric Acid:** Add [Cyanuric Acid](#) (also called Conditioner or Stabilizer) to raise CYA levels, and when too high, use Bio-Active cyanuric acid reducer. 1 lb. of Cyanuric Acid will increase CYA by 10 ppm in 10,000 gallons of water, and one pouch of [Bio-Active](#) can reduce CYA levels by up to 50%.



## Pool Water Chemical Levels

For the most accurate pool water testing, we recommend a titration test kit – the [Taylor K-2005](#) is the same test kit used by pool stores.

The ranges shown here are suitable for any pool surface or any type of pool sanitizer used.

Adjusting to the lower end of these ranges is best under most circumstances.

**Step 2 - Add Stain & Scale and Clarifier:** Before you shock the pool, which can disrupt other pool start up chemicals, add a [Stain & Scale](#) chemical to prevent staining by keeping minerals and metals locked tightly in solution. Follow up with a good pool clarifier, following label dosage information, to help your filter remove small suspended particles.

**Step 3 - Filter the Pool!** Run the filter overnight or for 6-8 hours to distribute [water balance chemicals](#), and then backwash or clean the filter as needed, and empty the pump and skimmer baskets. Run your filter 24/7 if possible, for the first few days after opening the pool from its winter slumber.

Before adding your pool opening chemicals, test the water again to be sure your adjustments hit the mark, and all water balance levels are correct, preferably on the lower end of the ranges.

**Step 4 – Shock the Pool!** Many people shock the pool first, or add all of the [spring start-up chemicals](#) all at once, which is incorrect, in both cases. Pool shock destroys algaecide polymer chains and interferes with Stain & Scale and Clarifier chemicals, which need some time to work. And filtering overnight before shocking greatly reduces the chlorine demand.

Equally important is to balance the water first, before shocking a pool. Minerals, metals and dirt often mix and deposit as stains or scale during shocking, when pool water is not balanced. In addition, chlorine has much more power or efficacy at lower pH levels, so you can use less. Now that you have balanced water, added stain and clarifier chemicals and filtered the water, you can finally shock the pool!

How much shock is needed to open a pool depends on the condition of the water. Our spring startup kits have 4 lbs of [pool shock](#), but you may need more. For a clear but hazy pool, 1 lb. per 10,000 gallons is usually sufficient. For a dark green pool however, 3-4 lbs. (or more) per 10,000 gallons may be needed. If the pool water is still green-ish, more pool shock is needed.

The chlorine level should be high from the pool shock for the first few days. If the chlorine level drops to zero within 8 hours of shocking the pool, or if the pool water is still green, recheck water balance levels and shock the pool again. For continued trouble with chlorine residual or green water, check for phosphates or add a [phosphate](#) remover to the pool.

Broadcast pool shock across the surface, and pour along the edge to disperse the chemical. Use a pool brush to help dissolve and distribute. Plastered pools with stained surfaces on steps, or around the drain, can use pool shock for stain removal. Vinyl pools should use non-chlorine pool shock, or pre-dissolve chlorine granules in a bucket filled with water, before pouring around the pool.

**Step 5 - Add Algaecide:** The final product in our [pool start up kits](#) is the algaecide. Add your algaecide only after chlorine levels have dropped below 3 ppm, which is usually a few days after shocking the pool. High chlorine levels quickly deplete pool algaecides, or render them useless.

The name Algae-Cide is a bit of a misnomer; [pool algaecides](#) function more as Algae-Stats, to control the growth and prevent colony formation. Algaecides do a poor job of killing an active algae bloom. Pool Shock is used to kill algae; Algaecide is used to prevent it from growing in the first place.

**Step 6 - Add Chlorine Tablets:** After balancing the water, adding Stain & Scale and Clarifier, filtering the water, shocking the pool and finally adding a dose of algaecide, you are ready for summer.

Add chlorine tablets to your [chlorine feeder](#) or [chlorine floater](#) to continuously chlorinate the water. Most pools use about 2 tablets per week, per 10,000 gallons of pool water. Use your test kit or test strips to determine the correct number of tablets and correct chlorinator setting, to maintain a constant chlorine level of 1-3 ppm.

You can buy [chlorine tablets](#) in 10, 25 or 50 lb. buckets, or purchase a spring [pool chemical pack](#) that contains tablets, shock, algaecide and stain chemicals, available in five sizes.

Do not place chlorine tablets in the skimmer basket, or directly in the pool, which can cause equipment problems or surface stains. Keep your chlorine bucket tightly sealed to keep out moisture and prevent contamination, or mixing with other chemicals.

