

PROTEXUS

ELECTROSTATIC SPRAYING SYSTEMS



PX200ES
CORDLESS ELECTROSTATIC
SPRAYER



PROTEXUS ELECTROSTATIC SPRAYERS

Next Generation Infection Control Tools

Traditional approaches to disinfecting and sanitizing can't keep up with the rising infectious disease crisis. Ineffective and expensive, they don't have the tools or technology to get the job done effectively or on time. The result is unsafe, potentially contaminated environments ripe for breeding and spreading disease.

HOW BAD IS THE INFECTIOUS DISEASE EPIDEMIC?

A 2014 Brown University study states, since 1980 infectious outbreaks have been dramatically increasing.

Research America! puts the cost of infectious disease in 2014 at **\$120 billion in the United States alone.**

In hospitals, day care facilities, schools, hotels, gyms, cruise ships, restaurants – places you'd expect disinfection protocol to be the very best – **why are so many people getting sick?**

Ineffective, inefficient protocol and technology are to blame.

What would happen if you didn't need to rely on outdated practices? Instead, empower your team with more effective, more efficient tools.



APPLICATION COMPARISON:

Based on 450 sq/ft of office space across all surfaces

Protexus Sprayer (PX200ES)

12 oz



Product Usage

2.20 minutes



Application Time

5.03 minutes



Dry Time

Trigger Sprayer (32 oz Hand Powered)



38 oz



12.17 minutes
1,130 trigger pulls



11.13 minutes

The Protexus Advantage:

68% Product Savings

81% Time Savings

HOW WOULD THAT IMPACT YOUR ORGANIZATION?

It's time for a new way – a better way. Protexus' cutting-edge, battery-powered electrostatic sprayers provide a whole new way to attack the problem. A 'game-changing' approach that arms every technician with powerful tools and technology to protect your facility while saving time and money.

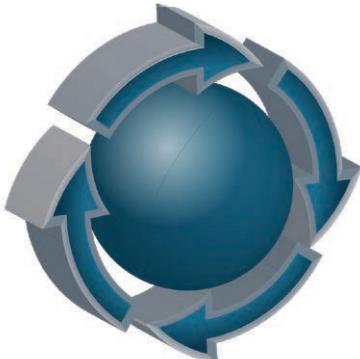


THE ELECTROSTATIC ADVANTAGE

Protexus sprayers are superior to any other sprayer, mister or fogger. This cutting-edge system combines electrostatic delivery with advanced battery technology that empowers your staff to effectively disinfect more thoroughly and with less training than ever before.

360° COVERAGE CLEANS AROUND CURVED & HARD TO REACH SURFACES.

Electrostatic charged droplets create a field in the spray plume that is magnetically drawn to any surface within 6 feet. With an attraction coefficient 15 times greater than gravity, the electrostatic force field is so powerful the plume reverses direction to coat hidden and hard to reach surfaces that would typically be missed by conventional spraying or misting equipment.*



Unlike other systems, the Protexus sprayer's unique three-tiered applicator nozzle is easily adjusted to change droplet size, accommodating any product's labeling requirement. This fine-tuning capability provides unmatched flexibility – ensuring consistent performance and versatility, while eliminating the waste and overuse of chemicals.

IMPROVE YOUR PROCESS FOR A SUPERIOR OUTCOME

Protexus brings infection control to a new level of effectiveness and efficiency. Designed for maximum flexibility, Protexus sprayers are easily adaptable to any protocol – different spray modes, saturation levels or specifications – making it ideal for daily use in any situation or environment.

| Save Money

Labor and chemical costs are reduced by using electrostatic technology

| Increase Performance

More surface coverage, less wasted chemicals

| Better Efficiency

Faster, safer and more consistent application; requiring minimal training or disruption to existing protocol

Protexus sprayers revolutionize infection control programs for a wide range of industries including hospitality, education, day care, food service, building management and professional cleaning...among others.



* Protexus sprayers are tested using our complete line of EarthSafe Protexus cleaning solutions against a full range of germs and pathogens with 99.999% effectiveness. Contact our team at 866-666-2305 for a compete list of test results.

