



Pool Care

Guide



Happy Swimming!

Versión en español al reverso

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At HTH Pool Care Products, we know that pool owners all want the same thing - clean, clear water. You want sparkling water that just begs for its surface to be

broken with a graceful dive or a tummy-busting belly flop. That's why we offer a complete line of pool care products that will keep your water sparkling blue throughout the entire season.

The HTH® brand is recognized for superior, quality pool and spa care products.

HTH Pool Care Products are color-coded to make it easy for you to find the product you need and to follow our 4-Step Program to maintain sparkling blue, crystal clear water. By simply looking at the package you'll be able to see which step you are completing in the 4-Step Program.

Happy Swimming!



Connect with HTH Pool Care
(scan QR codes to learn more)

HTH Pool Care How-To

HTH Pool Care is constantly working to provide you the tools and know-how to give you clean, clear water. Scan the QR codes to view helpful how-to videos on the topics shown.

Step 1: Test & Balance (purple)



*How to Test
and Balance
Your Pool*

Step 2: Sanitize (yellow and orange)



*How to Add
HTH® Floaters
to Your Pool*



*How to Add
HTH® 3-in-1
Skimmer
Tablets to Your
Pool*

Step 3: Shock Weekly (red and blue)



*How to Shock
Your Pool with
HTH® Green to
Blue Shock
System*



*How to Add
Shock an
HTH® Shock
Product*

Step 4: Prevent Algae (green)



*How to
Prevent
Algae in
Your Pool*



*How Treat
Algae in
Your Pool*

**For more information,
please visit www.hthpools.com
or call 1-866-HTH-Pool**

Pool Care Basics



*The Basics
of Opening
Your Pool*

Accessories



*How to Use
the HTH®
Vinyl Patch Kit*



*How to
Vacuum Your
Pool*



*How to
Assemble the
HTH® Spa &
Small Pool
Vacuum*

*(For Pop-Up
and Above
Ground Pools)*



*How to
Assemble the
HTH® Spa &
Small Pool
Vacuum*

(For Spas)



*How to
Backwash
Your Pool*



*How to Use
HTH® Test Kits*



*How to Use
HTH® Test
Strips*



*How to
Assemble an
HTH® 8-14'
Telescopic Pole*

Pool Care Fundamentals

Balanced Pool Care

Balanced water means healthy water. This chart

Ideal Levels and HTH® Products Used for

Parameter	What is it?	When to Test
pH	A measure of the water's acidity	Everyday
Free Available Chlorine (FAC)	The amount of active chlorine in the water	Everyday
Total Alkalinity (TA)	The water's ability to keep the pH at a proper level	Once a week
Calcium Hardness (CH)	The amount of dissolved calcium in the water	Once a week
Cyanuric Acid/ Stabilizer (CYA)**	The measurement of the FAC's ability to be protected from the ultraviolet rays of the sun <i>(these rays decrease chlorine in pool water)</i>	Twice a season

*Adjust pH in the range of 7.2–7.6 when using HTH® Chlorinating Granules or HTH® 3-in-1 Chlorinating Skimmer Tablets. Adjust pH in the range of 7.2–7.8 when using HTH® 1" or 3" Chlorinating Tablets or HTH® Super Chlorinating Tablets.

Filtration and Circulation

Maintaining proper circulation and filtration is necessary to ensure efficient distribution of products and filtration of debris.

Filter Maintenance

- Sand Filters
 - Backwash the filter when the pressure increases 8 psi to 10 psi over initial reading
- Diatomaceous Earth Filters
 - Follow the manufacturer's directions for backwashing
- Cartridge Filter
 - Clean the filter per the manufacturer's directions
- Use **HTH® Filter Cleaner** to clean all three filter types at least twice a season

outlines the ideal levels for balanced pool care.

Balanced Pool Care

Ideal Range	Product Used to Adjust Levels
7.2–7.6*	HTH® pH Plus® or HTH® pH Minus
1–4 ppm when using chlorine	HTH® Sanitizers or HTH® Shock products
60–120 ppm	HTH® Alkalinity Plus
200–500 ppm	HTH® Calcium Plus
Ideal range: 20–50 ppm Do not exceed 100 ppm	HTH® Stabilizer & Conditioner

**Allow at least 48 hours for the stabilizer to dissolve before adding an HTH® sanitizer.

Water Circulation

- Make sure all equipment is working properly and in place
- Run the pump and filter at least 10 to 12 hours per day - sometimes longer
- Chemically clean the filter at least twice per season - Use **HTH® Filter Cleaner**
- Position return inlets downward at 45° and slightly to one side
- Clean skimmer baskets and hair and lint strainer (on the pump)

Step 1: Test & Balance

Want to see how to test and balance your pool?
Turn to page 3

Testing the water is a very simple process. Use an HTH® Test Kit or Test Strips to measure pH, free available chlorine (FAC), total chlorine, calcium hardness (CH), total alkalinity (TA) and cyanuric acid/stabilizer (CYA).



