ctx® pro

The caring formula

Maintenance Guide

Everything you need for a perfect water

ctxprofessional.com

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The caring formula

The CTX pro range of products is the complete, practical, balanced and ideal formula you need to take care of your pool water.

Care, technology, expertise
We've been working for over 40 years with a single objective:
to take care of water, you and yours.

We've developed a series of specific products to take care of your pool water. Safe products manufactured in Europe for each and every phase of water treatment. Because we know water; we study it, we protect it, we live it.
We take care of water, and we take care of you.

For more information, please visit the new CTX website
www.ctxprofessional.com

Discover the CTX pro formula

Whether maintenance products or specific solutions, the new pack has all the information you need to choose the CTX Pro product that will work best for you.

New design

The 4 steps of water care

The CTX pro formula is a complete and total commitment to the care of water and those who enjoy it.
Everything you need, in four steps:

1

Balance

Maintains water parameters at optimal levels

2

Disinfection

Disinfects water and kills microorganisms

3

Algicide

Prevents algae, preventing their appearance

4

Crystal Water

Removes dirt and cloudiness, crystal clear water

The CTX pro range is supplemented with products to keep pools in **optimal condition all year round:**

Cleaning products

Take care of the elements of your pool for a perfect efficacy

Winter products

Take care of your pool during Winter

CTX Solutions

A complete range that delivers specific solutions to every possible problem

Always clean, always perfect

Through a combination of physical and chemical processes, the water reaches and maintains a visually and hygienically **perfect state for maximum swimming enjoyment**.

Physical Treatment
Filtration and circulation system

The circulation and filtration system is the heart of a pool. Together with the pump and skimmers, up to 80% of the final result depends on their performance. Chemical products cannot be fully effective without proper filtration that keeps the water free of impurities and dirt from the atmosphere, environment and pool use.

How to ensure trouble-free operation

1. **Make sure the filter is in good condition.**
2. **Clean the filters with chemicals at least once a season.**
3. **Filter all water at least once a day.**
   The filtration time will depend on the water temperature (filtration time = water temperature divided by 2). If the temperature is above 30°C, filtering 24 hours a day is recommended.
4. **Keep the skimmers free of obstructions (leaves, etc.).**

Chemical Treatment
The importance of water chemistry

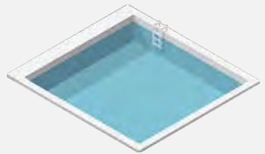
Filtration systems alone aren't enough to remove all impurities from the water.
Also, external agents, apart from affecting the appearance of the water, its transparency and cleanliness, also impact water on the chemical level, and can jeopardize swimmer safety.
It is therefore essential to treat the water with chemical products that purify and keep pools clean and safe.

Knowing your pool's capacity is crucial for correctly dosing chemical products.

How to determine your pool's capacity

1 ppm Cl = 1 (mg Cl/L water) = 1 (g Cl /m³ water)
Equivalence to determine the quantity of 1 product/volume

Capacity
Rectangular pool
Length x Width x Average Depth



Capacity
Circular pool
Diameter x Diameter x Average Depth x 0.78

Capacity
Oval pool
Length x Width x Average Depth x 0.89

Getting ready

Warm weather is just around the corner, and with it, the urge to go for a swim. Which means it's time to service your pool to get it ready for a trouble-free swimming season.

Clean the outside of the pool

The first step is to clean the pool basin. It's also important to clean the other pool elements (pool cover, nozzles, skimmer, the area around the pool, etc.).

Clean the inside of the pool

Once the exterior is cleaned, make sure the interior (the pump and filter) is in good condition. Wash any sand out of the filter before the swimming season.

Cleaning the water

Even when winterizing is successful, all pools need to have their water cleaned before the new season.

First, fill the inside of the pool with fresh water until it reaches the right level to ensure that the recirculation system works correctly. We recommend dosing the pool with Astralpool Chlorine Shock during this process to keep water quality high.

Once the pool is filled, follow the 4 steps to get the pool ready for swimming:

1

Balance

The water's correct pH must be measured and corrected using pH regulators

2

Disinfection

A shock treatment must be performed to eliminate all germs and pollutants from the water

3

Algicide

Complete the disinfection process with an anti-algae treatment to prevent algae from developing

4

Crystal Water

Another important step is to add a dose of flocculant to help clarify the pool water and improve the filter performance

Maintenance during the swimming season

The swimming pool, particularly in summer, is one of the busiest places in the house, a place where the whole family can have fun as well as relax and unwind with a swim. Which means that while it's important that the pool always be clean, you also need to make sure that the water is free of any bacteria, viruses and algae that could carry diseases.

Several factors impact the condition of pool water: the weather (temperature, sun, storms), the frequency of use (number of users, how often they use the pool), the proximity to plants (leaves, pollen), etc.