Protexus Three-Tiered Applicator Nozzle



ADVANCED BATTERY TECHNOLOGY: MOBILITY, PORTABILITY & POWER

Protexus' battery-powered sprayers are superior to traditional products such as foggers, spray bottles, misting units, or pump sprayers. These are ineffective for numerous reasons – **too expensive, time intensive, wasteful, as well as potentially creating problems like cross contamination and respiratory issues** – limitations that make them impractical to be used efficiently or as part of a daily sanitizing regimen.

While electrostatic technology has been previously available, its' effectiveness has been limited by bulky design and dependency on corded power supplies.

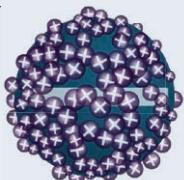
Leveraging years of experience developing advanced lithium-powered technologies, our team has created a spraying system that eliminates the drawbacks of traditional approaches.

Advanced battery technology has enabled Protexus sprayers to equal (or exceed) the power of 'corded' systems, while benefiting from the portability, mobility and flexibility of battery power. **Over 4 hours of continuous use** on a single charge, delivering unmatched effectiveness make the system practical and affordable enough for daily, facility-wide use.

Empower your infection control team to be more effective and efficient.

HOW DOES ELECTROSTATIC DELIVERY WORK?

Protexus electrostatic delivery technology is a revolutionary approach to infectious disease protection and sanitization. Here's how it works: the electrostatic process atomizes the cleaning product with high-pressure air. The droplets pass an electrode inside the nozzle creating a magnetically charged spray that seeks out and wraps around all touch points and grounded room surfaces.



Protexus Battery
and Charger

PRODUCT FEATURES

| Cordless

16.8 volt Lithium Ion Battery System
Allows the Convenience of cord free
cleaning for approx. 4 hours of use.

| Electrostatic On / Off Switch

Electrostatic charge can be
disabled or enabled as needed.



| Ergonomic Over Molded Handle

Provides a soft grip for added comfort.

| Versatile

Ideal for sanitizing, disinfecting, odor
control, pesticides, coatings, etc.

| Tool Free Adjustable Nozzle

Allows the versatility of
adjusting particle size for the
required application.

| Quiet

Being only 60 db., its great
for environments where
noise is important.

| Lightweight & Portable

Light enough at 3.8 lbs. to
quickly navigate from surface
to surface and room to room.

| Head Light

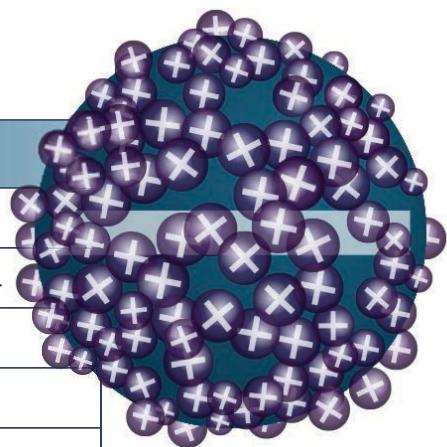
Illuminate work surface to provide a
clear view of intended coverage.

| Trigger Lock

Trigger can be locked in place to
prevent accidental spraying.

PRODUCT SPECIFICATIONS: PX200ES

Voltage	16.8v	Micron Size	40/60/100
Run Time	4 hrs	Flow Rate (oz/min)	3.35/3.62/4.34
Charge Time	1 hr	Spray Distance (ft)	3-6 ft
Weight	3.8 lbs	Coverage Per Tank	800 sq. ft.
Capacity	32 oz	Coverage Per Charge	54,000 sq. ft. avg.
Decibels	60 db		



PROTEXUS ELECTROSTATIC SPRAYER ACCESSORIES

We stock and offer a full line of accessories for the Protexus Electrostatic Sprayers. For information and orders, please contact customer service at (866) 666-2305, or email info@earthsafeca.com.



PX10
Professional 18.8 Volt Charger



PX50
3 in 1 Nozzle



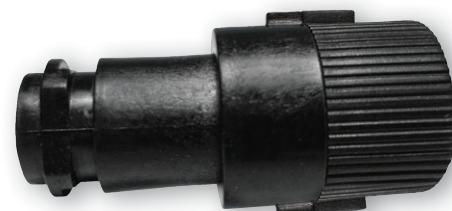
PX30
PX200 Replacement Tank



PX20
Professional 16.8 Volt Battery



PX49
Nozzle Wrench



PX55 Single
40 Nozzle
3.35 oz./min.

PX57 Single
60 Nozzle
3.62 oz./min.