- HTH® 6-Way Test Kit
- HTH® 3-Way Test Kit
- HTH® 6-Way Test Strips
- HTH® Test Kit Refill

Tips for Testing Pool Water:

HTH® 6-Way Test Kit:

The **HTH® 6-Way Test Kit** measures the following parameters: pH, total chlorine, bromine, total alkalinity, calcium hardness and cyanuric acid/stabilizer. The **HTH® 3-Way Test Kit** measures total chlorine, total bromine and pH. Follow the instructions below for both kits.

Directions:

- Wait 24 hours after a shock treatment before testing for FAC or pH.
- Rinse the collection container a few times with pool water. Do this before and after each use.
- Collect water that is 18 inches (about an arm's length) below the surface of the water and away from an inlet pipe.
- Test the water promptly after collecting it.
- Hold bottles vertically when dispensing drops.
- Replace test kit reagents yearly.
- Store the test kit in a cool, dark place.

The HTH® 6-Way Test Strips:

The **HTH® 6-Way Test Strips** measure the following parameters: pH, free chlorine, bromine, total alkalinity, calcium hardness and cyanuric acid/stabilizer.

Directions:

- Dip strip (do not swirl) and remove immediately.
- Do not shake excess water off.
- Hold strips horizontally.
- Hold case horizontally and position the strip over (not touching) colors, and match dominant color of textured pads to color chart.

After testing, the first step in maintaining safe, sparkling clear water is to balance. Balanced water prevents corrosion, etching, equipment damage and scale buildup. It also ensures maximum sanitizer efficiency.

The following products are used to balance the water:



- **HTH® pH Plus®** raises pH levels.
- **HTH® pH Minus** lowers pH levels, use this product to help lower alkalinity levels.
- **HTH® Alkalinity Plus** helps maintain proper pH level and raises alkalinity in pool water.
- **HTH® Calcium Plus** raises calcium hardness in pools plus helps prevent corrosion of metal and plastic surfaces.

Other Balance products help clarify, improve filter efficiency, or reduce metals and staining.



- **HTH® Stabilizer** protects chlorine in pool water and prevents chlorine loss due to intense sunlight.
- **HTH® Filter Cleaner** for cartridge, sand or diatomaceous earth filter. Helps filtration systems work more efficiently by removing dust, oil and lotion. Biodegradable and non corrosive.
- **NEW► HTH® Filter Cleaner contains natural protein additives** cleans all types of pool filters effectively, and is dye and fragrance free.
- **HTH® Clarifier** cleans cloudy, dull pool water.
- **HTH® Natural Clarifier** naturally clarifies cloudy pool water and eliminates oil and scum.
- **HTH® Super Concentrated Clarifier** restores crystal clear pool water. Does not effect pH balance and improves filter efficiency.
- **NEW► HTH® Multi-Surface Cleaner contains natural protein additives**, cleans pool surfaces effectively, will not stain or harm surfaces and is dye and fragrance free.

Step 2: Sanitize

Want to see how to use HTH® sanitizers?
Turn to page 3

Choosing a Sanitizer

HTH Pool Care offers two types of chlorine-based sanitizers: stabilized and unstabilized. Stabilized chlorine contains cyanuric acid/stabilizer, which shields the water from chlorine degradation caused by the sun's harmful ultraviolet rays.

HTH Pool Care offers two varieties of stabilized sanitizers. **HTH® 3" Chlorinating Tablets** and **HTH® Super 3" Chlorinating Tablets**.

HTH® 3" Chlorinating Tablets when used as directed, are an effective swimming pool water sanitizer. These convenient and easy to use tablets are formulated to protect against chlorine loss in direct sunlight.

If you are looking for additional benefits in a swimming pool sanitizer, the New Advanced Formula in **HTH® Super 3" Chlorinating Tablets** is exactly what you need. **HTH® Super 3" Chlorinating Tablets** are a unique and highly effective pool water sanitizer. These convenient and easy to use tablets are formulated to protect against chlorine loss in direct sunlight, and can be used in skimmers, and floaters and feeders. In addition to sanitizing, **HTH® Super 3" Chlorinating Tablets** prevent algae growth and clarify your pool water. They are designed to dissolve slowly to provide a steady source of available chlorine.



