



Eco One Frequently Asked Questions

What is the active molecule in the disinfectant generated from water and salt?

The active molecule is hypochlorous acid (HOCl). Hypochlorous acid is a powerful oxidant and is 100 times more efficient at killing bacteria than chlorine bleach or sodium hypochlorite (NaOCl). Hypochlorous acid is safe and natural. It is found in our blood as one of the most powerful biological oxidants generated by our white blood cells against invading pathogens.

Have you done research on SARS-CoV-2 (COVID-19 Virus)?

Yes, we have done research on the SARS-CoV-2 (COVID-19 virus) using hypochlorous acid generated from EcoloxTech systems. Please [click here](#) to see our research.

How long is the disinfectant active after being generated from the EcoloxTech system?

In a closed container such as a spray bottle, the concentration of hypochlorous acid decreases about 1% per day. For example, if you generate 200 ppm, it should maintain above 180 ppm after 2-4 weeks if stored at room temperature and protected from UV light.

Can I generate higher than 200 ppm?

Yes, after generating 200 ppm, if you continue to run additional cycles on setting 3 (8 minute cycles), each additional cycle will raise the concentration approximately 80 ppm.

Why do I see hypochlorous acid advertised to have a shelf-life of 1 year or more by some manufacturers?

When hypochlorous acid is bottled, manufacturers often add other chemicals to act as buffers or stabilizers to help prolong the shelf-life.

Can hypochlorous acid be sprayed using a fogging or misting device?

Yes, but it is important that the device be a cold fogging device and not a thermal fogging device. Heating up hypochlorous acid will denature the molecule and can generate chlorine gas.

How can I test the disinfectant?

Measuring Concentration

Because hypochlorous acid (HOCl) is a free chlorine molecule, you can measure the concentration with standard [chlorine test paper](#) in measurements of 10, 50, 100 and 200 parts per million (ppm).

Measuring pH

The pH is important because HOCl will be the dominant free chlorine molecule between pH 5 and 7. You can measure the pH with standard [pH test paper](#).

At pH 5, over 99% of the free chlorine molecules will be HOCl. At pH 6, over 90% of the free chlorine molecules will be HOCl. At pH 7, over 80% of the free chlorine molecules will be HOCl. At pH 8, only 20% of the free chlorine molecules will be HOCl.

What kind of salt must I use to generate the disinfectant?

Just pure and natural salt without iodine (ie. kosher salt)

Why does the user manual recommend adding 1 tsp of vinegar?

Adding vinegar is optional but recommended to lower the pH of the water.

What is the difference between the disinfectant made with salt and the degreaser made with potassium carbonate?

The disinfectant made with salt is hypochlorous acid (HOCl), a powerful oxidizing agent. The degreaser made with potassium carbonate is potassium hydroxide (KOH), a powerful reducing agent.

Why is the EcoloxTech system more expensive than some other systems?

It all depends on the quality of the electrolysis cell. EcoloxTech systems use high quality titanium electrolysis cells. Other competing systems may not be generating hypochlorous acid and the electrolysis cell may be built with lower quality alloys which cause the electrolysis cells to deteriorate quickly. Be cautious of cheaper systems manufactured in China that are using electrolysis cells made from steel. These electrolysis cells will deteriorate at a fast pace and will form harmful chromium compounds that can be carcinogenic.

Do I need to purchase any special capsules?

No, we do not require users to purchase expensive capsules like some competing systems. All that is needed is salt for generating HOCl disinfectant or potassium carbonate for generating KOH degreaser.

Can the salt and potassium carbonate be mixed to generate a combined disinfectant and degreaser?

No, the disinfectant is a strong oxidant whereas the degreaser is a strong reducing agent. If the two additives are mixed, the system will not generate any useful solution.