



PROtech

*Spa
Care*

**For Establishing
and Maintaining Your Spa
using PROtech Spa Chemicals**

QUICK START

Add water up to the level recommended by the manufacturer of your spa and let the pump circulate for at least 30 minutes before proceeding. Once you have added the proper amount of water to your spa, you will need to adjust the ranges for pH, Total Alkalinity, and Calcium Hardness. Once you have balanced the water, you will need to choose a sanitizer. Use PROtech Brominating Tablets or PROtech Chlorinating Granules depending upon your sanitizer preferences.

pH

IF pH IS TOO HIGH...

pH values above 7.8 will lead to cloudy water, staining, scale deposits, filtration problems, and reduced chlorine efficiency.

**KEEP pH LEVELS
BETWEEN
7.2 and 7.8.**

IF pH IS TOO LOW...

pH values below 7.2 may lead to corrosion, rapid loss of chlorine residual and possible irritation to swimmers.

TOTAL ALKALINITY

HIGH...

If Total Alkalinity levels are above 150 ppm, the pH will tend to slowly creep up and resist efforts to remain stable.

**KEEP LEVELS
BETWEEN
80 - 150 ppm**

LOW...

If Total Alkalinity levels are below 75 ppm, the pH is likely to "bounce" from one extreme to the other and it will be difficult to keep the pH in proper range.

CALCIUM HARDNESS

HIGH...

Calcium levels above 300 ppm may form precipitates from the water causing cloudy conditions and scale deposits.

**KEEP LEVELS
BETWEEN
175 - 300 ppm**

LOW...

Calcium levels below 200 ppm, may lead to etching of plaster spa surfaces.

THE PROTECH SPA CARE SYSTEM

You can easily take care of your spa by following a few simple and basic principles. Following the PROtech Spa Care System will ensure your spa water is clean, safe, and enjoyable. Your spa dealer can perform a detailed analysis of your spa water to assist you with the proper selection and safe use of the chemicals needed to keep your water safe and inviting.

There are three main components to maintaining your spa water in a clean and safe condition.

The components are:

- **Water Balance** (includes Total Alkalinity, pH, and Calcium Hardness)
- **Sanitizers** (typically Bromination or Chlorination)
- **Oxidizing/Shock Treatment or Superchlorination**
(Brominating, chlorinating, or non-chlorinating products are available)

FILLING YOUR SPA

Add water to the level recommended by the manufacturer of your spa and let it circulate for at least 30 minutes before testing and adding your PROtech Spa Chemicals. Once you have added the proper amount of water to your spa, you'll need to balance your spa water and sanitize it according to the methods described previously in this care guide. The Total Alkalinity, pH, Calcium Hardness, and Sanitizer levels should be adjusted at this time using a standard test kit designed for spas. You can also have your spa water tested by your spa chemical dealer. A new spa or a recently opened spa may require 2 days for the water chemistry to stabilize. You can ensure your spa is ready to use as soon as possible by keeping the pump and filter system running at least 8 hours each day for the first 2-3 days. Thereafter, the amount of time required to circulate your water will vary depending upon temperature and frequency of use. Again, your professional spa dealer can assist in recommending the proper amount of time required to maintain a safe, clean, and healthy spa.

WATER BALANCE

- 1.** The first component of proper water balance is the testing and adjustment of Total Alkalinity. This is a measure of the amount of dissolved carbonates in water that helps to keep the pH within the proper range of 7.2 to 7.8. Total Alkalinity should be maintained between 80 to 150 ppm depending on the type of spa (plaster, fiberglass or acrylic). Your spa dealer can help recommend the proper levels. Proper Total Alkalinity will prevent the pH from changing rapidly. This leads to the next component of water balance - pH.
- 2.** pH is a number between 0 and 14 that gives a value to the amount of acid (strong, neutral or weak) present in all water. Water with a pH of 7.0 is neutral. Water with a pH value below 7.0 is acidic and corrosive, whereas a pH value above 7.0 indicates the water is basic or less acidic and will lead to the formation of scale deposits. The pH of spa water is best when slightly basic and should always be kept between 7.2 and 7.8. If the pH is too high (above 7.8), problems such as increased scale formation, cloudy water, poor sanitizer efficiency, and eye irritation can occur. If the pH is too low (below 7.2), problems such as corrosion of the metal components of your spa system, etching of plaster-coated spas, eye and skin irritation, and excessive sanitizer consumption can result.
- 3.** The final component of water balance is the adjustment of the Calcium Hardness. Believe it or not, a certain amount of calcium is required to properly balance the spa water. All water contains dissolved minerals such as calcium in varying amounts. Hard water is high in minerals and soft water is low in minerals. Low Calcium Hardness levels can lead to etching of plaster-coated spas and equipment corrosion. High Calcium Hardness levels can lead to scaling and cloudy water. Calcium Hardness levels should be maintained between 175 - 300 ppm depending on the type of spa.