PX59 Single
100 Nozzle
4.34 oz./min.



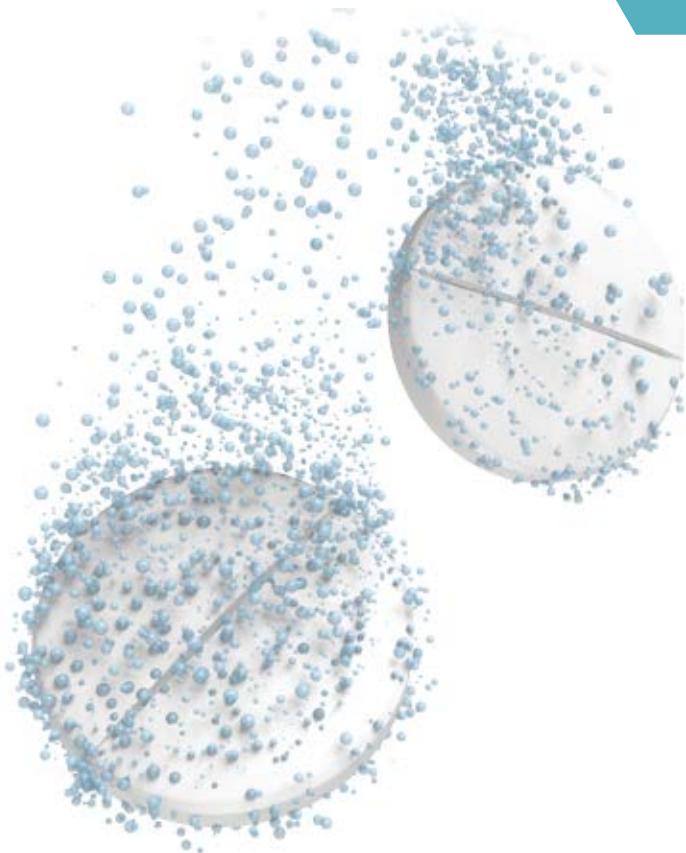
EARTHSAFE
CHEMICAL ALTERNATIVES

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PURTABS

EFFERVESCENT SANITIZING / DISINFECTION TABLETS



Disease Prevention is the Cure.
NaDCC/ (HOCL) is the Answer.



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INFECTIOUS DISEASES ARE SERIOUS BUSINESS.

What is the probability of contracting an infectious disease?

ENORMOUS. Every public surface can potentially be contaminated with bacteria or viruses including (but not limited to) staph, hepatitis, norovirus, strep, HIV, salmonella, influenza H1N1, rhinoviruses. C. Diff spores and much more. No surface is safe, and some are worse than others.

- Desks were found to have **400X** more bacteria than a toilet seat.
- Tests have proved that in just a few hours, viruses can spread to **60%** of a building's occupants from a single doorknob.
- Studies determined that **28%** of gym surfaces tested positive for contamination
- CDC statistics showed **3 out of 4** norovirus outbreaks occur in long-term care facilities and nursing homes



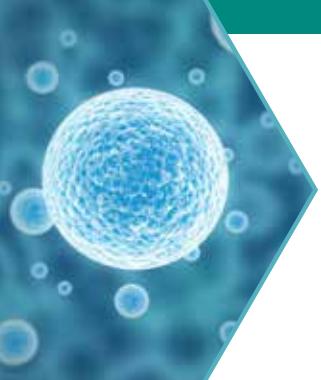
Who is at risk? Everyone.
From children to our pets to our elderly, we are all at risk!

Daycares and schools • athletic facilities and gyms • offices and stores • food processing • restaurants and grocery markets • trains, Planes and buses • hotels and cruise ships • shipping and boats of all types • theatres and amusement parks • hospitals, medical facilities and first responders • agriculture • animal care

Even residential homes are all known to spread infectious diseases, as well as exposure to mold and allergens.



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What's wrong with using Bleach and Quats to sanitize and disinfect?

Traditional sanitizer/disinfection approaches like chlorine bleach and quaternary ammonium compounds, or quats, are toxic to humans, corrosive to materials and harm the environment they are released to. NaDCC tablets that produce hypochlorous acid (HOCL) when added to water are the less toxic alternatives to chlorine bleach & quats.

