

# Spa Bacterial Growth

All spas have some bacteria. There's no getting away from that. But sometimes, bacterial growth in spas can become a problem. Because of the high water temperature and sometimes inconsistent sanitation in spas, bacteria have a very easy time growing quickly. Pretty soon, you have a bacterial infestation that can cause a myriad of problems that a regular shock application will not eliminate.

Sometimes this bacterial growth is evident in a slimy, white substance that looks like floating tissue paper. Other times, it might look like spaghetti filaments floating in the water. And other times, it may even result in the bathers getting a rash.

To eliminate the bacterial growth:

Drain the spa and refill just above the jets. Remove the filter and soak in a solution 2 Tbsp. of Chlorinating Concentrate to 5 gallons of water for 12 hours.

Add 4 tsp. of SpaGuard Chlorinating Concentrate per 100 gallons. Turn on the jets and circulate for 2 - 3 hours. The bacterial growth usually builds up in the lines, so it is necessary to flush them thoroughly.

Drain the spa again and refill with fresh water. Rinse and replace the filter. Rebalance spa and shock.

# Spa Clear Yellow Water

Spa water that is tinted clear yellow usually indicates a high bromine residual and a low pH. This is fairly common with bromine spa systems, because the bromine can discolor the Phenol Red used to test pH. The pH reading looks higher than it actually is, which often causes the mistaken addition of more acid. The higher the bromine reading, the more tendency to discolor the pH test, so it can become a vicious cycle.

When testing pH for brominated spas, use up to 5 drops of chlorine neutralizer to ensure that you are getting a more accurate reading. When the pH and total alkalinity are properly adjusted, the yellow discoloration should go away.

# Spa Cloudy Water

Cloudy water in spas can be due to many different things, but regardless of the reason, it is unpleasant and prevents you from fully enjoying your spa. See below for information on different causes and solutions for cloudy water.

## Poor Filtration

Very often, cloudy water is blamed on poor water chemistry, and more chemicals are added to try to clear it up. However, the most common cause of cloudy water is poor filtration. This can be due to not cleaning the filter frequently enough, not running the pump enough hours, and not

preventing obstructions to circulation in the spa. If the cartridge filter is not being chemically cleaned periodically, oil and dirt build up on it that rinsing does not remove. Dirty filters cannot properly remove insoluble waste. Clean the cartridge periodically with Spa Filter Cleaner and Degreaser, and rinse off debris weekly. Sparkle Up and Water Clarifier can be used to aid in the removal of smaller particles that the filter can't always get.

#### Low sanitizer level

Low sanitizer levels can allow bacterial growth. Even if the sanitizer level only drops temporarily, at that point, bacteria can gain a foothold. After some bacteria multiply, it takes more than just regular maintenance levels of a sanitizer to keep it in check. Test your sanitizer level frequently. If the sanitizer level drops, even for a short period, shock the spa with Brominating or Chlorinating Concentrate to increase the sanitizer level and help eliminate more prolific growths of bacteria. After shocking, if you still cannot maintain normal sanitizer levels, see the instructions for extensive bacterial growth.

#### Buildup of undesirable compounds

If the spa is not being shocked often enough, the compounds that enter the water from bathers and other outside sources begin to build up. The filter can't remove all of this waste, and it is usually too much for the sanitizer to remove. Shocking will help eliminate these compounds.

#### Poor water balance

High Total Alkalinity, pH, and /or Calcium Hardness can cause cloudy water. Adjust the water balance according to ALEX recommendations based on whether Spa Sentry is being used or not.

## Spa Foaming

Foaming in spas is not uncommon. It can be caused by:

#### Poor water balance

Low calcium hardness levels can sometimes promote foaming. If you are NOT using Spa Sentry, adjust the calcium hardness to the proper range.

#### Insoluble Compounds

Buildup of insoluble compounds, such as perspiration, cosmetics, etc. Spas should be shocked frequently. They should also be drained periodically.

To determine how often to drain your spa, use the following formula:

$\text{Volume} / 3 / \text{Average Daily Bather Load} = \text{Number of days between drains}$

#### Use of Algicide

Most Algicides foam unless they specifically state otherwise. If a foaming Algicide has been added to a spa, it may be necessary to drain.

#### Soaps and other foreign substances

Detergents from poorly rinsed bathing suits can cause extensive foaming, as can any fragrances,

bath oils or other warm water scents not especially designed for spa use. Read labels carefully when selecting any kind of spa fragrance.

#### Cleaning agents

Spas should not be cleaned with household cleaners. If the water line is cleaned with anything that was not designed for spa use, it can cause foaming or buildup. Household cleaning products should also not be used when the spa is drained. It is very difficult to completely rinse the buildup off the spa walls, and when the spa is filled, this film can cause foaming.

If none of the above are the cause of the foaming problem, or the foaming is slight, use BioGuard Anti-Foam to eliminate existing foam from the spa surface.

## Spa Odor or Fuming

All bodies of water release gasses. Spas will release more fumes than most because the water is heated. Since most spas stay covered most of the time, this adds up to a fairly high level of harmless gases under the spa cover. When the cover is opened, these fumes are released and will sometimes cause throat and eye irritation and coughing.

To prevent a heavy odor, ventilate the spa room well if indoors. Periodically remove cover to release gases and prevent extensive buildup.

If the odor is musty or unpleasant, use Spa Water Freshener. Leave the cover off for a few hours a day if possible. Clean the cover periodically with a disinfectant.

## Spa Surface Problems

#### Surface Discoloration

Surface discoloration in spas usually indicates the presence of metals, or, for fiberglass spas, cobalt staining. Use of Stain and Scale Control will remove some fresh stains. If, however, the stains have been present for a long period of time, it may be necessary to drain the spa and perform a light acid wash. If the spa is fiberglass, cobalt staining can be temporarily faded by an application of oxalic or citric acid. Usually, the discoloration will reappear. This has to do with a problem within the fiberglass itself, and there is no way to prevent its return.

#### Scale Buildup

Scale can sometimes form on the spa surface, causing a gritty, sandpaper-like feel to the seats and walls. This is caused by poor water balance. (High Total Alkalinity, pH, Calcium Hardness, and/or water temperature.) To remove this, a light acid wash must be applied to the surface when the spa is drained. Check with the spa manufacturer to make sure this procedure is safe for the surface type.

To prevent scale buildup, use the recommended maintenance dose of a stain and scale control for spas.

#### Scum at the waterline

Spas often get an accumulation of scum and other oils around the waterline due to the number of bathers. The spa should be shocked often to avoid the accumulation of this waste. Once it occurs, however, it can be removed with a surface cleaner designed for use with spas. For information about buildup at the waterline in SoftSoak spas.

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