



**ASTRALPOOL** 





# Taking care of your pool

Water treatments

**A clean and safe pool, all year round.**

▶ Start-up, 5-step maintenance, winterizing and common problems.

▶ All the solutions:

-  DISINFECTION, MULTIFUNCTION
-  REGULATORS
-  ALGAEICIDES AND WINTER CONDITIONERS
-  CLEANING, FLOCCULANTS AND COMPLEMENTARY PRODUCTS

▶ Maximum safety for all the family



# Practical tips for maintaining your pool

The water is balanced when it is clean. This table indicates the levels for the stable maintenance of your pool. Ideal levels and AstralPool products used for the balanced maintenance of your pool.

Parameter	What is this?	When to analyze	Ideal range	AstralPool solution for adjusting the levels
pH	A measurement of the acidity of the water	Twice a week	7.2-7.6	pH Minor or pH Plus
Free residual chlorine	The amount of active chlorine in the water	Every day	From 0.5 to 2 ppm	Disinfectant products with chlorine
Total alkalinity (TA)	The capacity of the water to maintain the pH at a suitable level	Once a week	From 60 to 120 ppm	Alkalinity increaser
Calcium hardness (CH)	The amount of calcium dissolved in the water	Once a week	Acceptable: from 200 to 1,000 ppm. Ideal: from 200 to 500 ppm	Antical Super
Cyanuric acid (CYA) stabilizer*	The measurement of the capacity of the chlorine to be protected from the ultraviolet rays of the sun (these rays reduce the chlorine in the pool water)	Twice a week	Ideal range: from 20 to 50 ppm Do not exceed 100 ppm	Chlorine stabilizer

\* Wait at least 48 hours for the stabilizer to dissolve before applying an AstralPool disinfectant.

## Filtration and circulatio

- It is necessary to maintain adequate circulation and filtration to guarantee efficient distribution of the products.

## Filter maintenance

- Sand filters:** backwash the filter when the pressure increases from 8 psi to 10 psi from the initial reading.
- Diatomaceous filters:** follow the manufacturer's instructions for backwashing.
- Cartridge filters:** follow the manufacturer's instructions for washing the filter.

## Water circulation

- Make sure that all the units operate correctly and are in their correct position.
- Run the pump and the filter for at least 8 to 10 hours a day.
- Clean the filter with chemical products at least twice every season.
- Clean the collector baskets and the hair and fluff filters (in the pump).



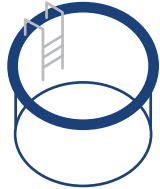
# Measuring the capacity of your pool

It is important to know the capacity of the pool before starting any chemical treatment in it. If you do not know the capacity of your pool, simply use the formulas below to make an approximate calculation.

1 PPM = 1 mg / l = 1 gr/m³

Circular pool

Length (m) x Width (m) x Average depth (m) x 0.78 = volume (m³)



Rectangular or square pool

Length (m) x Width (m) x Average depth (m) = volume (m³)



Oval pool

Length (m) x Width (m) x Average depth (m) x 0.89 = volume (m³)





## Taking care of your pool

### Water treatments

Cloudy water? Green color? Rusty metal components? Smell of chlorine? Irritated eyes? Slippery walls and floor?... Whatever the problem with your pool, here you will find all the solutions: algaecides, regulators, multiactions... Up to 100 different **AstralPool** products! That is why we have created this catalogue, so that you can keep it and consult it whenever necessary. Your pool will thank you for it!

Now you know. If you dream of a pool that is always clean, crystal-clear and safe, for you and your family, now it is possible and easier. With **AstralPool** you will have an infinite number of solutions for a perfect pool, always.

**Welcome to AstralPool.**  
**An infinite number of solutions for a clean and safe pool, all year round.**



## Start-up

At the beginning of the season, certain actions for starting up the pool must be carried out. The objective is to ensure that all the components of the installation are ready and in good condition in order to enjoy the pool throughout the swimming season.

It is best to start the operation at the beginning of spring, in order to have enough time in case it is necessary to resolve small problems that require the presence of pool care professionals.

It is important to follow the correct procedure in order to avoid problems during the bathing season.

- 1.1. THE POOL BASIN**
- 1.2. THE PLANT ROOM**
- 1.3. THE INTERNAL CIRCUIT**
- 1.4. PREPARING THE WATER**



### 1.1. THE POOL BASIN

If you have a winter pool cover, remove it, clean it and spread it out in the sun to dry. You can continue to use it as a hygiene and safety measure.