- Because chlorine bleach is a hypochlorite (-OCL) and is highly reactive, impure, unstable and sensitive to light and temperature. Quats & chlorine bleach exacerbate or cause asthma.
- Chlorine bleach concentrate begins to degrade from the moment it's manufactured and, within a month, easily loses a third or more of its activity. When diluted bleach is effective for only hours.
- In addition, bleach and quats are highly corrosive to metals and other surfaces, extremely toxic to the environment, and unsafe for humans to handle or inhale its fumes.

FRIGHTENING FACTS

According to the Center for Disease Control and Prevention (CDC):

- ▶ **More than two million Americans develop antibiotic-resistant infections each year, resulting in 23,000 deaths**
- ▶ **Norovirus is the #1 cause of acute gastroenteritis outbreaks worldwide.**
 - Norovirus affects about 21 million Americans annually
 - Leads to over 2 million outpatient/ER visits or hospitalizations, and 800 deaths
 - Touching a contaminated surface, then touching your mouth, spreads 61% of diarrhea or vomiting outbreaks.
 - There is no vaccine to prevent norovirus infection.
- ▶ **As of March 2015, half the estimated 25,000 individuals infected with Ebola virus ultimately died.**
- ▶ **The common cold, Rhinovirus, is the main reason the majority of our population misses school or work every year.**



IT'S TIME FOR A PROACTIVE SOLUTION TO INFECTIOUS DISEASE PREVENTION— ONE THAT IS QUICK, SAFE AND EFFECTIVE.

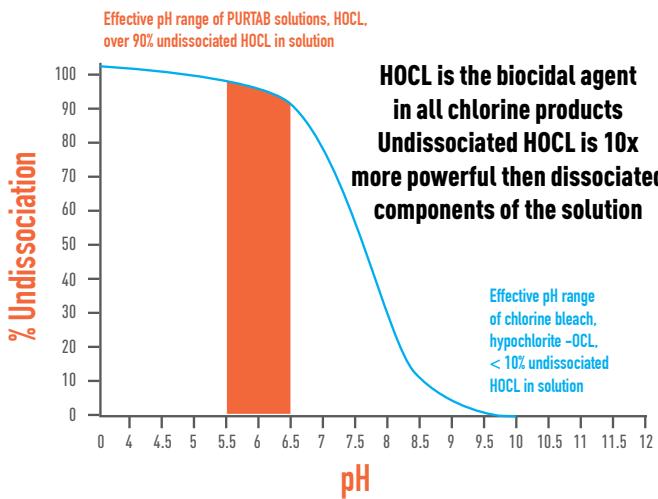


AN OUNCE OF PREVENTION IS PRICELESS

Billions are spent in the war on infectious diseases every year. Proactive approaches have been hard to implement in the past but that is no longer the case. EarthSafe's revolutionary technology combines the right chemicals with the perfect tools, resulting in an easier, safer and more effective way to sanitize and disinfect, any time and anywhere. In the long run, this superior level of protection will **save millions of dollars in work hours and productivity and medical costs as well as save lives.**

Earthsafe's Proactive Solution – PUR TABS

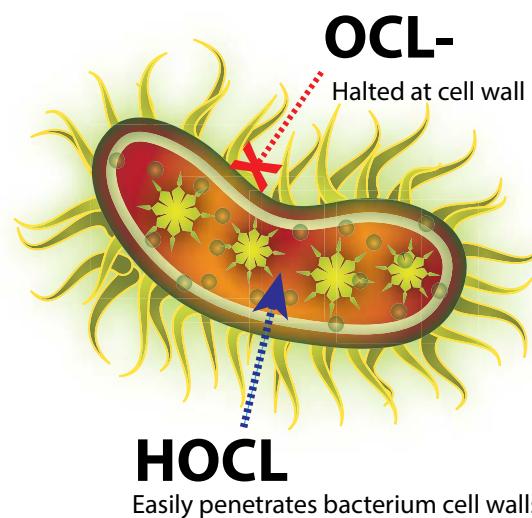
PUR TABS is a sustainable, solid tablet form of Sodium Triclosene, NaDCC, which dissolves readily in water to become a powerful hypochlorous acid (HOCL) that is versatile enough, depending on concentration, to use as a food surface sanitizer and a hospital grade disinfectant. If you aren't aware of the many benefits of HOCL, it's time you were. This multi-tasking, EPA registered sanitizer/disinfectant, when coupled with green cleaning formulations and the right application technology, **literally SOLVES the time constraints and process problems of daily cleaning and sanitizing / disinfection.** PUR TABS is changing the janitorial/custodial industry for the better.



