



Spa Care Guide



*A convenient guide to
maximizing your spa
experience*



Relax, Restore, Rejuvenate...

No matter what the occasion, we at HTH® Water Products want to help you get the most from your spa. We are committed to quality and satisfaction. With our full line of water treatment solutions, you can have peace of mind knowing that your spa is ready, offering you clear, sparkling enjoyment everyday.

This guide contains information necessary to care for your spa from opening to closing. It has helpful hints and easy solutions for any problems that may arise.

In addition to this guide, our helpful pool and spa care experts are available 7 days a week, between 8:00 A.M. and 10:00 P.M. Eastern Time, at **1-866-HTH-POOL**. Spa care questions can also be e-mailed through "Ask an Expert" on our website - www.hthpools.com.



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Whether you utilize your spa for entertaining, therapy or relaxation, with HTH Spa™ Products you can enjoy your spa water with the assurance that it is clean and safe.



Color Coding Overview

The **HTH Spa™ Product Line** is divided into 3 categories and is color-coded to ensure that your shopping experience for spa care products is a simple process.

maintain

Maintenance Products

Utilize these "core" products and steps in your weekly routine.



enhance

Enhance

Elevate your spa experience through these enhancers.



prevent

Prevent

Use these products to treat a problem or to prevent one from occurring.



Choosing a Sanitizer

The HTH Spa™ Product Line offers two types of primary sanitizers for use in spas: chlorine and bromine. Choosing a sanitizer comes down to personal preference. No matter which HTH Spa™ Sanitizer you select, both our bromine and chlorine products sanitize effectively when used properly.

Here is additional information about both types of sanitizers offered in the HTH Spa™ product line.

Chlorine:

Chlorine is most commonly used in outdoor spas because it can be stabilized from degradation by sunlight.

Chlorine is a stronger oxidizer than bromine.

Fluctuations in pH affect the effectiveness of chlorine.

Bromine:

Bromine is most commonly used in indoor or covered spas because it cannot be stabilized from degradation by sunlight.

Bromine is not typically used in outdoor spas, because of the effect of sunlight on its degradation.

Bromine is not affected by fluctuations in pH.

Bromine can be less irritating to the skin and eyes.

Opening Your Spa

Easy and straightforward so you can *invigorate* the body, while *calming* the mind

Nothing is more calming than soaking in a spa full of warm, relaxing water. When your spa water is crystal clear, you and your family and friends can feel relaxed and rejuvenated. We promise to provide safe, easy and effective sanitization technology so you can enjoy your spa experience worry-free.

For both chlorine and bromine sanitization:

Clean your spa.

- Remove any debris and scrub walls to remove dirt and grime buildup.
- Use a surface cleaner to remove residue from the sides of the spa.

If you use chlorine you should:

1 Balance: Test and adjust the total alkalinity, calcium hardness and pH of the water (see “Balanced Spa Care” on page 6 for specific levels).

2 Sanitize: Broadcast **HTH Spa™ Chlorinating Sanitizer** over the surface of circulating water.

Measure and adjust the free available chlorine (FAC). For startup, do not enter the spa until the FAC level is in the range of 4 – 5 ppm. FAC levels should be maintained in the range of 3 – 5 ppm.



If you use bromine you should:

Each time your spa is freshly filled with water you will need to add one-half ounce of **HTH Spa™ Brom-Start** per 100 gallons of water to establish an immediate 30 ppm bromide reserve. The bromide reserve keeps the system completely bromine based, to eliminate odors and to ensure maximum water comfort to skin and eyes. The 30 ppm bromide reserve is not the same as the 2 – 4 ppm bromine level that must be maintained on a daily basis. Any time the spa is drained and refilled **HTH Spa™ Brom-Start** will need to be added.



1 Balance: Test and adjust the total alkalinity, calcium hardness and pH of the water (see “Balanced Spa Care” on page 6 for specific levels).

2 Sanitize: Add **HTH Spa™ Brominating Tablets** to the **HTH® Spa and Pop-up Pool Floater**. Test and adjust the bromine residual. Do not enter the spa until the bromine residual level is in the range of 2 – 4 ppm. Bromine levels should be maintained in the range of 2 – 4 ppm.