SANITIZERS

Clearly, this is the key to safe, clear, and healthy spa water. The proper use of sanitizers helps to keep spa water free of algae and bacteria. The two sanitizers of choice for spas and hot tubs are bromine and chlorine. Because of their importance in keeping the water safe, sanitizer levels should be checked several times per week and each time the spa is used.

Bromine sanitizers are available in convenient small tablet form for use in floaters or feeders. Brominating tablets work exceptionally well at the higher temperatures and bather loads associated with spas and hot tubs and produce less odor normally associated with chlorine. Proper bromine levels should be maintained between 3.0 and 5.0 ppm. Chlorine sanitizers are also excellent for use in spas and hot tubs. These types of sanitizers are normally available in a fast-acting, granular formulation. Keep the free chlorine levels between 1.0 and 3.0 ppm. Your spa dealer can recommend the best sanitizer for your specific needs.



OXIDIZING SHOCK TREATMENT/ SUPERCHLORINATION

Your spa needs to be shocked or oxidized periodically - especially after heavy use or if your spa is kept outside. Shock treatment or superchlorination helps to boost the sanitizer levels of your spa to a range such that the bromine or chlorine sanitizer can kill or oxidize the contaminants (algae, bacteria, bather body oils and wastes) that are resistant to normal bromine or chlorine levels. Typically, shock treatments should be performed every 1-4 weeks depending on frequency of use, spa water temperature, and rainfall (if spa/hot tub is kept outside). For high water temperatures (above 100°F) and frequent bather use, perform a shock treatment every 1-2 weeks. For lower temperatures and less frequent use, perform shock treatments every 3-4 weeks.



SPA KITS

PROtech makes it easy to start using and enjoying your spa. The PROtech SPA KIT shown below and your choice of sanitizer (Brominating Tablets or Chlorinating Granules) has everything you need. Contact your professional PROtech spa dealer for assistance in the proper selection of quality PROtech spa care products.

SPA STARTUP KIT INCLUDES:

- Natural Clarifier, 1 pint
- Stain & Scale Control, 1 pint
- Soft Shock, 1.25 lb. bottle
- Alkalinity Increaser, 1 lb. bottle
- Spa Start, 1 pint
- Test Strip and Instructions

DELUXE SPA KIT INCLUDES:

- Chlorinating Granules, 2 lb. bottle
- Soft Shock, 1.25 lb. bottle
- Natural Clarifier, 1 pint
- Alkalinity Increaser, 1 lb. bottle
- Stain & Scale Control, 1 pint
- Filter Cleaner, 1 pint
- Defoamer, 1 pint
- Spa Zyme, 1 pint
- Test Strip and Instructions



EASY SPA CARE PROGRAM

Your spa is supposed to be fun and relaxing. To help keep maintenance to a minimum and enjoyment to a maximum, PROtech has developed a program of regular spa water care. If you devote a few minutes three times a week to ensure your spa water is in good shape, you will avoid messy and expensive problems AND get the most pleasure out of your spa.

Here's a simple routine to follow:

DAY ONE: Test your spa water for pH, Total Alkalinity, Calcium Hardness and sanitizer levels. Adjust as necessary. Addition of PROtech Spa Clarifier (1 oz per 500 gallons) will keep the water sparkling clear.

DAY THREE: Test your spa water for pH, Total Alkalinity, Calcium Hardness and sanitizer levels and adjust if necessary.

DAY FIVE: Test your spa water for pH, Total Alkalinity, Calcium Hardness and sanitizer levels and adjust if necessary. Shock/oxidize your spa water by using PROtech Soft Shock according to directions.

HERE'S A TIP:

To make spa care even easier, use a floating dispenser or feeder to dispense your sanitizer of choice. They are adjustable to deliver the correct amount of sanitizer and minimize the need to manually add chemicals as frequently. Your spa water may need special help on occasion, and PROtech offers a number of spa chemicals designed to help you keep your spa trouble free.

