

Enzymes are cutting-edge technology in hot water maintenance so, one would ask:

"Why not start with enzymes in your hot tub or swim spa and use chlorine or bromine as a supplement to provide sanitized water without drawbacks?"

Thousands of hot tub owners today agree and enjoy the benefits of less maintenance, a pleasurable hot tub soaking experience and the fact that enzymes are friendly to the environment.

ENZYMES are the 21st Century technology for **Hot Water** Maintenance



Environmentally
Friendly



For more information, go to
www.spasolution.com

Made in Canada 



Enzymes in Spas, HotTubs and SwimSpas



- All-Natural Water Conditioner
- Requires Less Water Testing
- Non-Toxic, Non-Allergenic
- Reduces Harsh Chemicals
- Lasts Up To Three Months



When it comes to maintaining your hot tub or swim spa water, chlorine and bromine-based programs are considered to be 1970's technology that were originally designed for cooler temperature swimming pools. Today, all-natural enzyme products are considered to be the safe, 21st Century technology to provide clean, clear, luxurious, and environmentally friendly water in a hot tub or swim spa.

HOW DO ENZYMES WORK IN HOT TUBS?

By using a natural enzyme water conditioner, the enzymes continually break down the substrates that bacteria live on such as body oils, sunscreen, cosmetics, hair products and other body waste and effectively removes it from the water through the filtering process. All but the complete destruction of bacteria is accomplished. To destroy the bacteria, you now only require a small amount of sanitizer 20 minutes before you enter the hot tub, to eliminate the bacteria and to allow time for the residuals to off-gas into the atmosphere leaving clean, clear, and sanitized water.

Enzymes are compatible with chlorine, bromine, ozone, and salt chlorine generators.

CHLORINE AND BROMINE ARE THE MOST EFFECTIVE SANITIZERS, BUT.....

Let us be clear! When it comes to burning out waste and killing bacteria, chlorine and bromine are the most effective sanitizers on today's market and a minimal amount is required in any enzyme program. However, chlorine and bromine programs come with drawbacks when you use them as the basis of your hot water maintenance system.

RECOMMENDED
21st CENTURY
TECHNOLOGY

ENZYMES REQUIRE LESS WATER TESTING

Chlorine and Bromine products work most effectively in a balanced water environment with a 7.2 to 7.6 pH range and requires a 3-5 ppm level of sanitizer to do their job in a hot water environment. The higher temperatures in hot tubs will break down chlorine and bromine faster than in the cooler water temperatures of a swimming pool. Constantly adding chlorine or bromine affects the pH balance which requires regular water testing and additions of adjustment products to bring levels up or down.

Enzymes only require that you balance your water initially, paying close attention to the alkalinity level, after which the enzymes will automatically adjust the pH level to what is best suited for them. Only periodic testing is recommended.

Enzymes remain in the water, continually breaking down most contaminants and work more efficiently in hotter temperatures. They will not break-down in temperatures under 180 degrees Fahrenheit. Enzymes will maintain your hot water for a period of up to three months without close monitoring. This is especially beneficial to absentee hot tub owners.

ENZYMES ARE EASY ON THE BODY

While sitting in these high levels of bromine and chlorine in the hot water, the user may experience several negative reactions such as dry or itchy skin or even more severe dermal sensitivity. They may also suffer lung and sensory discomfort due to chlorine vapours along with offensive chlorine odour remaining on the body until showering.

With an enzyme product, the water is simply treated with a small amount of sanitizer 20 minutes before entering the hot tub which is enough time to kill any bacteria build-up and then off-gas so as to avoid soaking in water that has been chemically treated to excess. In addition, the enzyme formula has additives that provide a luxurious feel to the skin which enhances the total hot tub soaking experience.

ENZYMES ELIMINATE BIOFILM BUILD-UP

Biofilm is a build-up of oils and organics that are not destroyed by chlorine or bromine. This biofilm feeds bacteria and is a great place for bacteria to hide.

Enzymes constantly clean that biofilm hiding in the plumbing and also reduces the frequency of tub and plumbing purge requirements.

ENZYMES PROTECT YOUR PLUMBING AND EQUIPMENT

Chlorine and bromine are oxidizers that can adversely affect pipe seals and the systems' equipment.

Enzymes are a gentle product that will not harm seals or equipment which provides a longer life to the hot tub's plumbing and equipment.

ENZYMES ARE ENVIRONMENTALLY FRIENDLY

Chlorine and bromine are not environmentally friendly and can sometimes contravene local bylaws about draining your hot tub.

Enzyme products are all-natural in their make-up therefore friendly to the environment.

ONE LAST THING!

Several chemical brands recognize the value of enzymes in a hot water maintenance program by recommending that an enzyme product be added on a regular basis as a supplement to maintain clean, clear fresh water when the tub is not in use.

