# $BromiCharge^{{}^{\mathrm{TM}}} \ \text{for use with the}$



# with BROMITRON<sup>™</sup> Bromine Generator Technology





## **Operation Instructions**

IMPORTANT: Read instructions before using.

# SPA BROMINE GENERATOR

INSTALL AND OPERATION MANUAL

The purpose of the in.clear<sup>™</sup> water sanitation system for spas and hot tubs (with BROMITRON<sup>™</sup> BROMINE GENERATOR technology) is to reliably and automatically maintain a halogen presence in a given recreational body of water, whether the hot tub owner remembers to treat the water, or not.

Proper bromine levels and chemistry should be checked regularly by hot tub owners with the use of a standardized test kit.

The in.clear<sup>™</sup> water sanitation system for spas and hot tubs (with BROMITRON<sup>™</sup> BROMINE GENERATOR) should be installed before your hot tub is filled with water. If this is an after market installation, drain the water and install it in the return line after the heater circulation pump.



# user guide for BromiCharge<sup>™</sup>

# Adding BromiCharge<sup>™</sup>

When you add BromiCharge<sup>™</sup> to your spa, the TDS (Total Dissolved Solids) of the water will increase about 1150 PPM (Parts Per Million) per 100-U.S. gallons for every pound of BromiCharge<sup>™</sup> added. Normal operating range of BromiCharge<sup>™</sup> should be between 1400 to 1500 PPM for best results.

By adding 1.2 pounds of BromiCharge<sup>™</sup> per 100 U.S. gallons of water you should increase the total TDS in your spa by 1440 PPM.

EXAMPLE: If you have a 300 U.S. gallon spa, add 3.5 lbs of BromiCharge™.

BASE TDS	
3.5 lbs. BromiCharge™	1440 PPM
TOTAL PPM after Brom	iCharge <sup>™</sup> 1840 PPM

You will want to maintain a TOTAL TDS of 1600 to 1900 PPM in your spa for best performance based on the above example. This will give you a 1400 to 1500 PPM of BromiCharge<sup>™</sup> in your spa at all times.

#### IDEAL WATER CHEMISTRY FOR SPA WATER

BromiCharge <sup>™</sup> Add 1.2 pounds per 100 U.S. gallons of water (1440	
PPM)	-
Calcium Hardness - CaCo:	125 to 200 adjust if necessary
Alkalinity	
pH	

Adjust the above factors to meet optimum range values.



## **DIRECTIONS FOR USE**

#### For Spas ONLY (Not for swimming pool use)

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

BromiCharge<sup>™</sup> is designed to be used in conjunction with in.clear<sup>™</sup> water sanitation system for spas and hot tubs (with BROMITRON<sup>™</sup> BROMINE GENERATOR technology), an electrolysis unit that converts bromide into hypobromite solution. The produced hypobromite solution (bromine) is then introduced into the spa to be treated as a sanitizer for spa water. BromiCharge<sup>™</sup> DOSAGE:

Upon dumping of spa water, every 60 days add 1.2 pounds of BromiCharge<sup>™</sup> per 100 U.S. gallons of spa water to a spa equipped with in.clear<sup>™</sup> water sanitation system (with BROMITRON <sup>™</sup> BROMINE GENERATOR). This will establish sufficient bromide reserve for the bromine generator to operate properly. This same treatment should be followed every 60 days upon draining and refilling the spa with fresh water.

#### MAINTENANCE:

An in.clear<sup>™</sup> water sanitation system (with BROMITRON ™ **BROMINE GENERATOR**) will operate to produce bromine as designed until the bromide reserve drops below required levels. BromiCharge<sup>™</sup> should be added if the bromide level drops below 10-30% of the initial charge. Dilution, splash out and leaks are primary reasons for the bromide level to drop. If the bromine generator does not produce enough bromine make sure the recommended level of 1440 PPM is still present in the spa water. The level can be tested with a TDS meter (Total Dissolved Solids), or by taking a water sample to a spa/pool store. If BromiCharge<sup>™</sup> is being added repeatedly the spa should be checked for leaks.

Before entering the spa, the bromine level should be tested.

The bromine level should be maintained between 2-5 PPM and can be tested with a DPD test kit, or Bromine test strips, found at any spa/pool store. The bromine generator only produces bromine when the spa is circulating. For more immediate results, dilution with fresh water will lower the bromine level.



### user guide for BromiCharge<sup>™</sup>

It is important to empty the spa every sixty days.

The in.clear<sup>™</sup> water sanitation system (with BROMITRON<sup>™</sup> BROMINE GENERATOR) is for spa use only and is not to be used in swimming pools. It is important to know how many U.S. gallons of water it takes to fill your spa. The water capacity is usually listed on the spa and is always in the spa information book. If you cannot determine the number of U.S. gallons, call your spa dealer, this information is essential to the proper use of your spa. As the water passes through the in.clear<sup>™</sup> water sanitation system (with BROMITRON<sup>™</sup> BROMINE GENERATOR) a lowvoltage current electrolytically reduces the bromide ions to bromine, which reacts with the water molecules to form free bromine. Bromine is known to be a very effective bactericide and algaecide. This process releases bromide ions back into the water for continuous recycling until the BromiCharge<sup>™</sup> is emptied from the spa.