HTH® 3" Chlorinating Tablets*

- Provides long-lasting chlorination
- Sun protected for extended chlorine life
- Chlorinates up to one week



HTH® Super 3" Chlorinating Tablets*

- Chlorinates up to one week
- Contains built-in resistance to sunlight
- Contains built-in algae fighter
- Contains built-in clarifier
- New Non-Staining Formula
- Leaves No Residue



HTH® Chlorinating Granules

- Sanitizes pool water
- Kills bacteria and controls algae



HTH® 3-in-1 Chlorinating Skimmer Tablets

- Sanitizes pool water
- Inhibits scale
- Contains skin softener

Unstabilized chlorine does not contain cyanuric acid/stabilizer and may degrade more quickly from ultraviolet rays if it is not used in conjunction with cyanuric acid in the pool. If the cyanuric acid/stabilizer levels are too high in your pool water, overstabilization or chlorine-lock can occur.

Yellow **HTH® sanitizers** will not cause overstabilization. The **HTH® 3-in-1 Chlorinating Skimmer Tablets** dissolve slowly and are for use in skimmers, whereas the **HTH® Chlorinating Granules** can be broadcasted directly into the pool or through the skimmer.

We recommend using **HTH® Stabilizer & Conditioner** with our unstabilized (yellow) chlorinators. Always add this product before you add sanitizer. Allow at least 48 hours for the stabilizer to dissolve.

What is overstabilization?

Excessive amounts of stabilizer can cause overstabilization. This is the buildup of cyanuric acid in your swimming pool water resulting from the use of stabilized sanitizers and stabilized shock products. Overstabilization significantly decreases the effectiveness of chlorine in killing bacteria and algae. Note: Overstabilization can happen in less than one season.

Symptoms of overstabilization:

- Cloudy water
- High chlorine reading with algae
- Adding chlorine does not remove algae

Solution:

- Turn on pool pump and make sure it does not need to be backwashed or cleaned and ensure it is running properly.
- Test and adjust the stabilizer level to 20–50 ppm by partially draining some water from the pool and top-off with fresh water.
- Adjust the pH, FAC, TA and CH to the ideal levels recommended in the Balanced Pool Care Chart.
- Continue with routine pool maintenance program.

Step 3: Shock Weekly

*Want to see more about HTH® shock treating?
Turn to page 3*

Shock treating your pool weekly is important because it protects you and your family from bacteria and organic contaminants. Super chlorination or shock treating removes chloramines, which cause eye irritation and “chlorine” odors from the pool water by adding free available chlorine (FAC).

A shock treatment adds 5 to 10 ppm FAC. The pump and filter should be in operation when shocking your pool. After shock treatment, check to make sure the FAC level is in the range of 1 to 4 ppm before entering the pool.

HTH Pool Care recommends shocking at the same time and day each week. Sundown is the optimum time to shock your pool because the chlorine can work without fighting the sun’s ultraviolet rays. Shocking after sundown also gives chlorine more time to restore water clarity.

Apply an additional shock treatment when any of the following situations occur:

- After heavy swimmer load
- After strong rains and winds
- During periods of extreme sun
- Unpleasant odors
- Signs of algae growth appear
- Water appears dull, hazy, or cloudy





HTH® Shock 'N Swim

- 5 lb. bottle
- Individual 1 lb. bag
- Box with 5 convenient pre-measured 1 lb. bags

This product destroys organic contaminants and restores FAC to the water.



HTH® Green to Blue Shock System

- In 24 hours your pool will once again be blue
- Transform your green water to clear, sparkling sea of blue
- Must be able to vacuum debris out of pool without it passing through the filter



HTH® Super Shock 'N Swim

- Individual 1 lb. bag
- Box with 5 convenient pre-measured 1 lb. bags

This product removes organic waste to restore sparkling clean, swimming pool water. It is also buffered for pH control.

Step 4: Prevent Algae

Want to learn more about treating and preventing algae? Turn to page 3

If you use a preventative algaecide on a weekly basis, algae should not be a problem. However, if you do happen to get stubborn algae, you should use an HTH® algaecide to alleviate the problem.

To get rid of stubborn algae, follow this simple program:

1. Scrub the affected area with the **HTH® 18" Curved Wall Brush** to puncture the outer membrane of the algae.
2. Use an HTH® shock product to double shock treat. Apply directly to the affected area.
3. The following morning, scrub the affected area with the brush again and add the appropriate HTH® algaecide. Let the pump run overnight.
4. Let the pump run overnight.
5. Return to the pool once the available chlorine level is between 1 and 4 ppm.