The Science Behind EarthSafe's PUR TABS (NaDCC → HOCL)

The active agent in PUR TABS is sodium triclosene (NaDCC). While it does provide chlorine in the form of hypochlorous acid (HOCL) for sanitizing and disinfection purposes, it is not a hypochlorite like chlorine bleach. The chemistry and mode of action of NaDCC is significantly different, producing a solution that is stable once diluted, particularly in the presence of organic contaminants.

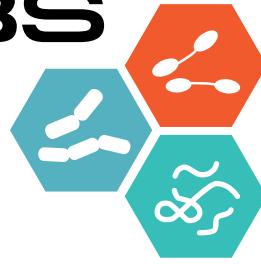
Studies show that HOCL has four times the anti-microbial killing power of hypochlorites (-OCL). **It is believed that this is due to the fact that HOCL is very similar to the structure and molecular size of water and is electrically charged**—thus allowing it to penetrate cell walls as easily as water. Conversely, the hypochlorite ion is electrically charged and thus has a harder time getting through the cell wall.



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PURTABS

EFFERVESCENT SANITIZING / DISINFECTION TABLETS



In the U.S., infectious diseases are associated with an economic burden of over \$120 billion

Last year, Americans missed more than 70 million workdays because of the flu

Antibiotic resistant infections cost Americans \$20 billion in direct medical costs and \$35 billion in lost productivity

The projected loss of earnings due to the illness was approximately \$16.3 billion annually

Reports estimate that employers lost \$10.4 billion in direct costs during each flu season

60 million school days are lost each year to colds and flus in the U.S.

What are infectious diseases costing?

3 Tablet Sizes Kill a Multitude of Microbes

PURTABS multi-purpose tablets have many various uses and are available in 3 tablet sizes for easy mixing and precise dilution. PURTABS targets the most virulent microbes that affect every sector, from no-wipe sanitization for restaurants to high-powered hospital grade disinfection, and everything in between.



PURTABS Versatility

Kill Claims	Concentration	Dilution
Food contact surface sanitizer (No Rinse)	100 ppm	(1) 0.3g tab / 1qt (1) 3.3g tab / 2.5 gal (1) 13.1 tab / 10 gal
Hospital grade disinfectant claims (Bleach alt.) Cold & flu virus' (including H1N2) Salmonella & Staph.	538 ppm	(6) 0.3g tb / 1 qt (1) 3.3g tab / 2 qts (1)
Bloodborne pathogen, Herpes & Polio Norovirus, MRSA & Ecoli HIV & Hep B claims Many Animal pathogens	1076 ppm	(11) 0.3g tabs / 1 qt (1) 3.3g tab / 1 qt (1) 13.1 tab / 1 gal
C. Diff 10 minute claim	2153 ppm	(2) 13.1 g tabs / 1 gal
C. Diff spore 4 minute claim	4306 ppm	(4) 3.3 g tabs / 1 qt (4) 13.1 g tabs / 1 gal

THE FUTURE OF INFECTION CONTROL IS HERE AND IT IS SUSTAINABLE AND SAFER.

PURTABS is designed to be the most convenient and cost effective option to ship, store and apply a less toxic, more potent disinfection solution. Protecting environments and people from harmful pathogens has never been easier or more affordable.



Concentrated PURTABS tablets **weigh 95% less** per case than liquid concentrate sanitizer/disinfectant. Making it **more ergonomic** to lift, and uses less plastics and cardboard, creating less solid waste.



PURTABS **saves money** on shipping, storage space and overall chemical cost.



PURTABS **weighs 7x less**

than traditional liquid concentrate sanitizers/disinfectants, so **you pay 7x less** in shipping costs. PURTABS takes up less square footage, saving money on storage.



PURTABS is **less-toxic** and **less-corrosive** to humans, materials and the environment.