All this visibly (leaves, insects, sunscreen, hair) and invisibly (bacteria, viruses, particles) affects the water. Which is why proper maintenance is important to ensure pool water is always clean and in perfect condition. To that end, and as we explained in the practical tips, good filtration isn't enough: you have to treat your pool with chemical products.

4 STEPS to follow

1

Balance

Maintains water parameters at optimal levels

2

Disinfection

Disinfects water and kills microorganisms

3

Algicide

Prevents algae, preventing their appearance

4

Crystal Water

Removes dirt and cloudiness, crystal clear water

Before going into the details of the 4 steps of correct maintenance, it's important to consider an equally important preliminary step: **analyzing the water** to ensure that the chemical products have optimal effectiveness and that the water is in perfect condition. It is crucial to analyze water regularly, at least once a week.

There are different ways to test the water, but we recommend using Blue Riiot, which has an application to make pool maintenance easier. (attach photo and feature explaining the product).

The most important parameters to analyze are:

Parameters	Values	Frequency	Comments
Total Alkalinity TA	100-150ppm	Every season	Prevent the pH from fluctuating
Hardness TH	150-300ppm	Every season	Prevents turbidity and lime
pH	7,2 & 7,6	1-2 per week	Ideally 7.4
Free chlorine	0,5-2ppm	1-2 per week	1ppm is enough
Combined chlorine	<0,6ppm	1-2 per week	Difference between Total chlorine and Free chlorine

STEP 1: Balancing the water for a pleasant swim

Balancing the water is the first step in pool water maintenance. There are 3 values to control if you want balanced water:

pH

The pH controls whether water is acidic, neutral or basic. An imbalanced pH affects the effectiveness of disinfectant products, and can cause metals to corrode, scale to build-up and can result in eye/skin irritation.

TA (Total Alkalinity)

Refers to water's carbonate and bicarbonate content. TA acts as a 'buffer'. A correct TA improves the pH stability of the water.
If the TA is too low, the pH may fluctuate significantly.

TA recommendation:
100 a 150ppm

TH (Total Hardness)

Measures water's calcium and magnesium content and defines the hardness of the water, that is, how much lime scale is in the water. A low TH produces aggressive or 'SOFT' water (corrosive to equipment).
A high TH produces lime scale, it is 'HARD' water (accumulates lime scale).

TH recommendation:
150 a 300ppm

(a value around 150ppm can help prevent corrosion or have lime problems)

STEP 2: Disinfecting water for safe swimming

Water disinfection is an essential step that removes bacteria and viruses from the water. There are different chemical disinfection methods: Stabilized chlorine, Non-stabilized chlorine and Bromine.

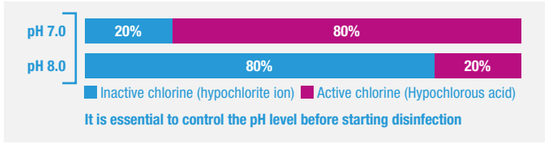
All the options for disinfecting swimming pools, in their recommended parameters, are effective against microorganisms that can live in the water.

Disinfectant	Values
Residual free chlorine	0,5-2ppm
Total Bromine	2-5ppm

Stabilized chlorine

The most common method of disinfection is stabilized chlorine, which not only disinfects the pool, but also contains a stabilizer that protects the chlorine from the sun's UV rays. Chlorine therefore takes longer to evaporate and stays in the water longer.

When added to the water, chlorine is divided into active chlorine, which disinfects, and inactive chlorine, which does not. The proportion of active chlorine depends on the water's pH level.



Disinfection demands change throughout the season (weather, use, etc.), so it's important to check the chlorine level weekly to ensure that it always stays within the recommended parameters.

CTX has a wide range of chlorine:

- Slow-release chlorine
- Multi-action

Non-stabilized chlorine

This chlorine does not contain stabilizer, so it is recommended for indoor pools. If used in outdoor pools, stabilizer is recommended to keep chlorine in the water longer.

Bromine

A highly reliable disinfectant, bromine is a good choice for anyone who is bothered by the smell of chlorine. It has a high tolerance to high pH, so it ensures optimal disinfection even if the pH increases.

STEP 3: Algicides for algae-free water

Disinfectants aren't enough to prevent algae. Frequent use of algaecides is necessary to stop algae from growing and spreading in the pool, causing cloudiness and even algae layers.

There are many types of algae, which produce:

- green or brown water
- slippery surfaces
- pool damage

Our wide range of CTX anti-algae products covers all types of needs.

Tip

If there is a recurring algae problem, we recommend checking the water's phosphate concentration.

