



TOMI[™]
ENVIRONMENTAL SOLUTIONS

STERAMIST[®]
POWERED BY BINARY IONIZATION TECHNOLOGY[®]

LIMIT CROSS-CONTAMINATION & REDUCE FOODBORNE PATHOGENS
THROUGH COLD PLASMA SCIENCE

FOOD SAFETY DIVISION

IMPLEMENT **STERAMIST**[®]
INTO YOUR FACILITY TODAY

TOMIMIST.COM
800.525.1698

SteraMist® is the Right Solution

AN INNOVATOR IN GLOBAL DISINFECTION & DECONTAMINATION

Through the use of cold plasma technology, TOMI's Food Safety division aims to protect our food supplies and distribution networks from ever-increasing pesticide-resistant microbial organisms, addressing the need for better disinfection protocols throughout the entire food production process.

As a pioneer in EPA-Registered equipment and solution disinfection, TOMI intends to utilize SteraMist's trusted and innovative Binary Ionization Technology (BIT™) to reduce cross-contamination risks associated with manual cleans. ionized Hydrogen Peroxide (iHP™) disinfects previously cleaned non-porous food contact surfaces and equipment through cold plasma science.

PRE/POST-
HARVEST



PROCESSING
& PACKAGING



CARGO &
TRANSPORT



STORAGE &
PREP AREAS



INNOVATING FOR A SAFER WORLD®

TOMI™ Environmental Solutions, Inc. is a global disinfection, decontamination, and infection prevention company, providing environmental solutions for indoor surface disinfection through manufacturing, sales and licensing of its premier Binary Ionization Technology® (BIT™) platform, sold under the SteraMist brand. The technology is in use domestically and internationally with multiple registrations.

TOMI's industry-leading commitment is to ongoing research and supporting our expanding customer base on all levels of disinfection, from seed to table. Our mission is to help our customers create a healthier world through its range of SteraMist® branded products and services featuring iHP™.

Extensive Product Registration

COMMITMENT TO QUALITY



As an EPA-registered solution and technology combination, BIT™ solution has proven effective in global GLP efficacy tests at independent, accredited laboratories. TOMI™ continues updating its BIT™ label to ensure that we meet and exceed global standards for quality and results - **with proven validation via high-log reduction of *Geobacillus stearothermophilus*.**

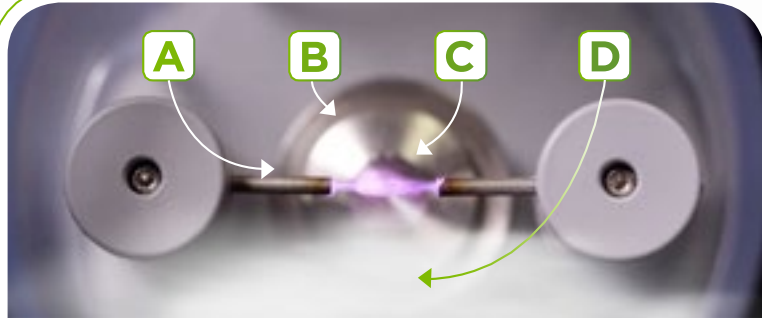
SteraMist® is registered on EPA (Reg. No. 90150-2 | EPA Est. No. 72038-DE-001) and has a registration with the U.S. Food & Drug Administration (Reg. #3012117386).

SteraMist is also listed with the Organic Materials Review Institute (OMRI). The OMRI supports organic integrity by developing clear information and guidance about materials, working with all certifiers to ensure that materials meet organic standards in accordance with consistent criteria and review methods. As an organic product with no excessive byproducts or residue, you can be confident in a quality, tested disinfection solution.



The Science Behind **Binary Ionization Technology**®

UNDERSTANDING THE POWER BEHIND STERAMIST® DISINFECTION



- A. Electrodes
- B. Nozzle
- C. Atmospheric Cold Plasma Arc
- D. Ionized Hydrogen Peroxide (iHP™)

A BRIEF SUMMARY OF **IONIZED HYDROGEN PEROXIDE (iHP™)**

The atmospheric cold plasma arc converts the H_2O_2 molecules into iHP. As one of the most powerful oxidizing agents in nature, the iHP kills the pathogens achieving high efficacy and leaves behind only oxygen and humidity in treated spaces.

The **ionized Hydrogen Peroxide** Process

1. COLD PLASMA



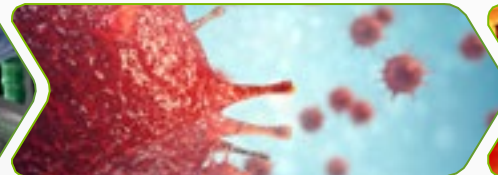
7.8% hydrogen peroxide BIT Solution converts to iHP after passing through a cold plasma arc.

2. DISPERSION



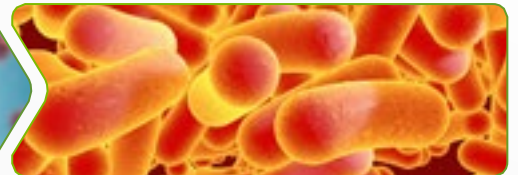
iHP is carried throughout the mist, moving like a gas throughout the treated area.

3. CONTACT



iHP damages pathogenic organisms through oxidation of proteins, carbohydrates, and lipids.