To convert your spa from bromine to chlorine or vice versa, simply drain your spa and refill it with fresh water.

Balanced Spa Care

To ensure your water is balanced we have created the following chart with suggested HTH Spa™ Care Products, which deliver optimal product performance, comfort and crystal clear water.

Ideal Levels and HTH Spa™ Care Products Used for Balanced Spa Care				
Test	What Is It?	When To Test	Ideal Range	Product Used To Adjust Levels
pH	A measure of the water's acidity	Every day	7.2 - 7.6 when using chlorine 7.2 - 7.8 when using bromine	HTH Spa™ pH Increaser or HTH Spa™ pH Decreaser
Free Available Chlorine (FAC)	The amount of active chlorine in the water	Every day	3 - 5 ppm when using chlorine	HTH Spa™ Chlorinating Sanitizer and HTH Spa™ Shock
Bromine Residual	The amount of bromine sanitizer in the water	Every day	2 - 4 ppm when using bromine	HTH Spa™ Brominating Tablets
Total Alkalinity (TA)	The water's ability to keep the pH at a proper level	Once a week	60 - 120 ppm	HTH Spa™ pH Decreaser and HTH® Alkalinity Plus
Calcium Hardness (CH)	The amount of dissolved calcium in the water	Once a week	Acceptable: 200 - 1,000 ppm Ideal: 200 - 400 ppm	HTH® Calcium Plus

Follow label directions for each product and allow each product to dissolve and dispense before adding additional products to the pool. Use an HTH® test kit that measures all these ranges. Re-entry into a treated spa is prohibited with chlorine levels above 5 ppm due to risk of bodily injury.

Routine Maintenance Tips

Maintaining your spa is important for keeping your spa water safe and free of problems

Regardless of whether you use a chlorine or bromine based sanitizer, the following basic routine cleaning tips are recommended:

Drain your spa every 30 to 90 days depending on bather use.

Refill the spa with fresh water.

Clean the filter with **HTH Spa™ Cartridge Filter Cleaner** at least once a month.

Keep the skimmer basket cleaned out.



Measuring Spa Capacity

Measuring Spa Capacity

Dosage rates are determined by the number of gallons of water your spa holds. Therefore, it is important to know your spa's capacity before you add any products to your spa water. If you don't know the capacity of your spa, simply use the formulas below to calculate the approximate capacity.

1 Calculate average depth in feet*.

$$\frac{\text{Deep end depth (ft)}}{\quad} + \frac{\text{Shallow end depth (ft)}}{\quad} = \text{_____ (ft)/2} = \frac{\text{Average depth (ft)}}{\quad}$$

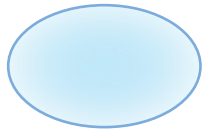
2 Calculate in gallons.

For a Rectangular or Square Spa



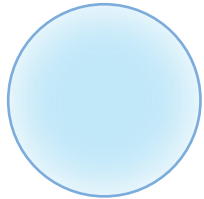
$$\frac{\text{Length (ft)}}{\quad} \times \frac{\text{Width (ft)}}{\quad} \times \frac{\text{Average depth (ft)}}{\quad} \times 7.5 = \frac{\text{Spa Capacity (gal)}}{\quad}$$

For an Octagonal or Oval Spa



$$\frac{\text{Short Diameter (ft)}}{\quad} \times \frac{\text{Long Diameter (ft)}}{\quad} \times \frac{\text{Average depth (ft)}}{\quad} \times 5.9 = \frac{\text{Spa Capacity (gal)}}{\quad}$$

For a Circular Spa



$$\frac{\text{Diameter (ft)}}{\quad} \times \frac{\text{Diameter (ft)}}{\quad} \times \frac{\text{Average depth (ft)}}{\quad} \times 5.9 = \frac{\text{Spa Capacity (gal)}}{\quad}$$

*For the average depth and/or spa capacity, you can also refer to your spa owner's manual.

