

## What Is Pure San (Hypochlorous Acid)?

It is a disinfectant that is **100 to 300 times more effective than bleach – yet is non-toxic and non-irritating!**

Bacteria cannot develop resistance to it. In fact, in scientific testing, it has killed every pathogen (virus, bacteria, fungus, mold, etc.) **which it has ever been scientifically tested against!** Although called “acid”- it actually isn’t acidic at all because it only exists as a neutral pH solution!



In October 2002, the FDA cleared superoxidized water as a “high level” disinfectant (FDA personal communication, September 18, 2002).

Hypochlorous Acid (HOCl), also referred to as “superoxidized water” is a strong oxidizer. It is so destructive to pathogens and fungi because it has very high “Redox Potential”. HOCl robs electrons from bacteria thus destroying it.

With pathogens, HOCl reacts with and destroys the cell wall causing necrosis (rupturing of the cell), or apoptosis (programmed cell death). Anything left of the cell contents are then also destroyed by the HOCl. Even though a virus is not technically a living thing, it too is destroyed in the same way.

Despite the destructive potential to all living things, HOCl is produced by our body and is used by our immune system. This process is called phagocytosis.

Whenever the immune system is compromised, the body detects the compromised location and sends white blood cells through the body to fight the invading pathogens. The white blood cells attack, surround (or eat), and destroy (digest) the pathogen using a process that creates Hypochlorous Acid as an end product.

Even in weak solutions, HOCl is lethal to pathogens, but tolerable to mammalian cells.

Studies show that saline nasal rinse containing HOCl killed bacteria and fungus but did not irritate the nose!

Outside of use on living things, it is used even more frequently in food processing plants because of its amazing ability to disinfect equipment for meat and dairy products without introducing any hazardous chemicals into the food.

## Healing Properties

Hypochlorous Acid (HOCl) has long been recognized for its ability to help wounds heal faster and do it painlessly. By killing bacteria at the site, you enable the wound to recover faster.

HOCl does not sting when applied to wounds or burns. Alcohol, commonly used for sterilizing a wound, stings and destroys pathogens by drying out the cells. Unfortunately, it does the same thing to the living tissue including white blood cells that are there to fight infection! Not only does it destroy natural defenses at the injured site, but the process is extremely painful and reduces the chance that the injured person will allow further treatment.



**This is a solution that is lethal to every pathogen known to man, yet completely harmless to humans and animals!**

### The reported benefits of Hypochlorous Acid include:

- Speeds up healing of wounds
- Disinfects wounds, cuts, burns, etc....
- Kills bacteria and viruses on contact including E.Coli, Listeria, Salmonella, HIV, MRSA, et al.
- Kills fungi and molds
- Isn't harmful to humans or animals
- Non-irritating, non-stinging

### The possible uses of Hypochlorous Acid include:

- Wound healing and disinfection
- Eye infections
- Ear infections
- Sore throats
- Flu's or other illnesses
- Food poisoning
- Disinfecting tools, surfaces, equipment
- Disinfecting vegetables / fruits / meats
- Disinfecting areas that have been infected by bodily fluids (vomit, blood, feces, etc.)
- Disinfecting linens / materials contaminated with bodily fluids (vomit, blood, feces, etc.)
- Disinfecting ALL airborne pathogens by electrostatically spraying
- Disinfecting water of all pathogens to make potable
- Disinfecting dishwashers