STEP 4: Flocculants essential to maintain crystal clear water

The filtration equipment traps much of the dirt that is accumulated in the water, but there are very small particles that it cannot remove (algae, bacteria, organic matter, sunscreens, pollen). This is what makes water lose transparency. With the flocculant, these particles increase in size so that the filter can catch them and remove them from the water.

Frequent problem and how to solve them

Problem	Cause	Solution	Product
Irritation of eyes and skin	- pH outside recommended level. - Combined chlorine (chloramines) too high, presence of organic matter.	- Adjust pH to 7.2 - 7.6 and check to see if alkalinity needs adjusting. - Decrease chloramines. Possible shock treatment.	- ctx20/25 pH Plus - ctx10/15 pH Minus - ctx21 Alka Plus - ctx200gr/250 Clor Shock
Stains on pool walls	Presence of metal ions, usually due to corrosion problems.	Scrub and clean the stains with a brush and a surface descaler. Adjust pH and alkalinity.	- ctx51 WallCleaner Plus - ctx53 WallCleaner Liner
High combined chlorine	Deficient chlorination. Presence of organic matter and nitrogenous compounds (ammonia).	Adjust chlorine levels. Clean filters. Make sure swimmers rinse off before using pool. Possible shock treatment.	- ctx200gr Clor Shock - ctx57 Netalfilter
Foam is forming in the water	Too much algaecide. Too much organic matter.	Shock treatment and subsequent chlorine adjustment. Adjust pH and partially refresh pool water.	- ctx20/25 pH Plus - ctx10/15 pH Minus - ctx200gr/250 Clor Shock
- Green colored water **- Slippery or green walls and floors**	- Algae. - Algae growth on walls and floor. - Wrong disinfection treatment. - Low alkalinity (emerald green).	Remove algae by brushing. Adjust pH. Wash filter. **For polyester liners/ pools:** Perform shock chlorination. Add flocculant and let it filter for 24 hours. Add algaecide. **For gresite pools:** Add algae destroyer. For low alkalinity, you can also use the alkalinity increaser.	**Polyester liners:** Preliminary steps: - ctx20/25 pH Plus - ctx10/15 pH Minus - ctx57 Netalfilter Remove algae: - ctx200gr ClorShock - ctx37 Xtrem Floc - ctx530c Algastop Ultra Power For low alkalinity: - ctx21 Alka Plus **Gresite pools:** Preliminary steps: - ctx20/25 pH Plus - ctx10/15 pH Minus - ctx57 Netalfilter Remove algae: - ctx575 Algae destroyer For low alkalinity: - ctx21 Alka Plus

Problem	Cause	Solution	Product
Lime scale on walls and cloudy water	High concentration of calcium salts (hardness) and pH too high.	Adjust pH. First, brush off lime scale from the walls. Vacuum with a pool cleaner. If the scale cannot be removed, empty the pool and add anti-limescale products.	- ctx20/25 pH Plus - ctx10/15 pH Minus - ctx600 Antical - ctx700 Antical Super
Brown water	Presence of iron or manganese particles.	Raise pH to 7.8. Shock chlorination. Add flocculant. Run the pool cleaner.	- ctx200gr ClorShock - ctx530c Algastop Ultra Power - ctx575 Algae destroyer
Rusting of metal parts	Excessively low pH levels. Low alkalinity. Corrosion of metal parts.	Adjust pH to 7.2 - 7.5. Maintain Alkalinity between 60 - 125 mg/l.	- ctx200gr ClorShock - ctx20/25 pH Plus - ctx37 Xtreme Floc
Water has turned green or brown after chlorination	Metals in the water, especially copper, can cause the water to turn green. These metals get into the pool through rainwater, tap water, well water and can be produced naturally or as a result of corrosion caused by a low pH level.	Check the alkalinity of the water and increase it if it is <100mg/l. Adjust pH. Add flocculant. Let the circulation run for at least 24 hours, until the water turns clear again.	- ctx20/25 pH Plus - ctx10/15 pH Minus - ctx21 Alka Plus - ctx41 Flocculant

Problem	Cause	Solution	Product
Water is milky or cloudy	- High water pH and alkalinity. - Poor filtration. - Algae formation.	Clean the filter. Adjust pH. Perform shock chlorination and add flocculant. Turn on filtration for 10 hours at a time.	- ctx20/25 pH Plus - ctx10/15 pH Minus - ctx200gr/250 Clor Shock - ctx37 Xtreme Floc - ctx57 Netalfilter
Low alkalinity	Water supply. Chemicals supply. Low pH.	Add alkalinity increaser.	ctx21 Alka Plus

And, remember!

CTX also has a range for cleaning all the elements of the swimming pool, and a range for the maintenance of the water during the winter.

Cleaning

Winter

For more information, go to the website
www.ctxpofessional.com

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