HTH® Algae Guard™

10% strength

- Protects against algae growth and is a non-foaming formula
- 1 gallon bottle



HTH® Algae Guard™
3X Concentrate

30% strength

- Concentrated formula is 3x stronger than original **HTH® Algae Guard™**
- Prevents green, black and yellow algae



HTH® Super
Algae Guard™

60% strength

- Prevents green, black and yellow algae and is a non-foaming formula
- Quart size bottle



HTH® Super Extended
Algae Guard™

HTH® Super Extended Algae Guard™

- A single treatment of this copper-based algaecide lasts three months



HTH® YellowRid®

Pool Maintenance

- Aids in algae cleanup without brushing
- Treats 15,000 gallons

HTH® Accessories

*Want to learn more about HTH® accessories?
Turn to page 4*

From leaf rakes to vacuum heads to wall brushes, HTH Pool Care offers a full line of accessories for all your pool care needs.

Vacuums & Hoses

HTH® Multi-Surface Vacuum Head

- Fits all types of hoses
- Ideal for all pool types

HTH® Spa & Small Pool Vacuum

- Easy assembly
- Works with above ground and pop-up pools, spas, ponds and waterfalls

HTH® 50' Pool Backwash Hose

- Fits all types of filters
- Standard size 1 1/2 inch diameter

HTH® 35' Universal Swimming Pool Vacuum Hose

- Super flexible
- Use in above/in-ground pools

Floaters

HTH® Swimming Pool Tablet Floater

- Automatically release chlorine into the pool
- Provide steady and continuous sanitization

HTH® Small Pool Floater

- Automatically release chlorine into the pool
- Provide steady and continuous sanitization

Patch Kits & Thermometers

HTH® Vinyl Patch Kit

- Patches small cracks and tears under water
- Do not have to empty pool
- Multi-use container for storage and applying patch

HTH® Pool & Spa Thermometer

- Shatter resistant lens
- Easy to read large numbers

Filter Media

HTH® D.E. Filter Aid

HTH® Pool Filter Sand



Maintenance & Cleaning

HTH® 18" Curved Wall Brush

HTH® Leaf Skimmer

- Skim debris off water surface
- Won't scratch spas, pool walls or vinyl liners

HTH® Leaf Skimmer with Telescoping Handle

- Skim debris off water surface
- Won't scratch spas, pool walls or vinyl liners
- Telescoping handle extends 44"

HTH® Leaf Rake

- Deep net scoops debris from pool floor
- Super flexible frame

HTH® 8'-14' Telescopic Pole

- Locking grip
- Compatible with existing industry products

NEW▶ HTH® PRO 18" Curved Wall Brush

- Reinforced aluminum frame for extra durability
- Helps to scrub and clean pool walls and floors

NEW▶ HTH® PRO 10" Algae Wall Brush

- Aluminum handle
- Stainless steel bristles
- Product contains up to 30% post-industrial material

NEW▶ HTH® PRO Leaf Skimmer

- Enhance pole attachment system
- Puncture resistant net
- Reinforced aluminum frame for extra durability
- Larger surface

NEW▶ HTH® PRO Leaf Rake

- Reinforced aluminum frame for extra durability
- Handle for easy emptying of debris

Recycled Content

Notice our accessories look a little different? That's because we've started using recycled materials in many of our new accessories.

On each item that contains recycled content, you'll see the green icon explaining the exact percentage that makes up that accessory.

Also marked
on product



HTH® Pop-Up/Above Ground Products

Above Ground / Pop-Up & Accessories

HTH® Pop-Up Pool Start Up and Maintenance Kit

This start up and maintenance program is designed specifically for pop-up and above ground pools ranging from 8 to 24 feet in diameter.

The kit contains:

- One 1 lb. **HTH® Shock 'N Swim** for Pop-up Pools
- One 1 lb. **HTH® Chlorinating Granules** for Pop-up Pools
- One 15 oz. **HTH® Stabilizer & Conditioner** for Pop-up Pools
- 10 **HTH® Test Strips**

Products available for individual sale:

- **HTH® Shock 'N Swim** for Pop-up Pools
- **HTH® Chlorinating Granules** for Pop-up Pools
- **HTH® 1" Chlorinating Tablets** for Pop-up Pools



HTH Pool Care also offers the following items for use with pop-up pools:

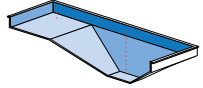
- **HTH® pH Minus**
- **HTH® pH Plus®**
- **HTH® Algae Guard™**
- **HTH® Clarifier**
- **HTH® Calcium Plus**
- **HTH® Alkalinity Plus**



Measuring Pool Capacity

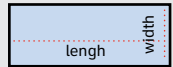
It is important to know your pool's capacity before adding any products to your pool water. If you do not know the capacity of your pool, simply use the formulas below to calculate the approximate capacity.