## New Pool Start Up



Chemicals for starting up a new pool, or an older pool that has been drained and refilled is not very different than those chemicals needed for pool opening, only that you may use more of them.

Tap water usually makes pretty good pool water in most cases. The pH and alkalinity are normally within a good range, but depending where you live, the water hardness can be too soft or too hard. It's quite important to test pH, Alkalinity and Calcium Hardness levels with a reliable pool [test kit](#) or strip.

Well water, when used to fill a pool, can have a good water balance right out of the ground, or in other cases it can require a good deal of adjustment to pH, Alkalinity and Calcium Hardness. Minerals, metals and hardness are usual concerns with well water. Consider filling with well water that has been filtered and treated by the home filtration system, rather than using outside spigots.

When filling a pool with high calcium hardness levels, minerals or metals, or suspended solids, use a [pool pre-filter](#) to improve water quality and trap stain causing material before it enters the pool. Especially recommended for new pool plaster start up procedures.

**Step 1 - Add Stain & Scale Treatment First!** To protect pool surfaces, use a non-phosphoric [sequestering agent](#), (Stain & Scale) to keep minerals and metals locked up in solution. It's important to add this chemical to the pool first, even as the pool is filling. Allow the agent 4-8 hours of filtration to make all of the chemical connections before adding chlorine.

**Step 2 - Water Balance:** When a pool is refilled with fresh water, the first step is to balance the pH, Alkalinity and Calcium Hardness levels. If you're lucky, they may all be within range, but in most cases, at least 1 of the 3 will need adjustment. Add water balance chemicals needed to the water with the filter running, and use a pool brush to help disperse quickly.

Cyanuric acid levels will be zero in fresh fill pool water; you'll need 4 lbs per 10,000 gallons of [stabilizer](#) or conditioner to raise your cyanuric acid levels, which protects chlorine from degradation by sunlight.

**Step 3 – Add Algaecide:** We've skipped over shocking the pool, and unless your fill water has poor clarity or a strong chlorine smell, there is probably no need to shock the pool. And if you don't add granular pool chlorine, you can jump right ahead to adding [pool algaecide](#) to control and prevent algae from establishing a foothold if chlorine levels should dip, or filtration problems occur.

**Step 4 – Add Chlorine Tablets:** Without delay, add [chlorine tablets](#) to your chlorine feeder or chlorine floater to continuously chlorinate the water. You may need more tablets than usual at first to build an initial residual, and after that about 2 tabs per week, for each 10,000 gallons of pool water.

You can buy chlorine tablets in 10, 25 or 50 lb. buckets, or buy a seasonal chemical supply of [summer pool chemicals](#) in a perfectly sized kit with 3" tablets, shock, algaecide and stain chemicals.

Use an accurate [test kit or test strips](#) to determine how many tablets to use and the best chlorinator setting, to maintain a constant chlorine level of 1-3 ppm, from now until the end of the season. Avoid peaks and valleys in chlorination, and strive for consistent level throughout the summer. As the weather warms, you will need to use more chlorine tablets than during cooler and cloudy periods.

## Salt Water Pool Start Up



Salt water pool startup chemicals are not that much different from any other pool opening procedure. You still need to balance your water chemistry, you still need a Stain & Scale chemical, and will benefit from using a Clarifier and [Algaecide](#).

Start the pool filter and circulate the pool water for 24/7 for a few days, but don't turn on the salt cell yet. For a salt water pool start up, leave the salt cell off until you establish good water conditions.

**Step 1 - Water Balance First!** To improve the efficacy of your chlorine and reduce the workload required of your salt cell, test and adjust pH, Alkalinity and Calcium Hardness levels. A minimum level of 40 ppm of [Cyanuric Acid](#) prevents the sun from depleting the chlorine rapidly, which also protects your salt cell from over work.

**Step 2 – Check Salt Levels:** Many saltwater chlorinators have a sensor to measure salinity level in the pool, and will alert you when additional salt is needed. Sensors should be cleaned regularly to prevent a false reading, and can be calibrated by using [Salt Test Strips](#). Most salt pools will need to add make-up salt each spring. Be sure to use only salt labeled as [Pool Salt](#).

**Step 3 – Stain & Scale & Clarifier:** In addition to keeping mineral scale and metal ions from mixing with dirt and depositing on pool surfaces, [Stain & Scale](#) chemicals also help keep salt cells from a rapid accumulation of scale, which hinders their performance. [Clarifiers](#) are recommended for any pool startup, to help the filter quickly restore water shine and sparkle.