3-Step Maintenance Process

3 simple steps for spa maintenance... 1 clear choice for all your spa care needs

We understand the peace of mind and enjoyment you get from a soothing spa. We also know that you'd like to spend more time relaxing in your spa and less time maintaining it. That's why we've made it easier than ever to choose and use our products. Our complete line of HTH Spa™ Care Products and our 3-Step Spa Care Program ensure that you have crystal clear water so you and your family can relax and enjoy your spa all year long. In addition, each step is highlighted on every "Maintain" product for your convenience.

maintain

STEP 1

STEP 2

STEP 3

enhance

prevent

Maintain Step 1: Balance

To keep your water balanced, be sure to test it before each use. You can do this by using an **HTH® 6-Way Test Kit**, **HTH® 3-Way Test Kit** or **HTH® 6-Way Test Strips**.



After testing, the first step in maintaining sparkling water is to balance your water. Use the following products to create a bromide reserve or to adjust the pH of your spa water:

HTH Spa™ Brom-Start

HTH Spa™ Brom-Start establishes a bromide reserve in your spa water.

It is recommended for use with

HTH Spa™ Brominating Tablets

("Maintain Step 2"). When using

HTH Spa™ Brominating Tablets,

HTH Spa™ Brom-Start will ensure that the

disinfection of spa water is completely bromine based and will eliminate chlorinous odors.



HTH Spa™ pH Decreaser

HTH Spa™ pH Decreaser lowers the pH in your spa water.

HTH Spa™ pH Increaser

HTH Spa™ pH Increaser raises the pH in your spa water.



Maintain Step 2: Sanitize

Spas operate at a high temperature (up to 104° F/40° C), which can create a high rate of water evaporation and an environment that may promote the growth of bacteria and algae. Heavy use of your spa can cause the water to become cloudy and dull. It may also cause your spa to develop a tendency towards corrosion, staining and/or scaling.

Proper sanitization can help prevent and remedy these situations. However, if a specific problem occurs, check the HTH Spa™ Problems and Solutions Chart on pages 20 – 21 for a solution.

If you use chlorine you should:

Use **HTH Spa™ Chlorinating Sanitizer** to maintain the FAC in the range of 3 – 5 ppm.

During periods of heavy use or reduced water circulation, add an additional dose of **HTH Spa™ Chlorinating Sanitizer**.

HTH Spa™ Chlorinating Sanitizer

This product kills bacteria and is a convenient routine chlorinator. For best results, refer to “Balanced Spa Care” on page 6. If circulation is low, stir the spa water after the addition of chlorine or other chemicals.



Maintain Step 2: Sanitize

If you use bromine you should:

Use **HTH Spa™ Brominating Tablets** to maintain an active bromine concentration in the range of 2 – 4 ppm.

During periods of heavy use, add additional tablets.

HTH Spa™ Brominating Tablets

When used correctly, **HTH Spa™ Brominating Tablets** will disinfect spa water, keeping it clean and free of odor. These tablets fit all floaters; however, we recommend using the **HTH® Spa and Pop-up Pool Floater**.



Maintain Step 3: Shock or Oxidize

It is essential to shock treat or oxidize your spa water at least once a week to keep your water clean and clear. Shock treating gives your spa the extra boost of chlorine it needs, killing unwanted bacteria and algae. Oxidizing eliminates undesirable solids, colors and odors. **HTH Spa™ Shock** and **HTH Spa™ Non-Chlorine Oxidizer** are essential maintenance products. If your spa is located outdoors, you should always shock after rain showers.

If you use chlorine you should:

After bather use, shock treat the spa water with a dose of **HTH Spa™ Shock**.

Shock treat as needed to help prevent unpleasant spa odors, algae, rashes, skin infections, swimmer's ear and discolored water.

HTH Spa™ Shock

Our shock adds a higher dose of chlorine to the spa in order to eliminate harmful bacteria and other contaminants.



Maintain Step 3: Shock or Oxidize

If you use bromine you should:

After bather use, oxidize the spa with a dose of **HTH Spa™ Non-Chlorine Oxidizer**, which helps to “burn out” unwanted solids, colors and odors.

Oxidize as needed to help prevent unpleasant spa odors, algae, rashes, skin infections, swimmer’s ear and discolored water.

HTH Spa™ Non-Chlorine Oxidizer

This product removes organic contaminants resulting in fresh, odor free, clear water.



Enhance

These enhancement products have been created to elevate your spa experience.