4. DISRUPTION



Cellular disruptions and/or dysfunctions occur and allows for disinfection & decontamination in the targeted area.

The iHP™ Disinfection Solution for Food Safety

CONSIDER STERAMIST® FOR THE FOLLOWING USE SITES*

NON-FOOD AREAS

- Garbage Rooms
- Lavatories
- Entry vestibules
- Offices
- Locker Rooms
- Machine Rooms
- Boiler Rooms
- Garages
- Mop Closets
- Storage

GENERAL FOOD USE AREAS

- Manufacturing Plants
- Supermarkets
- Grocery Stores
- Food Handling Establishments
- Packing Plants
- Restaurants
- Fast Food Restaurants
- Food Processing
- Reducing Surface Contamination

OTHER FOOD AREAS

- Receiving
- Storage
- Preparation
- Packing (canning, bottling, wrapping, boxing)
- Waste Storage
- Serving Areas
- Enclosed Processing Systems*

FUTURE FOOD USE AREAS

- Pre/Post Harvests of Fruits & Vegetables
- Increasing Storage and Shelf Life of All Foods Including Meat, Poultry, & Fish
- Processing and packaging of food

SteraMist® can aid in every stage of food production:

HARVEST SITES



PRE-GERMINATION



PROCESSING



PACKAGING

LOGISTICS



TRANSPORT

SERVICE AREAS



STORAGE



PREPARATION

*With no food present in treated area.

SteraMist® Product Offerings

FEATURING NANOSCOPIC PARTICLE SIZES, FROM **SUBMICRONS TO 3 MICRONS**

STERAMIST® SURFACE UNIT

The **SteraMist® Surface Unit** is a fully portable, fast-acting, hand-held, point-and-spray disinfection system. Whether used for specific service needs or for daily use, the single applicator surface unit enables disinfection of all surfaces - including high touch, sensitive equipment, and electronics.



PRODUCT FEATURES

- Application time of only five seconds per square foot, with a seven-minute contact time
- Reaches surfaces that regular disinfectants and manual cleans cannot reach
- SteraMist treatment requires no wiping, no rinsing, and leaves no residue

SteraMist® Surface Unit | Refer to EPA label no. 90150-2 for more information.

STERAMIST® ENVIRONMENT SYSTEM

The **SteraMist® Environment System** is portable and provides complete room disinfection, deodorization, and mold mitigation using multiple treatment applicators (3) per unit. The fogging capabilities of the Environment System allows for thorough area treatment, simultaneously disinfecting both air and surfaces.



PRODUCT FEATURES

- An effective remote-controlled whole room treatment in just under 45 minutes for a room (3,663.7ft³/104m³)
- Scalable for small or larger spaces, with no maximum requirements
- Able to be converted into three hand-held Surface Units, extending disinfection reach

SteraMist® Environment System | Refer to EPA label no. 90150-2 for more information.

SELECT **STERAMIST** SURFACE UNIT

The **SteraMist® Select Surface Unit** is a fully portable, handheld misting disinfection unit with an array of application customization options. Perfect for those looking to disinfecting cabinets or smaller areas with additional control.



COMPATIBLE WITH THE
**STERAMIST 90 DEGREE
APPLICATOR***

PRODUCT FEATURES

- Monitor and adjust air flow with pressure gauge and regulator
- Control fluid pump flow and speed with the digital potentiometer
- Create ideal application cycles with a programmable timer
- Perfect for use with both the standard SteraMist applicator and the SteraMist 90-degree Applicator

DID YOU KNOW?

The SteraMist Select Surface Unit is currently in use by laboratories operated by the Food Safety and Inspection Service (FSIS), a public health regulatory agency of the U.S. Department of Agriculture (USDA). These labs are a part of the critical infrastructure of the United States, and SteraMist is trusted to disinfect rooms and contact surfaces to help ensure that lab workers are protected as they continue to monitor quality and ensure a safe supply of food products.

Join those protecting our global food supply today!

NEED MORE INFORMATION?

Ask your SteraMist® representative about our extensive Food Safety research papers, available upon request. Research topics analyze the effect of ionized Hydrogen Peroxide (iHP™) on various fresh produce in meticulously ongoing studies spanning nearly five years. TOMI's current papers include the effect of iHP disinfection on produce quality^{1,2,3}, how cold plasma enhances the power of hydrogen peroxide², and application of iHP on produce in large-scale storage³.

¹(2016) Cold plasma-activated ionized Hydrogen Peroxide inactivates Escherichia coli O157:H7, Salmonella Typhimurium, and Listeria innocua and maintains quality of grape tomato, spinach and cantaloupe

²(2019) Cold plasma enhances the efficacy of Hydrogen Peroxide in reducing populations of Salmonella Typhimurium and Listeria innocua on grape tomatoes, apples, cantaloupe and romaine lettuce

³(2020) - Cold plasma-activated hydrogen peroxide aerosol on populations of Salmonella Typhimurium and Listeria innocua and quality changes of apple, tomato and cantaloupe during storage - A pilot scale study

TOMI offers a wide variety of SteraMist solutions! If you would like to make SteraMist an integrated step in your facility's protocols, ask about **STERAMIST CUSTOM ENGINEERED SOLUTIONS** and how we can tailor a disinfection solution to fit your needs.



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