

pioneering with integrity



## Hypochlorous acid – The most effective known biocide just got better.

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

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

Hypochlorous Acid is a highly oxidising solution that is bactericidal, virucidal, fungicidal and sporicidal. It is hundreds of times more effective at disinfecting than hypochlorite... however it is also, to all intents and purposes, non-toxic.

Hypochlorous acid (the substance) has been known to man for literally hundreds of years and although a natural phenomenon, it can be replicated by dissolving acid into water at a specific pH.

Once identified however, it is very difficult to isolate and is very unstable. The alternative and hitherto standard means of manufacturing Hypochlorous acid is via the process of electrolysis. This entails passing an electric current through a brine in order to realise a limited quantity of Hypochlorous solution. The process is not without its limitations however: the electrolysis machines are extremely costly, they cannot make the solution in bulk, they can only produce low strength Hypochlorous (up to 600ppm) and the machines are expensive to maintain as the production process erodes the electrodes. Because of the saline origins, the resultant solution is also highly corrosive. The main limitation however is the longevity of the product produced: it has a half-life of between 48 and 72 hours, after which time it rapidly becomes benign.

However, after years of development, all this changed. In 2011 BHI\* managed the 'impossible'.

We are the only company in the world to successfully manufacture a pure and stable Hypochlorous Acid with a shelf life of 2 years.

We'd like to introduce to you a more Environmentally friendly way to disinfect.





















# **STERI-7 HALO** delivers far greater disinfecting power

Superior to oxidising actives such as hypochlorite or peracetic acid, exceptionally rapid in action enabling effective sanitising with low contact times against pathogens such as E. coli Botrytis, Campylobacter jejuni, Salmonella, Listeria, Shigella, Staphylococcus and sproe based pathogens such as C. difficile.

- Skin neutral pH
- Non-irritant
- No COSH implications
- Non-toxic
- Can be used directly on food
- Breaks down to just water

### Increases food safety – extends the shelf life of fresh produce

Spraying **STERI-7 HALO** significantly reduces surface micro-organisms on food making Minimum Residue Limits a concern of the past.

- Meat
- Fish
- Fruit & Vegetables
- Cut flowers

### STERI-7 HALO Fogging Fluid

Specially formulated to achieve surface and air bourne disinfection - doesn't require rooms to be sealed or removed from use for long periods of time.

#### STERI-7 HALO Sanitising Fluid

Achieves decontamination in CIP, tank cleaning, and bottle rinsing applications etc.

- Environmentally friendly
- Biodegradeable
- No animal testing

**STERI-7 HALO** is ecologically responsible.

### Independently tested at the UK's most respected laboratories

**STERI-7 HALO** is effective against all pathogens and kills 99.9999% of even the most resilient spores in less than 15 seconds.

# 99.9999% sterilising effectiveness in just 15 seconds

In the food industry where hygiene is critical and speed of sterilisation is vital for efficiency, **STERI-7 HALO** is a revolution.

# Based upon a unique stable active halogen technology

**STERI-7 HALO** is a chemically manufactured replica of the solution made by the humans immune system to fight infection and destroy the DNA and RNA of pathogens, preventing them from 'learning' the chemistry and becoming immune to it. The chemical composition of **HALO** is unique. The manufacturing process results in BHI's formulation containing almost 100% Hypochlorous. In comparison to any other previously manufactured form of hypochlorous solution the:

- Purity is vastly increased to >99% HOCL
- Stability is increased from 48 hours to 2 years
- Strength is increased from around 600ppm to over 2000ppm
- Safety is increased
- Corrosion is reduced
- Effectiveness increased
- Costs reduced
- Fresh produce spoilage & shrinkage reduced

"**HALO** is the gold standard by which all antiviral, antibacterial and sporicidal agents must now be compared"

> Dr Joe Selkon, MBChB, FRCPath, DCP, Formerly Consultant Microbiologist

Oxford University , John Radcliffe Hospital





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The biocidal cleaner that out-performs all others. For further information: 01932 237600 info@steri-7.com

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