HTH Spa™ Moisturizer

This unique concentrated formula has no oils or residues and is pH balanced.

This skin softening product prevents dryness caused by spa use.



HTH Spa™ Green Tea Aromatherapy

Adds a light, refreshing aroma to the water, lifting your mood and enticing your senses as you relax your body.



HTH Spa™ Aromatherapy Variety Pack

Ready to use blend of aromatherapy fragrances formulated especially for spas, hot tubs and jetted baths.

Scents include Lavender, Hawaiian Sunset, Rain and Eucalyptus.

Leaves your skin soft and moisturized, has no alcohol and is water soluble.

Masks chemical odors and will not stain or harm woods, fiberglass, acrylics or plaster.

This product will not clog filters or affect pH levels.



Prevent

These products were formulated to eliminate any other problems that you might encounter with your spa.

HTH Spa™ Non-Foaming Algaecide:

When used regularly, it will kill and control the growth of green algae.

This product works best when added by itself directly to spa water with the pump running. Wait 15 minutes before the entry of bathers.

For an indoor or outdoor spa, use this product on a weekly basis to eliminate algae problems.

If you happen to get stubborn algae in your spa, treat it by repeating the "Initial Dose" recommended for this product.

HTH Spa™ Defoamer:

This product is highly effective at eliminating foam and reducing the formation of foam in spa water.

This defoamer works efficiently with both bromine and chlorine sanitizing systems.

HTH Spa™ Calcium and Scale Control:

This product is formulated to prevent scale formation in spas.

A weekly application of this product is recommended to keep spa surfaces and plumbing in excellent condition.

HTH Spa™ Cartridge Filter Cleaner:

Use this product when the water pressure coming out of the filtration system noticeably decreases.

It improves filter efficiency and water circulation.

HTH Spa™ Metal and Stain Control:

This product effectively disperses precipitated iron and other staining agents in spa water.

Its soy protein serves as a skin softener to counteract the drying effect of spa water.

This should be applied whenever the spa is refilled to control the formation of new stains.

For continued prevention, a weekly application is recommended.

HTH Spa™ Clarifier:

Coagulates suspended particles that can readily be filtered from spa water.

The performance of this product is not affected by chlorine or bromine and does not require adjusting the pH of spa water before or after use.



Accessories

HTH Spa™ Brominating Tablet Dispenser:

- Automatically releases bromine into spa
- Adjustable ring controls the amount dispersed into spa

HTH® Spa and Small Pool Vacuum Cleaner:

- No filter system required
- Great for above-ground pools, wading pools, spas, ponds and waterfalls

HTH® Pool and Spa Thermometer:

- Shatter-resistant lens
- Easy to read large numbers
- Snap-on float
- Accurate F° and C° reading

HTH® 6-Way Test Kit:

- Tests for total chlorine/bromine, pH, total alkalinity, calcium hardness and cyanuric acid

HTH® 6-Way Test Strips:

- 50 strips
- Tests total hardness, chlorine/bromine for pools, chlorine/bromine for spas, pH, total alkalinity and cyanuric acid stabilizer

HTH® 3-Way Test Kit:

- Tests chlorine/bromine and pH

HTH® Spa and Pop-Up Pool Floater:

- Automatically releases sanitizer into the pool

HTH® D.E. Filter Aid:

- For all diatomaceous earth swimming pool and spa filters

Covering and Closing Your Spa

If you are covering your spa for an extended period of time, follow these tips:

If you use chlorine	If you use bromine
<p>1 Add correct dosage of HTH Spa™ Chlorinating Sanitizer while the filter is running. Do this twice a week or as needed to maintain FAC in the range of 3 – 5 ppm. Blow the water out of the piping, skimmer, filter and heater.</p>	<p>1 Add correct dosage of HTH Spa™ Brominating Tablets while the filter is running. Do this twice a week or as needed to maintain the bromine residual in the range of 2 – 4 ppm.</p>
<p>2 Ensure the pH, total alkalinity and calcium hardness levels are maintained in their proper ranges.</p>	<p>2 Ensure the pH, total alkalinity and calcium hardness levels are maintained in their proper ranges.</p>

If you are closing your spa, please refer to your spa manufacturer's recommendations. However, if you no longer have this documentation available follow these steps for both chlorine and bromine.