Calculate Average Depth in feet:



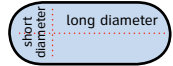
$$\underline{\hspace{2cm}} \text{ Deep end depth (ft)} + \underline{\hspace{2cm}} \text{ Shallow end depth (ft)} = \underline{\hspace{2cm}} \text{ (ft)} / 2 = \text{Average Depth (ft)}$$

For a Rectangular or Square Pool:



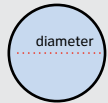
$$\underline{\hspace{2cm}} \text{ Length (ft)} \times \underline{\hspace{2cm}} \text{ Width (ft)} \times \underline{\hspace{2cm}} \text{ Average Depth (ft)} \times 7.5 = \text{Pool Capacity (gal)}$$

For an Oval Pool:



$$\underline{\hspace{2cm}} \text{ Diameter (ft)} \times \underline{\hspace{2cm}} \text{ Long Diameter (ft)} \times \underline{\hspace{2cm}} \text{ Average Depth (ft)} \times 5.9 = \text{Pool Capacity (gal)}$$

For a Circular Pool:



$$\underline{\hspace{2cm}} \text{ Diameter (ft)} \times \underline{\hspace{2cm}} \text{ Diameter (ft)} \times \underline{\hspace{2cm}} \text{ Average Depth (ft)} \times 5.9 = \text{Pool Capacity (gal)}$$

For a Free Form Pool:

$$\underline{\hspace{2cm}} \text{ Surface (sq ft)} \times \underline{\hspace{2cm}} \text{ Average Depth (ft)} \times 7.5 = \text{Pool Capacity (gal)}$$



Using HTH® Products with Your Salt

If you have a pool with a salt chlorine generator, it is still important to follow a regular maintenance routine. Although your salt chlorine generator is producing your routine sanitizer (chlorine), other important pool care issues still need your attention.

The same 4-Step Program recommended for traditional chlorine pools is also applicable to a pool using a salt chlorine generator for sanitization. Make sure to always follow the salt manufacturer instructions for warranty purposes, as some manufacturers prohibit the use of certain pool maintenance products with their device.

Step 1: Test & Balance

- HTH® balancers are compatible with salt chlorine generator pools.

Step 2: Sanitize

- Your salt chlorine generator is providing routine sanitization with the chlorine it is producing. However, there must be salt present in your water for the generator to create chlorine. Please refer to your manufacturer's directions for further instructions.

Step 3: Shock Weekly

- Both **HTH® Shock 'N Swim** and **HTH® Super Shock 'N Swim** are compatible for use with salt chlorine generator pools and will help maintain calcium hardness in pool water.

Step 4: Prevent Algae

- HTH® algaecides are compatible with salt chlorine generator pools.

For salt chlorine generator pools, follow the same recommended levels in the Balanced Pool Care Chart.

Chlorine Generator Pool

As with any pool, if you do not properly care for your generator or pool water, various problems may arise in and around your salt chlorine generator pool. Some issues that affect pools using a salt chlorine generator are the following:

- Cell corrosion
- Chalky residue on deck and surrounding area – Rinse deck with water weekly
- Metal erosion
- Heater damage
- Stains
- Salt water can cause certain concrete water features and sandstone rocks to dissolve. It is important that your builder assure you that these features are compatible with your salt water system. Salt water does not affect most vinyl-lined pools.



HTH® Salt Pool Care Products
Developed Specifically for Salt Water Pools

- **HTH® Salt Pool Care Cell Saver** Extends life of salt chlorine generator cell. Prevents scale buildup and protects pool surfaces from staining.
- **HTH® Salt Pool Care 3-in-1 Salt Startup** clarifies cloudy, dull pool water and controls metal to prevent stains and scale.
- **HTH® Salt Pool Care Restore & Balance** Balances water for optimal sanitizer effectiveness
- **HTH® Salt Pool Care Test Strip Dual-Pack** contains 10 test strips for use with salt chlorine generator. Delivers results in 3-4 minutes. Also includes 25 of the **HTH® 6-Way Test Strips**.