Now clean the pool surround, with a vacuum cleaner or a high-pressure water system.

- Check the condition of the return inlets and the various items built into the basin.
- Clean the skimmers.
- Clean the overflow channel and grille with water at high pressure.
- If the pool has underwater lighting, check the operation and condition of the projectors and connection boxes.
- Check the condition of the bottom drains and check that there are no deposits of dirt.
- Clean the surfaces of the pool basin with non-aggressive materials: sponges, brushes, etc. There are special chemical products available for these purposes, such as surface descalers.
- It may be necessary to empty the pool in order to carry out a complete cleaning of the basin. Avoid carrying out these tasks during sunlight hours, and always keep the surfaces wet.
- Finally, check the condition of diving boards or platforms and steps. Use specific products for cleaning and polishing stainless steel components.

 **CLEANING, FLOCCULANTS AND  
COMPLEMENTARY PRODUCTS**

## 1.2. THE PLANT ROOM

This is the nerve centre of the pool, containing the equipment for the physical and chemical treatment of its water.

### PUMP

Place the pump in position (if it has been disassembled during winterizing) and check the pre-filter. Next, check the condition of the purge valve of the hydraulic unit and check that the motor turns correctly.

1. Check that the joint and the cover of the pre-filter fit well and that the connections are correctly tightened. Check the appropriate operation of the cut-off valves. Check the condition of the electrical connections and the connection with the control cabinet.
2. If there are traces of incrustations, they may be a sign of possible water leaks. In this case it is essential to carry out an internal inspection of the unit.

### FILTER

The type of checks to be carried out depends on the type of filter..

1. In the case of a sand filter, open the filter and check inside. If the sand is densely packed and there are incrustations inside the filter, clean it using suitable chemical products. In these cases, it is necessary to empty the water from the filter using the purge valve and add fresh water and chemical product until the sand is covered. Leave the product to react with the cover open for 4 hours and then wash it.
2. In the case of cartridge filters, check the condition of the cartridges and clean them with water at high pressure if necessary.
3. For diatomaceous earth filters, once the inside of the filter is in the correct condition, insert a new filtering load.



## 1.3. THE INTERNAL CIRCUIT

In cases where it is possible to create a closed circuit, in which the water passes only through the pipes without going through the filter, it is recommended to carry out the cleaning, descaling and eradication of algae from the circuit. To do this, it is essential to fill the pool with the minimum amount of water necessary for the recirculation system to operate.

Subsequently, add a descaling and disinfectant product to the water in the pool and run the recirculation system for a prudential time of 30 minutes.

Finally, pour the liquid down the drain.

## 1.4. PREPARING THE WATER

In any pool, even if the winterizing process has been carried out correctly, it is necessary to recondition the water for the new season.

Firstly, the pool basin has to be filled or refilled with new water up to the level necessary for the recirculation system to operate correctly. As the pool fills up (a process that can take several days) it is recommended to add granulated dichloro or fast chlorine tablets to prevent the water from degrading. Once the pool is full, a shock treatment must be carried out to eliminate all the germs and contaminants from the water.

This operation can be complemented with an algaecide treatment to prevent the development of algae. Apart from good water disinfection, it is necessary to check and correct the water's pH (level of acidity) using the pH regulators that exist for this purpose.

Another important step is to adjust the dosage of flocculant, which will help to make the pool water clearer and improve filtration performance.

# 2

## Maintenance

Once the pool is in operation, with all the systems and units working correctly, with the water crystal-clear and safe for bathers, it needs to be kept clean and in perfect condition for use.

In a pool that is for your own use, you not only have to bear in mind water hygiene and transparency: aspects such as family safety, the cleanliness of the surrounding area and the correct use of chemical products are of vital importance for making the pool a place for recreation and leisure for the family at all times.

We explain it to you here in 5 steps:

- 2.1. ADJUSTING THE pH VALUE
- 2.2. DISINFECTING THE WATER
- 2.3. PREVENTING ALGAE
- 2.4. FLOCCULATION / ELIMINATING CLOUDINESS
- 2.5. TAKING CARE OF THE FILTER

## 2.1. ADJUSTING THE pH VALUE

Regulating the pH value is the first step for having healthy water that respects the skin.