- Drain the spa of water.
- Blow the water out of the piping, skimmer, filter and heater. If excess water is not removed from the pipes, freezing could occur, potentially causing your pipes to burst.
- Remove any remaining water that may be in the foot well or filter area.
- Remove all drain plugs, including ones that may be on your heater and replace the cover.
- Make sure your spa is unplugged and your heater is off.

HTH Spa™ Problems and Solutions

HTH Spa™ Problems and Solutions		
Problem	Possible Causes	Solution
Odors	Not enough free available chlorine or low bromine residual	<ol style="list-style-type: none"> 1. Adjust pH to 7.2 - 7.6 2. Shock treat or oxidize with HTH Spa™ Shock or HTH Spa™ Non-Chlorine Oxidizer
Eye and skin irritation	Not enough free available chlorine, low bromine or incorrect pH	<ol style="list-style-type: none"> 1. Adjust pH to 7.2 - 7.6 2. Shock treat or oxidize with HTH Spa™ Shock or HTH Spa™ Non-Chlorine Oxidizer
Cloudy water	High pH and/or high total alkalinity	<ol style="list-style-type: none"> 1. Use HTH Spa™ pH Decreaser to lower pH and/or total alkalinity to desired levels 2. Shock treat or oxidize with HTH Spa™ Shock or HTH Spa™ Non-Chlorine Oxidizer
	Visible algae growth	<ol style="list-style-type: none"> 1. Adjust pH to 7.2 - 7.6 2. Shock treat with HTH Spa™ Shock 3. Use HTH Spa™ Non-Foaming Algaecide as needed
	Poor filtration	<ol style="list-style-type: none"> 1. Check to make sure the filtration system is operating properly 2. Add HTH Spa™ Clarifier to help the filter remove fine suspended particles 3. Clean the filter with HTH Spa™ Cartridge Filter Cleaner

HTH Spa™ Problems and Solutions

Problem	Possible Causes	Solution
Foaming	<p>Buildup of body oils, cosmetics or other contaminants</p> <p>Use of certain algaecides</p> <p>Buildup of contaminants due to improper filtration and/or oxidation</p> <p>Low calcium hardness</p>	<ol style="list-style-type: none"> 1. Use HTH Spa™ Defoamer to remove and prevent foam, or drain spa and refill with fresh water 2. Be sure to use HTH Spa™ Non-Foaming Algaecide to prevent this from occurring 3. Clean your filter with HTH Spa™ Cartridge Filter Cleaner or oxidize with HTH Spa™ Non-Chlorine Oxidizer 4. Raise hardness using HTH® Calcium Plus
Scum ring	Body oils and dirt	Clean spa surface with a scrubbing pad designed for your spa surface
Corrosion of metal parts	Low pH	Use HTH Spa™ pH Increaser to raise pH and maintain the pH to 7.2 - 7.6
Algae	Not enough free available chlorine or low bromine residual	<ol style="list-style-type: none"> 1. Adjust pH to 7.2 - 7.6 2. Shock treat with HTH Spa™ Shock 3. Use HTH Spa™ Non-Foaming Algaecide as needed
	High pH	<ol style="list-style-type: none"> 1. Use HTH Spa™ pH Decreaser to lower pH to 7.2 - 7.6 2. Shock treat with HTH Spa™ Shock
Stains	Metals present in water	Use HTH Spa™ Metal and Stain Control to remove stains

HTH® Water Products is committed to your safety, and while no spa 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 spa.

Spa Product Safety:

Spa 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

- 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.
- Always 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 the release of toxic gases.
- Add water to pool chemicals or expose them to small amounts of water. They can react violently to product heat and toxic gasses.
- Mix different chemicals or 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.

Chemical Disposal and Spillage

- Call the ACEAN line, **1-800-654-6911**, for assistance in disposing of chemicals. Do not throw them in the trash.
- If any of your spa chemicals spill, call **1-800-654-6911** 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 **1-800-654-6911** 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.

Telephone Numbers:

Emergency

1-800-654-6911

This is the HTH® Emergency Action Network which is open 24/7. The experts who answer the phone are trained to assist you in an emergency.