When BromiCharge<sup>™</sup> is added to a spa the water, it separates into sodium ions and bromide ions. BromiCharge<sup>™</sup> can be added anywhere in the spa by simply dumping it from the container. Do not breathe or get into your eyes. First Aid instructions are on the BromiCharge<sup>™</sup> container.

 Upon initial filling of your spa, allow the water to circulate for one minute or so, before adding the BromiCharge<sup>™</sup>. Always refill the spa with "new" water out of the tap before starting to use BromiCharge<sup>™</sup>.

 BromiCharge<sup>™</sup> is designed for use with the in.clear<sup>™</sup> water sanitation system (with BROMITRON<sup>™</sup> BROMINE GENERATOR) and your warranty will be void if another product is used as a substitute.
FOR HEALTH PURPOSES DO NOT USE A SUBSTITUTE! Add 1440 PPM of BromiCharge<sup>™</sup> to the spa water.
(1.2 lbs per 100 U.S. gallons)
For example if the spa were 300 U.S. gallons you would add 3.6 lbs. of BromiCharge<sup>™</sup>.

3. After adding the proper amount of BromiCharge<sup>™</sup>, turn the in.clear<sup>™</sup> water sanitation system (with BROMITRON<sup>™</sup> BROMINE GENERATOR) on to build the bromine bank and bring it within 2-5 PPM range.

#### THE RECOMMENDED BROMINE LEVEL IS BETWEEN 2-5 PPM.

# user guide for BromiCharge™



4. When the bromine level reaches 2-5 PPM the spa is ready for use.

YOU SHOULD ALWAYS CHECK YOUR BROMINE LEVEL BEFORE USING YOUR SPA!

A bromine test kit, or test strips, can be purchased at your spa/pool store.

5. If you are having a problem producing bromine, check your TDS (Totally Dissolved Solids) level to make sure your BromiCharge<sup>™</sup> is 1440 PPM. Purchasing a TDS meter at any spa/pool store can do this or they will check it for you.

If you are adding water often, beyond what has evaporated or splashed out, then you may have a leak. If you have a leak you are not only losing water but also BromiCharge<sup>™</sup>.

Leaks should be fixed immediately, due not only to the expense but also, health issues that may be related to low sanitizer levels. 6. If your bromine level is below 2 PPM you should not enter the spa.

Activate the Boost Mode and wait until 2 PPM of bromine is present in the spa. If the bromine level is above 5 PPM lower the run time.

Remember your bromine generator can only produce bromine when the spa is running and your bromine generator is in the proper mode. For immediate relief of high bromine you may empty a small amount of spa water until the bromine level is between 2-5 PPM.

7. If your spa becomes cloudy or oily due to bather load, you may want to consult a spa/ pool dealer for a clarifier.

- \* BromiCharge<sup>™</sup> is a trademarked product of the BROMITRON<sup>™</sup> CORPORATION and is to be used only in the manner prescribed on the label.
- \* In.clear<sup>™</sup> is a brand name of Gecko Alliance Group.



#### MOST FREQUENTLY ASKED QUESTIONS

#### Q1- Does the BromiCharge<sup>™</sup> evaporate?

- A1- BromiCharge™ is only lost through splash out, leaks or emptying your spa.
- Q2 What do I use to clean my spa?
- A2 Always use a non-sudsing cleaner found at your spa store.

- Q3 When my in.clear<sup>™</sup> water sanitation system (with BROMITRON<sup>™</sup> BROMINE GENERATOR) is off does the BromiCharge<sup>™</sup> continue disinfecting my spa?
- A3 No! BromiCharge<sup>™</sup> does not disinfect. BromiCharge<sup>™</sup> is only the compound used to make bromine as it passes through the electrodes.

BROMINE disinfects.



# Dureté calcique (DC)

La dureté calcique est un indicateur de la concentration de calcium dans l'eau de votre spa.

# Dureté totale (DT)

La dureté totale est un indicateur de la concentration de calcium ou de magnésium dans l'eau de votre spa.

# Matière organique

Les substances laissées par les utilisateurs de spas, telles que les huiles, sueur et cellules mortes, servent de «nourriture» pour les bactéries.

# La charge de baigneurs

Ce terme est utilisé pour désigner le nombre d'utilisateurs d'un spa, tout en tenant compte de la durée et la fréquence d'utilisation. Plus l'utilisation d'un spa augmente, plus la quantité de produits chimiques nécessaire au maintien de la même qualité d'eau de votre spa s'accroit.