Hypochlorous Acid Information Sheet

Hypochlorous acid is lethal to every pathogen known to man but completely harmless to humans and other mammals.

It is a disinfectant that is 100 to 300 times more effective than bleach (NaClO example Milton) – yet is non-toxic and non-irritating! Bacteria cannot develop resistance to it – in fact, in scientific tests it has killed every pathogen (virus, bacteria, fungus, mold, etc) which it has been scientifically tested against. Not only is Hypochlorous acid an amazing disinfectant but it also speeds up the healing. Why this is so is not precisely known but it is likely to do with the “redox” reaction, a key process of this special solution. It is believed that increases Bioactivity by facilitating improved inter cellular communication. Although “acid” – it actually isn’t acidic at all because it only exists as a neutral pH solution! In order for this disinfectant to be most effective it has to be neutral pH like, water! (7pH).

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, and MRSA
- 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 vomit or diarrhea
- Disinfecting linens / materials (i.e. covered in diarrhea, vomit, or blood in disaster situations)
- Disinfecting ALL airborne pathogens by placing in a humidifier
- Disinfecting water of all pathogens
- Disinfecting dishwashers
Hypochlorous Acid is a light oxidizer. It is so destructive to pathogens and fungi because of its very high “Redox Potential”. Hypochlorous Acid 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 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 solutions that involve Hypochlorous acid as an end product.

Even in weak solutions, HOCl is lethal to pathogens, but tolerable to mammalian cells. Studies show that a 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. HOCl has long been recognized for its ability to help wounds heal faster and do it painlessly. By killing bacteria at the sight you enable the wound to recover faster.

HOCl does not sting when applied to wounds and 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.

**What Is HOCl?**

**Healing Properties**

HOCl has long been recognized for its ability to help wounds heal faster and do it painlessly. By killing bacteria at the sight you enable the wound to recover faster.

HOCl does not sting when applied to wounds and 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.

When HOCl exists at neutral pH it is totally safe to the body. It does not damage living tissue nor any of the body’s natural defenses (white blood cells) that are on site working to repair damaged tissue. This makes it one of the best first aid and medical solutions available.