Spa Care Questions

1-866-HTH-POOL

(1-866-484-7665)

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



Glossary

Algae: Microscopic one-celled or multi-celled forms of plant life that are black, green or yellow slime. They thrive in sunshine and can interfere with proper filtration and greatly increase chlorine demand. In addition, phosphates in the water encourage their growth.

Algaecide: A chemical formula used to kill algae.

Backwash: Sand filters require backwashing to keep the filter working effectively. Most pre-manufactured spas have cartridge filters, which require manual cleaning, rinsing and replacement periodically.

Bacteria: Microscopic single-cell organisms of various forms, some of which can cause infection or disease.

Balanced Water: Water containing just the right amounts of CH, TA, pH and dissolved solids so as to prevent scale formation or corrosive tendencies (in most spas you shouldn't need to worry about dissolved solids because they are frequently drained).

Broadcast: A method of putting granular or powdered chemicals into a spa by spreading them widely over the surface of the water.

Bromide Reserve/Residual: Bank of sodium bromide. Created when using **HTH Spa™ Brom-Start** to form an immediate residual of bromine to begin sanitization instead of waiting for the brominating tablets to dissolve.

Bromine: A chemical from the halogen family that operates as a sanitizer in spa water by forming hypobromous acid to kill bacteria and germs.

Calcium Hardness (CH): The measurement of dissolved calcium in the water. The recommended range is from 200 – 1000 ppm.

Clarifier: A chemical that helps clear cloudy water by coagulating small particles in the water into larger groups of particles. This makes it easier for the filter to remove the unwanted particles.

Cyanuric Acid: A chemical that has the ability to stabilize chlorine against loss due to sunlight.

Chlorine: A chemical from the halogen family that operates as a sanitizer in pool water by forming hypochlorous acid to kill bacteria and germs.

Corrosion: Deterioration of fixtures.

Filter: A device in the water circulating line that screens out solid contaminants by passing the water through a filtering medium. Common media are sand, diatomaceous earth or cartridges.

Free Available Chlorine (FAC): After the chlorine demand has been met, FAC is the measurement of the amount of active chlorine in the water that is available to destroy, algae, bacteria or other contaminants. FAC provides protection against additional contaminants as they may be introduced into the pool.

Overstabilization: The buildup of cyanuric acid in your spa water resulting from the use of stabilizer, stabilized sanitizers and stabilized shock products. Overstabilization (typically over 100 ppm) will dramatically decrease the effectiveness of chlorine in killing germs/bacteria and preventing algae.

Oxidize: Elimination of undesirable solids, colors and odors.



Glossary

pH: The measurement of water acidity.

PPM: Parts per million.

PSI: Pounds per square inch.

Sanitization: To sterilize the water to keep it free from germs and harmful bacteria.

Scale: White, gray or brownish chalky deposits on pool walls and fixtures.

Scum: A colored ring around the pool.

Shock: A highly concentrated dose of chlorine that raises FAC in order to kill bacteria and germs.

Skimmer: Surface strainer at the overflow or out-flow points of a spa, used to screen out leaves or other floating debris. It is often used to add chemicals, particularly tablets, to the circulating water.

Stabilizer: Cyanuric acid that forms a loose bond with the chlorine ion to keep the chlorine from dissipating due to sunlight, yet allows the chlorine ion to detach and attack harmful bacteria.

Total Alkalinity (TA): The measurement of the water's ability to keep the pH at the proper level. It represents the amount of bicarbonates, carbonates and hydroxides in water and is a measure of the buffering capacity (its degree of resistance to a change in pH) of water.

Water Hardness: The quantity of calcium and magnesium dissolved in water. High levels contribute to cloudy water and scale formation, while low levels cause water to "attack" pool components.

We hope the spa care tips and helpful hints in this guide make caring for your spa easier and more relaxing than ever. Remember, if you ever need more information, just call us at

1-866-HTH-POOL

(1-866-484-7665)

between

8:00 A.M. and 10:00 P.M.

Eastern Time

7 days a week or visit us online at www.hthpools.com. We're ready to help you get the sparkling water you desire, so you can enjoy your spa.

1-866-HTH-POOL



www.hthpools.com

1-866-HTH-POOL

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