### WHY?

- A correct pH value between 7.2 and 7.6 is the basis for all the other water maintenance measures.
- The pH value can be subjected to strong fluctuations. When it is not kept within the ideal range, the other steps for caring for the water will not work properly.

### WHEN?

- When the pH value is not within the correct range (7.2 to 7.6).
- For this reason, the pH value must be checked at least once a week and corrected if necessary.
- If the pH value is not correct, the following problems may appear:

#### pH too high

Irritation to eyes and skin.  
Reduction of disinfectant effect.  
Deterioration of flocculation.

#### Ideal

**7,2 - 7,6**

#### pH too low

Rusting of metal components  
Irritation to eyes and skin.  
Deterioration of flocculation.

### ▶ DISINFECTION AND MULTIFUNCTION

## 2.2. DISINFECTING THE WATER

Swimming pool water offers favorable living conditions for a wide variety of microorganisms that can form viscosities or cloud the water. Disinfecting eliminates these microorganisms and achieves hygienically clean pool water.

### WHY?

- Effective disinfection is the indispensable condition for hygienically impeccable water.
- It eliminates possible germs and cloudiness.

### WHEN?

- Continued disinfection is necessary throughout the bathing season.
- If problems emerge, such as algae, cloudiness or viscosities, we recommend carrying out an additional shock treatment.
- Keep the free residual chlorine level between 0.5 and 2 ppm.

If using a different type of disinfectant, maintain the suitable levels according to the table below:

Free residual chlorine	0.5 - 2 ppm
Active oxygen (granulated)	5 - 8 mg/l (1 hour after addition)
Active oxygen (liquid)	2 mg/l
Bromide	1 - 3 mg/l
SHOCK TREATMENT	
<ul style="list-style-type: none"> <li>• Carry out an additional shock treatment with granulated dichloro and liquid flocculant.</li> <li>• Filter for 24 hours or until the water is clean.</li> <li>• Brush pool walls and floor thoroughly.</li> <li>• Add an algicide.</li> <li>• Vacuum up remains.</li> </ul>	

## 2.3. PREVENTING ALGAE

Among the 10,000 types of algae that exist, unfortunately there are some that feel at home in swimming pool water. The appearance of algae has to be prevented.

### WHY?

- Algae are an ideal culture medium for fungi and bacteria.
- Solar radiation and heat favor the growth of algae.
- Viscous deposits of algae can cause accidents.

### WHEN?

- Regularly, to prevent the appearance of algae.

A low but permanent content of AstralPool algaecides in the water, which must be maintained by means of regular dosage, guarantees a pool free of algae with the passing of time.

Another option is to use a remover phosphates, phosphates are food for algae, so if there is no food, no reproduction.

### CLEANING, FLOCCULANTS AND COMPLEMENTARY PRODUCTS

## 2.4. FLOCCULATION / ELIMINATING CLOUDINESS

Cloudiness can appear in any type of pool at one time or another. It is caused by the presence of small particles suspended in the water. Flocculation helps to filter and clear the water.

### WHY?

- Flocculation makes it possible to eliminate both suspended particles and cloudiness and metallic ions and phosphates that the filter is unable to retain.
- Flocculation improves the quality of the water by eliminating these particles.

### WHEN?

- Continued flocculation must be carried out throughout the bathing season.



Laminated filter  
AstralPool Signature

## 2.5. TAKING CARE OF THE FILTER

Filtration and good maintenance of the filter are very important in treating the pool water. Good care of the filter will make chemical treatment more effective.

### WHY?

- With a dirty filter, the water quality deteriorates and the consumption of care products increases.

- A dirty filter can help germs to multiply and then spread through the water.

- With hard water, scale deposits form in sand filters despite regular backwashing.

### ¿CUÁNDO?

- Perform backwashes to eliminate dirt from the filter.
- Clean and disinfect the sand at least once a year, at the start of the season, and whenever problems appear.
- Descale the filter three or four times a year.



# 3

## Winterizing

Although the season of the year when the pool is used most is obviously the summer, you should not forget to look after it when the cold months arrive.

When the bathing season is over, you need to leave your installation on standby. The winterizing process requires a number of actions to make starting up the pool easier when the next season arrives.

Moreover, nowadays there are important problems of water shortage, and accordingly more and more private pool owners decide to keep the water in their pool from one year to the next, avoiding the need to fill it completely every summer.