**Step 4 – Shock the Pool:** Many saltwater chlorinators have a shock feature, but they are slow to raise chlorine level, and it puts a strain on the salt cell. For this reason, many salt water pool openings use [pool shock](#) for salt pools during pool opening, closing or for algae blooms.

**Step 5 – Turn on the Salt Chlorinator:** Salt cells make their own chlorine, but check the water temperature first – they don't work at all when water temperatures are below 60° F. Assuming that your water is warmer, power up the salt cell and test operation.

Use a pool [test kit or strips](#) to check chlorine levels regularly to be sure that your output level is set to create a consistent 1-3 ppm free chlorine residual. As the water temperature warms and days become longer, you may need to turn up the output to maintain chlorine levels.

**Step 6 – Add an Algaecide:** [Algaecide](#) is not always necessary; in pools that have never seen a single bloom for instance, but it's cheap insurance against filter, pump or salt cell problems that cause chlorine levels to quickly drop.

Our [Spring Start-Up Kits](#) are perfect for salt water pool openings and include chlorine shock, clarifier, stain & scale and algaecide. Salt water pool startup chemicals and balanced pool water are necessary to establish proper water conditions for the salt cell to operate effectively.

Natural Chemistry makes a small line of chemicals specifically for the saltwater pool. The [Salt Water Magic Maintenance pack](#) includes a bottle of Salt Water Magic, a combination enzyme, phosphate and pH buffer, a bottle of Cell Protect, a powerful sequestrant to keep scale deposits off your salt cell and pool surfaces, and also a 5.5 lb bag of Refresh pool salt, used as a booster.

## Intex Pool Start Up Chemicals



[Intex pools](#) are small aboveground pools, but they still need startup or opening chemicals as any other pool. Perhaps you aren't as concerned about staining and scaling as an inground pool owner, but you certainly want clean and clear water, without any signs of algae.

If you are starting with a freshly filled intex pool, consider screwing on a [pre-filter](#) to your garden hose before filling the pool, to remove excess solids and minerals, and reduce the workload for your pool filter.

**Step 1 - Water Balance First!** As usual, start by balancing pH, Alkalinity and Calcium Hardness levels to the chart above. Calcium is not as critical in a vinyl Intex pool, but maintaining a minimum level of 150 ppm is still a good idea. Your pool water pH level is best in the 7.2-7.5 range, and to hold the pH steady, the water's Alkalinity should be around 100 ppm. Intex pool chemicals startup would not be complete

without cyanuric acid (aka [conditioner or stabilizer](#)), to protect your chlorine from the sun. Add 1 lb per 2500 gallons, to raise CYA levels to 40 ppm.

**Step 2 – Add Clarifier:** Most Intex pool filter systems are decidedly small, and can use a helping hand. Swimming pool water [clarifiers](#) coagulate suspended material into larger clumps that are more easily filtered.

**Step 3 – Filter the Water!** Run your Intex filter 24/7 for a few days, if possible, to over-filter the fresh water, and help distribute the chemicals. Maintain the pool afterwards with 8-12 hrs of daily filtration, increasing run time as water and air temperatures rise. If needed during the season, replace tired old filters with a new [Intex filter cartridge](#), to make water maintenance easier.

**Step 4 – Add Tablets:** Without delay, use a [chlorine floater](#), a floating pool chlorinator, to slowly dissolve 1-3 chlorine [tablets](#) per week, to maintain a constant chlorine level of 1-3 ppm, from start-up until the end of the season. You will need more tablets as the water warms and sunny days lengthen. A 10 lb chlorine tabs bucket should be enough for most Intex pools.

**Step 5 – Add Algaecide:** Following label instructions for dosage, treat your Intex pool with a good quality [pool algaecide](#), as a supplement to your chlorine treatment, to prevent algae growth.

Pool shock can be added in small quantities to an Intex Pool, either [chlorine shock](#) or [non-chlorine shock](#) are effective to remove bacteria, viruses and germs in pool water, and remove combined chlorine molecules. Regular, unscented household bleach can also be added directly to Intex pools, 1 cup at a time.

Use a reliable [DPD test kit](#) or [test strips](#) to avoid over-chlorinating or under-chlorinating the pool water, and to also test for the pH level of the pool water. You will need to have [pool pH chemicals](#) on hand - pH increaser and/or pH reducer, to adjust pH levels during the summer.