

WHAT IS BIOFILM?

Q) What is Biofilm?

A) "Biofilm forms when bacteria attaches to surfaces exposed to water, and begin to excrete a slimy, glue-like substance. Colonies of Biofilm bacteria carry out a variety of detrimental or beneficial reactions that affect all of us daily."

Q) What problems can happen due to Biofilm?

A) Biofilm can cause many problems. It can clog filters, plumbing, and small pumps. Depending on what kinds of bacteria contribute to the Biofilm, there can be health issues.

Q) How do I get rid of it?

A) In order to penetrate the Biofilm and kill the bacteria living inside, a massive dose of sanitizer is necessary. The normal dosage of chlorine required to maintain a sanitary spa is 3-5ppm. To break up the Biofilm and destroy the bacteria, the chlorine level must reach the 100-200ppm levels. This is achieved by adding bleach to the water. The size of the spa determines the number of gallons of bleach necessary to get the water to the 100-200ppm levels. Here are the steps to follow after determining the amount of bleach necessary:

- 1) Open all air controls and place all diverter valves in the middle position. Make sure all the individual jets are open.
- 2) Turn on all pumps, including the air blower.
- 3) Let water circulate for 2 minutes and then turn all the pumps off. Let the water sit for about 10-15 minutes. This allows the superchlorinated water to make its way into all the plumbing lines.
- 4) After 10-15 minutes, turn on all the pumps again for 2 minutes. Repeat this process for 1 hour. Do not leave the superchlorinated water in the spa for longer than 2 hours.
- 5) Drain the water like you normally would.
- 6) Dispose of filter and Sunpurity mineral cartridge.

Q) Will the superchlorinated water damage my lawn?

A) We have drained superchlorinated water onto many lawns, including some that are very well taken care of. We have yet to have a report of the water damaging any plant life.

Q) How do I know it is gone?

A) You will know that the Biofilm is gone because there will be no more flakes in the spa. Also, when you add chlorine or bromine, you will be able to maintain a residual ppm reading.

Links to more information regarding Biofilm:

www.biofilmsonline.com

www.biofilm.org

www.edstrom.com and search for Biofilm