### 3.1. TREATING THE WATER

### 3.2. ACCESSORIES AND UNITS

### 3.3. PURIFICATION UNIT

### 3.1. TREATING THE WATER

The following points should be taken into account during the winterizing process:

- The pool must never be completely emptied during the winterizing period, especially in areas with a severe winter. The water in the pool acts as a stabilizer of the pressures that act on the walls and bottom of the pool. Furthermore, the water acts as a thermal stabilizer, avoiding contractions of earth in periods of frost.
- Clean the pool properly, rubbing the walls and using the bottom cleaning equipment.
- Carry out a shock chlorination using, for example, granulated dichloro at a ratio of 15 g per m<sup>3</sup> of water.
- Then adjust the pH to between 7.2 and 7.6 and leave the filter running.
- The next day, add about 5 liters of winter conditioner per m<sup>3</sup> of water and run the filter for about 8 hours in order to achieve a good distribution of the product in the water. It is important to repeat the addition of the winter conditioner halfway through the winter.



### 3.2. ACCESSORIES AND UNITS

**SKIMMERS:** Empty and protect the mouths of the skimmers in order to protect them in the event of frost and to avoid the entry of leaves, dirt, small animals and rain.

**WINTERIZING FLOATERS:** Put the winterizing floaters in place in order to protect the sidewalls of the pool from possible damage caused by frosts. Do not use wood or items that could deteriorate and damage the pool.

**SAND FILTERS:** Backwash the sand filters in order to prevent the sand from sticking together.

**DIATOMACEOUS EARTH FILTERS:** Carry out a backwash, remove the dirty diatomaceous earth, open the filter, clean the internal filtering elements with detergent and leave the filter open.

**CARTRIDGE FILTERS:** Remove the cartridges and clean them with water at high pressure.

**PUMP:** Disconnect the recirculation pump from the power and remove the pre-filter basket. Empty it and clean it with water. Then remove any water that is inside the pump. Check the mechanical condition of the pump, grease it and put it away in a dry place.

**REGULATION AND CONTROL DEVICES:** Remove the electrodes and store them with the ends of the sensors in water. Disconnect the control centre and empty the water from the circuit. Cover the holes of the analysis chamber to avoid the entry of dirt.

**SALT ELECTROLYSIS DEVICE:** Disassemble the cell and clean the electrode in an acidic solution, as indicated by the manufacturer. Store the cell in a safe, dry place.

**COVER:** Cover the pool with a manual or automatic cover in order to prevent impurities, leaves, etc. from falling into it. These covers can also act as safety devices and prevent children or animals from falling into the pool.



### 3.3. PURIFICATION UNIT

In cases in which the purification equipment can be activated reasonably often (weekly, fortnightly or monthly), the following recommendations can be considered:

- Add a floater to prevent pressure on the walls in the event of a frost. A floating dispenser can be used that contains the chemical products necessary to keep the pool in good condition during the winterizing period.
- Keep the purification system (pre-filter, filter and skimmers) in perfect operating condition.
- Keep the chemical products in a safe, dry place.
- Program the purifier timer to operate for just a few hours per day (2 hours). Do not operate it if the water in the pool freezes.



# 4

## Common problems

Even if you maintain your pool correctly, the clean, transparent water occasionally takes on colors of an unhealthy appearance in only a few hours, or the walls display stains and alkalinity. Most of these problems, more common than you might imagine, can be solved easily if you know what to do in each case.

- 4.1. CLOUDY WATER
- 4.2. ALGAE
- 4.3. DISCOLORED WATER
- 4.4. RUSTING OF METAL COMPONENTS
- 4.5. SCALE INCRUSTATION
- 4.6. FOAMING
- 4.7. CHLORINE ODOR
- 4.8. EYE AND SKIN IRRITATION

## 4.1. CLOUDY WATER

### SYMPTOMS

Development of algae, high pH or defective filtering.

### CAUSES

Cloudiness is due to the presence of small particles in the water that are difficult to filter out or remove by oxidation.

### TREATMENT

#### Poor filtering

Check the operation of the filter and clean it.

#### Suspended particles

Use a clarifier / flocculant AstralPool, these products grouped particle size less moving them to the bottom of the pool thus facilitating cleaning or filter cleaner.