Troubleshooting

Problem	Symptom	Possible Causes
Green, Black or Dark Yellow Algae	<ul style="list-style-type: none"> • Slippery pool surface • Slimy walls • Dull green water • Visible algae growth 	<ul style="list-style-type: none"> • Low free available chlorine (FAC) • High pH
Chlorine Odor	<ul style="list-style-type: none"> • Water smells like chlorine • Eye irritation • Complaints of “too much chlorine in the water” 	<ul style="list-style-type: none"> • Low free available chlorine • High combined chlorine
Cloudy Water	<ul style="list-style-type: none"> • Hazy, cloudy water • Lack of sparkle 	<ul style="list-style-type: none"> • Early algae growth
		<ul style="list-style-type: none"> • High pH
		<ul style="list-style-type: none"> • High total alkalinity
		<ul style="list-style-type: none"> • Poor filtration
Corrosion of Metal Parts	<ul style="list-style-type: none"> • Metal fixtures have rust • Discolored water 	<ul style="list-style-type: none"> • Low pH
		<ul style="list-style-type: none"> • Low total alkalinity
		<ul style="list-style-type: none"> • Low calcium hardness

* Please use all products in accordance with label directions.

Solution

1. Adjust pH into the range of 7.2–7.4 with HTH® pH Minus or HTH® pH Plus® at least one hour before shocking
2. Shock treat your pool water with an HTH® shock product
3. Brush walls vigorously using the HTH® 18" Curved Wall Brush
4. Run filter for 24 hours or until water clears
5. Vacuum
6. Add an HTH® algaecide

1. Adjust pH into the range of 7.2–7.4 with HTH® pH Minus or HTH® pH Plus® at least one hour before shocking
2. Shock treat your pool water with an HTH® shock product

1. Adjust pH into the range of 7.2–7.4 with HTH® pH Minus or HTH® pH Plus® at least one hour before shocking
2. Shock treat your pool water with an HTH® shock product

Lower pH into the range of 7.2–7.6 (calcium-hypochlorite based sanitizers) or lower pH into the range of 7.2–7.8 (trichloro-s-triazinetrione based sanitizers) with HTH® pH Minus

Lower total alkalinity with HTH® pH Minus

Check filter operation

Raise pH into the range of 7.2–7.6 (calcium-hypochlorite based sanitizers) or lower pH into the range of 7.2–7.8 (trichloro-s-triazinetrione based sanitizers) with HTH® pH Plus®

Raise total alkalinity into the range of 60–120 ppm with HTH® Alkalinity Plus

Raise calcium hardness to a minimum of 200 ppm using HTH® Calcium Plus

Troubleshooting

Problem	Symptom	Possible Causes
Foaming	<ul style="list-style-type: none"> • Foam 	<ul style="list-style-type: none"> • Buildup of body oils, cosmetics or other contaminants • Use of some algaecides
Scale	<ul style="list-style-type: none"> • White, gray or brownish chalky deposits on pool walls and fixtures 	<ul style="list-style-type: none"> • High pH
		<ul style="list-style-type: none"> • High total alkalinity
		<ul style="list-style-type: none"> • High calcium hardness
Scum	<ul style="list-style-type: none"> • Ring around the pool 	<ul style="list-style-type: none"> • Body oils and dirt accumulation
Too Much Available Chlorine	<ul style="list-style-type: none"> • Bleached hair and bathing suits • Possible eye irritation • FAC is higher than 4 ppm 	<ul style="list-style-type: none"> • Too much chlorine
Eye and Skin Irritation	<ul style="list-style-type: none"> • Red eyes • Itching skin 	<ul style="list-style-type: none"> • Low free available chlorine
		<ul style="list-style-type: none"> • Unbalanced pH
Discolored Water	<ul style="list-style-type: none"> • Green, hazy water 	<ul style="list-style-type: none"> • Algae growth
	<ul style="list-style-type: none"> • Clear blue-green water 	<ul style="list-style-type: none"> • Excess copper
	<ul style="list-style-type: none"> • Black or purple water 	<ul style="list-style-type: none"> • Excess manganese
	<ul style="list-style-type: none"> • Dark green to brown water 	<ul style="list-style-type: none"> • Excess Iron

Solution

Use HTH® Spa™ Defoamer

Lower pH into the range of 7.2–7.6 (calcium-hypochlorite based sanitizers) or lower pH into the range of 7.2–7.8 (trichloro-s-triazinetrione based sanitizers) with HTH® pH Minus

