

# THE PROS AND CONS OF DISINFECTING USING CHLORINE BLEACH

Very few of us will get through life without being able to identify the smell of chlorine bleach. Most swimming pools, both public and private, usually have chlorine added to them. In many places, chlorine is even added to the water supply as a disinfectant.

However, chlorine does have a “**dark side**” and can be very dangerous if it is not handled correctly. Should you be using chlorine bleach to clean and disinfect surfaces?



## PROS OF USING CHLORINE BLEACH AS A DISINFECTANT

- ◇ It is quite effective at killing microorganisms.
- ◇ It is relatively inexpensive.

## CONS OF USING CHLORINE BLEACH AS A DISINFECTANT

- ◇ The fumes given off by chlorine bleach can be very irritating to the sensitive linings of the nose, throat and eyes.
- ◇ Bleach can cause asthma symptoms to worsen in people who already have asthma and can cause new cases of asthma from exposure to bleach over time. The Association of Occupational and Environmental Clinics (AOEC), named chlorine bleach as an asthmagen, which means it can cause asthma, not just trigger an attack.
- ◇ It is extremely volatile when mixed with other cleaning products. When mixed with an ammonia-based product, the combination will result in ammonium chloride, which was used in chemical warfare in the trenches of WWI. This gas reacts with the mucous membranes of the throat, eyes and lungs to become hydrochloric acid which will literally begin eating your tissue from the inside out.
- ◇ When mixed with cleaners containing acids (such as toilet bowl cleaners, delimers or vinegar), the result is a very toxic chlorine gas that can destroy lung tissue, cause the lungs to fill with water and in a sense cause death by drowning. This too was used in chemical warfare during WWI.
- ◇ Being corrosive, it is horrible on your skin, and will leave it dry, itchy and cracking. If you have ever felt a slippery feeling on your fingers after spot-cleaning with bleach, this is because the chlorine bleach has literally taken off the top layer of your skin.
- ◇ It strips the color from clothes, carpets and other fabrics.
- ◇ Chlorine bleach does not break down food soils or grease. It simply removes the color from the soils it comes in contact with.
- ◇ Chlorine-based gases have been implicated in the destruction of the ozone layer and as a greenhouse gas. The most notorious offenders are CFSs (chlorofluorocarbons) found in aerosols. Some of these are released by household bleach.
- ◇ Chlorine bleach can cause permanent harm to many metals such as stainless steel, aluminum, silver, gold, pewter, brass and copper as well as other surfaces such as marble and granite.

## CONCLUSION

If bleach were our only option for preventing infectious disease, it might be worth the risk to our health. However there are safer, effective products for disinfecting available. See the following page for some of those options.

FOR MORE INFORMATION CONTACT YOUR TMA/CHEMNET SYSTEMS REPRESENTATIVE  
OR REQUEST INFORMATION AT: [WWW.CHEMNET-SYSTEMS.COM](http://WWW.CHEMNET-SYSTEMS.COM)