PROTECH SPA CARE PRODUCTS FOR COMPLETE SPA CARE

SANITIZERS

Brominating Tablets

The most popular sanitizer for spas and hot tubs

Chlorinating Granules

Excellent chlorine sanitizer for fast action

OXIDIZERS

Spa Soft Shock

Safe, non bromine/chlorine oxidizing shock treatment

BALANCERS

Spa Alkalinity Increaser

To establish proper levels of total alkalinity

Spa pH Increaser

Use to raise pH to proper levels

NEW pH Secure

Stabilizes pH

pH Decreaser

Use to lower pH to proper levels

Calcium Hardness Increaser

Use to establish proper levels of calcium hardness

ACCESSORIES

Spa Start

Convenient source of bromine for use with Spa Soft Shock

Spa Zyme

Multi-enzyme concentrate for eliminating oils in spa water

Natural Clarifier

Helps keep water crystal clear

Stain & Scale Control

Eliminates and prevents staining and scaling

Spa Defoamer

Eliminates foam caused by certain compounds combined with aerated water

Spa Cover Cleaner

Special liquid formulation for cleaning spa covers

Spa Filter Cleaner

Professional strength cleaner for paper filter elements

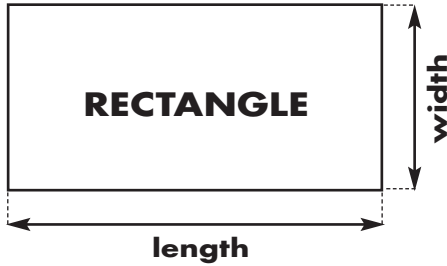
TROUBLESHOOTING

Symptoms	Cause	Solution
Foaming	Build-up of body oils or chemicals. Use of certain algaecides. Highly aerated water.	PROtech Spa Defoamer. Drain a portion or all of the spa and fill with fresh water.
Cloudy Water	pH levels too high. Calcium levels too high. Alkalinity levels too high.	PROtech Spa pH Decreaser. Drain a portion or all of the spa and fill with fresh water. PROtech Spa pH Decreaser. PROtech Spa Soft Shock.
Stains	Filter needs replacing or cleaning. High TDS or organic materials. Metals in water.	PROtech Spa Filter Cleaner or replace filter cartridge or media. Drain a portion or all of the spa and fill with fresh water. PROtech Spa Stain & Scale Control. Adjust pH to 7.2 - 7.8.
Algae (green, yellow, pink, black)	Insufficient sanitizer.	Check and adjust sanitizer levels. PROtech Chlorinating Granules PROtech Spa Start. PROtech Soft Shock.
Scale Deposits	High metal and/or mineral concentrations.	PROtech Spa Stain & Scale Control.

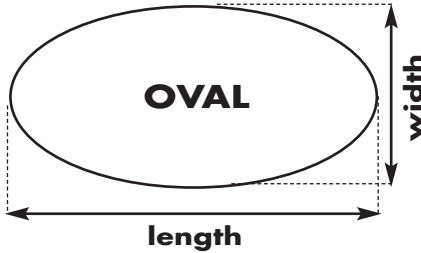
SIZING YOUR SPA

You must know the amount of water that your spa holds in order to know how much of a chemical to use. Here is a basic chart to calculate your spa volume.

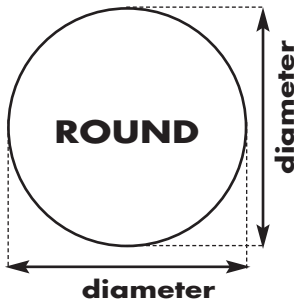
length x width x average depth x 7.5 = spa capacity in gallons



length x width x average depth x 5.9 = spa capacity in gallons



diameter x diameter x average depth x 5.9 = spa capacity in gallons



CHEMICAL SAFETY TIPS

**KEEP ALL CHEMICALS OUT OF THE REACH OF CHILDREN!
ALWAYS READ AND FOLLOW LABEL DIRECTIONS**

STORAGE

- Always store chemicals in a clean, cool, dry and well-ventilated area.
- Keep containers tightly closed when not in use.
- Keep liquid and dry chemicals separate.

DISPOSAL

- Do not reuse empty chemical containers.
- Follow container and product disposal directions on product labels.

USE

- Read carefully and follow directions for use on all labels.
- Do not prepare chemicals in closed area.
- Do not smoke while handling chemicals.
- Do not use quantities in excess of label instructions.
- Wear protective gloves and safety goggles when handling chemicals.
- Wash hands and exposed skin after handling any chemicals.
- Use a clean, dry utensil for granular chemicals.
- Never mix different types of chlorine.
- Never mix chemicals, always add chemicals to the spa separately.

NEVER ADD WATER TO CHEMICALS!

ALWAYS ADD CHEMICALS TO LARGE QUANTITIES OF WATER!

Distributed by:
Your Authorized PROtech Dealer

Ask your Authorized PROtech Dealer
for more information on our
full line of Pool Chemicals and Winterizing Kits