#### Development of algae

If you see algae in your pool, take the following two steps:

- Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus” at least one hour before shock treatment.
- Carry out shock treatment.

### PREVENTION

To avoid having to perform a shock treatment, prevent the appearance of algae using a weekly maintenance **AstralPool algaecide** or phosphate remover.

## 4.2. ALGAE

### SYMPTOMS

Cloudy water, slippery surfaces, obstruction of filters and excessive consumption of chemical products.

### CAUSES

Algae can occur due to poor circulation, poor filtration, inappropriate chemical maintenance, poor cleaning or environmental influences. Algae do not cause illness, but their presence does not make swimming inviting.

#### Green algae

Cling to walls and are also free-floating, making the water cloudy.

#### Mustard algae

Cling to walls, leaving the water clear unless they are physically disturbed. When brushed, the appearance is a fine brown powder.

#### Black algae

Cling to walls and are very difficult to eliminate.

### TREATMENT

- Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus” at least one hour before shock treatment.
- Carry out shock treatment with granulated dichloro and liquid flocculant.
- Run filter for 24 hours or until water clears.
- Brush pool walls and floor thoroughly.
- Vacuum up remains.
- Add an algaecide.

## 4.3. DISCOLORED WATER

### SYMPTOMS / CAUSES

The possible causes of discolored water are algae growth (green color), or an excess of copper (blue), iron (yellow/brown) or manganese (black).

### TREATMENT (GREEN WATER)

- Green, hazy water (algae growth): see section 4.2. “Algae”

### TREATMENT (BLUE/BROWN/BLACK WATER)

- Blue/brown/black water (excess copper/iron/manganese).
  - Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus” at least one hour before shock treatment.
- Carry out shock treatment with granulated dichloro and liquid flocculant.
- Run filter for 24 hours or until water clears.
- Brush pool walls and floor thoroughly.
- Vacuum up remains.
- Add a “Super Descaler.”

## 4.4. RUSTING OF METAL COMPONENTS

### SYMPTOMS

Rust is a symptom of the corrosion of the metal components of the pool.

### CAUSES

Some possible causes are low pH or low calcium hardness.

### TREATMENT

- **Low pH:** increase the pH to between 7.2 and 7.6 with “pH Plus.”
- **Low calcium hardness:** raise with “Hardness Increaser.”

## 4.5. SCALE INCRUSTATION

### SYMPTOMS

You know there is scale in your pool if white chalky deposits form on pool walls and accessories.

This can result in rough pool wall surfaces and reduced circulation flow.

### CAUSES

Scaling can occur if the water's pH is too high.

### TREATMENT

- **High pH:** lower the pH to between 7.2 and 7.6 with "pH Minor."
- Add **Descaler**.

## 4.6. FOAMING

### SYMPTOMS / CAUSES

Foamy water is a result of a build-up of body oils, lotions, deodorants and cosmetic products.

### TREATMENT

- Use a clarifying / flocculant AstralPool, using a weekly dose of these products, avoid turbidity and foaming and also remove the remains of oils or creams that are floating in the water thereby improving the performance of the filters

## 4.7. CHLORINE ODOR

### SYMPTOMS / CAUSES

A smell of chlorine when you are swimming is a habitual symptom of either imbalanced pH, a high presence of combined chlorine (chloramines) or an excess of total chlorine in the water.

### TREATMENT

#### Imbalanced pH:

- Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus.”

#### High presence of combined chlorine:

- Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus” at least one hour before shock treatment.

- Carry out shock treatment with granulated dichloro.

#### Excess of total chlorine:

- Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus.”
- Eliminate excess chlorine with “Chlorine neutralizer.”

## 4.8. EYE AND SKIN IRRITATION

### SYMPTOMS

Have you ever tried to open your eyes under water and they immediately began to burn, or you experienced itchy skin?

### CAUSES

You may have taken it for granted that excess chlorine was the cause when it was actually imbalanced pH or a low level of free chlorine. This is why it is important to keep your water balanced to ensure optimal swimming comfort.

### TREATMENT

#### Imbalanced pH:

- Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus.”

#### High presence of combined chlorine:

- Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus” at least one hour before shock treatment.

- Carry out a shock treatment with granulated dichloro.

#### Excess of total chlorine:

- Adjust pH to between 7.2 and 7.6 with “pH Minor” or “pH Plus.”
- Eliminate excess chlorine with “Chlorine neutralizer.”