Lower TA by using HTH® pH Minus to the range of 60-120 ppm

An excessively high hardness level may require that some water to be drained from the pool

Clean pool surface with a scrubbing pad designed for your pool surface

Allow sunlight to decrease free available chlorine
Stop adding chlorine until the free available chlorine level is at 1.0–4.0 ppm

1. Adjust pH into the range of 7.2–7.4 with HTH® pH Minus or HTH® pH Plus® at least one hour before shocking
2. Shock treat your pool water with an HTH® shock product

1. Adjust pH into the range 7.2–7.4 with HTH® pH Minus or HTH® pH Plus® at least one hour before shocking

Add an HTH® algaecide according to directions

Use HTH® Metal Control according to directions

Use HTH® Metal Control according to directions

Use HTH® Metal Control according to directions

Opening Your Pool

When it's time to open your pool for the swimming season, let **HTH Pool Care Products** get the water just right. Use the **HTH® Pool Start Up and Maintenance Kit** and follow the simple steps below:

Prepare the Equipment

1. Remove any water and debris that have accumulated on your pool cover during the winter.
2. Take off the pool cover. Clean the cover to prevent mildew and premature deterioration.
3. Hook up the pool pump and filter. Reconnect any hoses and electrical connections that may have detached.
4. Make sure your skimmer(s), filter(s), pump(s), drain(s) and other equipment are clean and free of winter debris.
5. Use the **HTH® Leaf Skimmer** to scoop up all surface and submerged debris.
6. Clean dirty pool walls immediately with the **HTH® 18" Curved Wall Brush**.
7. Bring the pool water up to the proper level.
8. Make sure all hoses and electrical hookups are in order.
9. Turn on filter pump.
10. Check the skimmers, drains and filters to make sure they're functioning properly.
11. Use the **HTH® Multi-surface Vacuum Head** along with the **HTH® 35' Universal Swimming Pool Vacuum Hose** to remove any remaining debris.
12. Run the filter for 12 hours before testing the water.

Prepare the Pool Water

1. Test and balance water.
2. Adjust the pH, FAC, TA and CH to the ideal levels recommended in the Balanced Pool Care Chart.
3. If needed, stabilize your water using **HTH® Stabilizer & Conditioner**.
4. Shock treat pool water with an HTH® shock product.
5. Continue with routine maintenance following the 4-Step Program.

**Want more tips on opening your pool?
Turn to page 4**

CAUTION: Please read the following important reminders before adding pool chemicals to water.

- **NEVER** mix products with other products or dissolve before use.
 - Re-entry into treated pools is prohibited above FAC levels of 4 ppm for risk of bodily harm.
- * Always read and follow label directions carefully.**



Closing Your Pool

Cold Climate

1. Test and adjust water balance. Use **HTH® test kits** or **HTH® test strips** to measure pH (adjust to 7.2–7.6) at least one hour before shock treating your pool, add TA (adjust to 60–120 ppm), CH adjust to 200–500 ppm and free available chlorine.
2. Adjust free available chlorine to 1–4 ppm.
 - Shock treat
 - Shock again using **HTH® Winterizing Pool Closing Shock** as a winterizing dose
3. Run the filter pump for 24–48 hours.
4. Clean pool by thoroughly vacuuming and removing any floating debris.
5. Add **HTH® Winterizing Closing Algae Control** per winterizing directions on bottle label to prevent algae.
6. Add **HTH® Winterizing Stain & Scale Control** per winterizing directions on bottle label to protect your pool from stain and scale during the winter.
7. Follow pool manufacturer's directions on draining pool so that water level is below the skimmers, and flush and drain any hoses that will remain outdoors during cold winter months.
8. Shut off filter pump and drain pool plumbing. Drain pump, filter, heater and all other equipment according to manufacturer's directions. Properly store all equipment indoors to prevent damage from freezing temperatures. Follow manufacturer's directions for lubrication and proper storage.
9. Clean the filter.
10. Cover pool with a properly fitted pool cover. Cover should be resistant to water, weather and pool chemicals. Seal the edge of the cover to prevent wind from getting beneath the seal. This will save you clean-up time when you reopen your pool by keeping out unwanted debris.

Warm Climate

1. Decrease filter cycle to half of its swimming season setting, but not less than 4-6 hours daily.
2. Test and adjust water balance weekly or as needed.
 - Use **HTH® test kits** or **HTH® test strips** to measure pH (adjust to 7.2–7.6 at least one hour before shock treating your pool) and free available chlorine
 - Adjust free available chlorine to 1.0–4.0 ppm
3. Clean the skimmer weekly or as needed.
4. Maintain pool equipment by following manufacturer's instructions for proper care of equipment while pool is closed.
5. Vacuum pool as necessary.
6. If you're going to cover your pool, shock treat the water before applying the cover.
7. Cover pool if desired. Even though you are not closing down your pool completely, you may want to cover it to keep out leaves and dirt, as well as conserve on the use of chemicals and chlorination.