Unique advantages of Earthsafe PURTABS NaDCC/Hypochlorous acid (HOCL) vs Chlorine bleach/hypochlorite (-OCL)

- Hypochlorous acid is **naturally produced** in our bodies by white blood cells and tears
- The CDC and EPA substantiate **HOCL kills pathogens up to 50 times better** than chlorine bleach
- Undissociated HOCL has **4 times the anti-microbial killing power** of -OCLs
- PURTABS kills mold and mildew, plus eliminates and **controls odors**
- PURTABS is **versatile**, from a no-rinse food contact sanitizer, to a hospital grade disinfectant with a **4-minute C Diff kill rate**
- PURTABS is a **broad-spectrum disinfectant** with more kill claims than other sanitizing alternatives, while also being more cost effective
- PURTABS neutral pH is surface, **human and environmentally-friendly**.
- Testing on metal substrates prove PURTABS is **50% less corrosive** than bleach, plus won't harm fabrics or substrates with normal use
- pH at neutral levels ensures the more **effective bactericide**, HOCL, remains dominant in the solution
- Diluted PURTABS is **stable in closed containers for 7 to 30 days**, depending on ppm of Free Available Chlorine (FAC); while chlorine bleach lasts only for hours once diluted
- PURTABS are **cost-effective and sustainable**, costing less to ship and store

BEAT BACTERIA WITH A POWERFUL SANITIZER / DISINFECTANT IN A COMPACT TABLET.

Biocidal Efficacy of Purtabs

EarthSafe PURTABS has the power to kill 99.999% of Bacteria and eradicate C Diff Spores in 4 minutes! PURTABS proactive effervescent sanitizing and disinfecting tablets are effective against a broad range of microorganisms on pre-cleaned, nonporous, inanimate surfaces, including:

Salmonella enterica
Staphylococcus eureus
Pseudomonas aeruginosa
Klebsiella pneumoniae
Staphylococcus epidermidis
Escherichia coli 0157:H7
Staphylococcus aureus – MRSA & GRSA
Carbapenan resistant Klebsiella Pneumoniae
Acinetobacter baumannii
Poliovirus type 1
Herpes simplex virus type 1
Hepatitis A virus
Hepatitis B virus

Clostridium difficile
Influenza virus H1N1
Respiratory syncytial virus
Canine Parvovirus
Newcastle Disease Virus
Pseudorabies
Canine Distemper Virus
Human Immunodeficiency Virus Type 1
Feline Calicivirus
Norovirus
Enterococcus faecalis Vancomycin Resistant,
Trichophyton mentagrophytes
Mycobacterium bovis (TB)

Sectors for Use

Daycares, Schools, Universities • Hospitals, Nursing Homes, Medical and Dental Facilities • Gyms, Health Clubs, Spas and Salons • Restaurants, Food Service and Kitchens • Ambulances and First Responders • Office Buildings, Shopping Centers and Grocery Stores • Theaters, Stadiums, Amusement Parks • Hotels and Cruise Ships • Residential Homes • Kennels, Stables and Veterinary Clinics • Agriculture and Farming • Beverage and Food Processing Plants • Transportation Vehicles, Trains, Buses and Airlines • Marine, Fishing Boats, ferries, Personal Boats





A SMALL TABLET THAT PACKS THE POWER TO PREVENT INFECTIOUS DISEASES

There are many outstanding differences between EarthSafe's PURTABS and common sanitizer/disinfectants, such as chlorine bleach, quats and other harsh chemicals, not the least of which are its efficacy and cost efficiency. This unique chemistry is less toxic and safe enough for daily use, yet powerful enough to kill dangerous microbes. It is proven to disinfect 99.999% of a wide variety of bacteria and viruses, including "super bugs" like MRSA and H1N1, without causing the mutation of other "super bugs."

PURTABS puts the power of disease prevention in your hands.



Saves Lives and Budgets

- Depending on the concentration, HOCL kills 99.999% of bacteria and destroys C Diff in 4 minutes!
- Mitigates the spread of infectious diseases and illnesses are stopped before they start
- Less sick days converts to higher productivity and lower financial losses



More Versatile

- Emergency pathogen crisis can be addressed immediately even in an ambulance
- Safely sanitizes food contact surfaces without rinsing
- Can also become a heavy-duty disinfectant



Safer and More Sustainable

- Shelf stable for 3 years
- User friendly and safer for humans and materials
- Less hazardous to the environment and less corrosive
- Easily transported and stored at a fraction of the cost of alternatives

Revolutionary stabilized NaDCC tablet that forms hypochlorous acid (HOCL) when dissolved in water.

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