



Why trust Smartmister to fight viruses and bad bacteria? How it works with our immune systems.

SalVesan
TOTAL HYGIENE

- Safe to use
- Environmentally friendly
- Kills 99.9999% of germs (BSEN 1276, BSEN 13704)



SMARTMISTER

Sanitises the air and all it touches overnight

Simultaneously tackle viruses internally and externally

The Science

Hypochlorous acid is one of the most effective known biocides. This weak acid with the chemical name **HCIO** or **HOCl** is the same chemical produced by the human immune system to kill invasive organisms and fight infection naturally.

It's a biocide so safe for humans and animals; we already have it in our bodies.

Before explaining the science, Google "White Blood Cell Chases Bacteria" YouTube video of a white blood cell chasing down and engulfing invading bacteria.

It shows what happens when our healthy immune systems tackle an unwanted microorganism. As you will see, the bacteria don't stand a chance. Numerous studies have found this to be highly effective in the fight agents germs and viruses.

So how does it work?

Simplified, we convert HOCl to a gas and heat until thinner and lighter than air so the air itself distributes to all areas evenly. Biomimicking nature using our own white blood cells (neutrophils) in the human immune system to produce hypochlorous acid this weak acid, which occurs naturally in the human body, kills invasive organisms through the myeloperoxidase-mediated peroxidation of chloride ions naturally. It also kills on contact with any surfaces like doors, walls and work space. By boosting the human immune system to produce hypochlorous acid (HOCl) to combat viruses, bacteria and other microorganisms are tackled both internally and externally simultaneously. The solution HOCl is made through an electro-dialysis (ED) process, using salt and water no chemicals used.

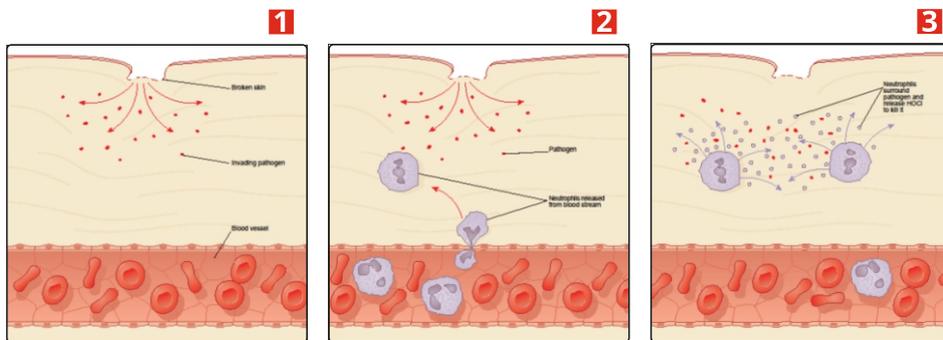
How the human immune system can be boosted

If the immune system detects an invasive organism – for example, bacteria entering the body through broken skin... **1**

the immune system sends neutrophils out from the blood stream to capture the bacteria. **2**

Once the neutrophils have caught the bacteria, they secrete an enzyme, NADPH oxidase, which decays to produce hydrogen peroxide (H₂O₂). The hydrogen peroxide reacts with sodium chloride (salt) to produce hypochlorous acid (HOCl) and sodium hydroxide. The hypochlorous acid then oxidises the cell wall of the bacteria and kills it. **3**

Hypochlorous acid is one of the most efficient biocides known, and can be up to 300 times more effective than bleach. **4**



White Blood Cell Chases Bacteria

HAZARD IDENTIFICATION

No hazard under normal conditions of use, corrosive, oxidizing if direct.

Inhalation and skin: Non-irritating, pH 6.5 - 7.5

Fire: Not flammable.

Handling: No special precautions necessary, store in dark place

REGULATORY INFORMATION

EU-directive 1999/45/EC EU 528/2012 (BSEN 1276, 13704)