HTH® Pool Closing Winterizing Products - can be used in cold and warm climates.

HTH® Winterizing Kit - Contains the following

- 1– 2 lb. **HTH® Winterizing Pool Closing Shock**
- 1– 10.4 oz. **HTH® Winterizing Stain & Scale Control**
- 1– 4 oz. **HTH® Winterizing Algae Control**

HTH® Winterizing Pool Closing Shock Destroys organic contaminants and restores FAC to the water.



www.hthpools.com



Mixed Sources

Product group from well-managed forests, controlled sources and recycled wood or fiber

Cert no. SCS-COC-001058
www.fsc.org
© 1996 Forest Stewardship Council

1-866-HTH-POOLS
(1-866-484-7665)

HTH® Water Products,
Atlanta, GA 30328

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HTH CareSM

HTH® Water Products is committed to your safety, and while no pool care guide can take the place of common sense and precaution, we recommend the following guidelines in order to help you and your family safely enjoy your pool.

Pool Product Safety:

Pool chemicals can be harmful if the proper care is not taken. Contamination or improper use of these chemicals may cause a fire, explosion or the release of toxic gases. Read and follow all labels carefully.

Always

- Read and follow all labels carefully
- Wear safety equipment when handling chemicals including gloves, goggles, long sleeves and pants.
- Store your chemicals in cool, dry, well-ventilated places.
- Keep your chemicals tightly covered when not in use.
- Store liquids upright.
- Read product labels and follow directions when adding chemicals to your pool.
- Add pool chemicals directly to your pool.
- Isolate spilled chemicals, and read and follow directions for cleanup and disposal.
- Completely use up the product before disposing of the container.
- Thoroughly clean and dry product containers prior to disposal.
- Wash your hands thoroughly after handling chemicals.

Never

- Allow pool chemicals to come into contact with your skin, eyes or mouth.
- Inhale or ingest pool chemicals.
- Store chemicals in a place where they can be accessed by children or pets.
- Store chemicals in a place where they can be contaminated by any other material. They can react with other materials, including other pool chemicals, to cause a fire, explosion, or release of toxic gases.
- Add water to pool chemicals or expose them to small amounts of water. They can react violently to produce heat and toxic gasses.
- Mix different chemicals to allow pool chemicals to come into contact with other pool chemicals or any other materials.
- Pre-mix or pre-dissolve pool chemicals before adding them to your pool.
- Smoke, grill or allow any open flame near stored chemicals.
- Put spilled product back into the container, doing so will contaminate the rest of the product.
- Dispose of product container without reading product label for directions.
- Dispose of spilled product by pouring into trash or drain.

HTH CareSM

Emergency Contact

1-800-654-6911

- Call the Lonza Emergency Action Network (LEAN) line for assistance in disposing of chemicals. Do not throw them in the trash.
- If any of your pool chemicals spill, call the LEAN line for special handling instructions.
- Do not backwash into a stream or river.
- Do not throw spilled material into trash.
- A spill requires emergency handling if there is any sign of activity such as a bulging container, bubbling, hissing, gassing, smoking or fire. In such an event, call the LEAN line and notify them of the activity.

Chemical Exposure

If you're exposed to pool chemicals, contact a physician immediately and follow the appropriate steps as listed below:

- In the event of skin or eye contact with chlorine products, flush the area with water for at least 15 minutes.
- If chemicals are accidentally ingested, sip on water, but do not induce vomiting. Never give anything to drink to an unconscious person.
- If fumes have been inhaled, move the affected person to fresh air as quickly as possible.
- If there is an emergency requiring immediate medical attention, call 911 immediately.

Pool Care Questions

1-866-HTH-POOL (1-866-484-7665)

This is the HTH[®] Product Helpline, which is open between 8 A.M. and 10 P.M. Eastern Time. The experts who answer the phone are trained to answer pool and spa care questions. You can also email your pool and spa care questions through "Ask an Expert" on our website — www.hthpools.com

We hope the pool care tips and helpful hints in this guide make caring for your pool easier and more relaxing than ever. We're ready to help you create sparkling blue, crystal clear water so you can enjoy your pool the way it was meant to be.

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