CHANGING THE WAY THE WORLD CLEANS

INFORMATION PACK

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Mobile: 01530 275 520
WHO WE ARE

With the needs of our customers in mind, Tersano designed the lotus® PRO system with the most advanced innovative technology, providing a natural and safe solution for all cleaning needs and applications. Our company strongly believes in using only the highest standards with all of our products and lotus® PRO exceeds specific regulations in our industry.

THE PERFECT COMBINATION

The lotus® PRO system and Stabilized Aqueous Ozone are the ideal match to create an effective but safe and natural cleaning system for your business. Using the lotus® PRO technology, ordinary tap water mixed with oxygen transforms into Aqueous Ozone which works faster and more effectively than a chemical cleaning solution. As a natural all-purpose cleaning and sanitizing agent, the lotus® PRO works for hours, after which point it converts back into water and oxygen. The lotus® PRO system creates an effective cleaning system for all applications in any industry.

BENEFITS / SUSTAINABILITY

Considered an ‘organic’ cleaning product, the All-In-One Multipurpose Cleaner provides a vast number of benefits that will help your company in many ways.

- On demand production
- Simple and safe to operate
- Reduce operating costs
- Compatible with existing machinery and work process
- Replaces multiple chemical
- Powerful & effective solution
- Environmentally sustainable

lotus® Pro takes environmental sustainability to a new level when servicing the needs of a broad range of retail spaces. With the lotus® PRO products, you will get more cleaning for less money. Reducing your operating costs is easy with the lotus® PRO system – no need for expensive chemical cleaners all while providing a safe and effective cleaning solution for your business.

* Stabilized Aqueous Ozone Decay Test. Tersano internal testing.
HOW LOTUS® PRO WORKS

HOW WE CREATE AQUEOUS OZONE

1. Cold tap water enters the lotus® PRO Stabilization Module.
2. The lotus® PRO Stabilization Module mixes with the cold tap water stream, expanding the useful time up to 24 hours*.
3. Treated water leaves the lotus® PRO Stabilization Module.
4. Water passes through the FloJet connector, which prevents back flow with air lock, then enters the lotus® PRO High Capacity Unit.
5. Oxygen enters the dispenser through the replaceable filter cartridge.
6. 4,500 volts of electricity transforms O₂ to O₃.
7. Ozone gas that is not saturated in the water is separated and safely dispensed as oxygen.
8. Stabilized Aqueous Ozone leaves the dispenser to fill mop buckets, trigger sprayers, auto scrubbers and carpet extractors.

*Results may vary based on water quality at location.

HOW AQUEOUS OZONE CLEANS & SANITISES

Stabilized Aqueous Ozone is created when introducing an extra oxygen atom to an oxygen molecule and water molecules. This combination creates a highly effective cleaning agent that breaks down dirt, grease, and other contaminants in the same way as toxic cleaners, but naturally.

The process can be show in four simple steps:

STEP 1
Oxygen from the air is safely turned into ozone then infused into ordinary tap water.

STEP 2
The ozone is attracted to germs, stains and bacteria.

STEP 3
Harmless to people, the ozone quickly attacks and eliminates contaminants it comes in contact with.

STEP 4
Only pure oxygen and water remain after the ozone cleans and sanitizes.
HIGH CAPACITY UNIT

SPECIFICATIONS

The lotus® PRO High Capacity cleaning system turns ordinary tap water into Stabilized Aqueous Ozone – a powerful natural cleaner, stain remover, deodorizer and sanitizer. The Aqueous Ozone is made on demand with continuous flow for spray bottles, mop buckets, carpet extractors and auto scrubbers - killing germs* while cleaning. It provides residue-free performance for a longer lasting clean and low slippage on even the smoothest floors. Safe on natural wood and stone.

STABILIZATION MODULE

Get hours of cleaning power with the Stabilization Module.

Turns ordinary tap water into a long-lasting, natural cleaner and sanitizer using patented Aqueous Ozone technology that keeps more ozone in solution for longer periods.

REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>FDA Safe Designation: 21CFR184.1563</th>
<th>USDA: Organic Program compliant</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA Site Reg. No.: 89093-CAN-001</td>
<td>EPA: DIS/TSS-4 sanitizer test passed</td>
</tr>
<tr>
<td>OSHA: Off-gas O3 &lt; .01 ppm PEL</td>
<td>Green Standard: Meets GS-37 guidelines</td>
</tr>
<tr>
<td>UL: Tested to UL Standard 979 by TUV</td>
<td>Zero global warming; Zero ozone depletion; Zero VOCs</td>
</tr>
<tr>
<td>Europe: CE and EN 60335-1/A2:2006 compliant</td>
<td>California Code: Exceeds regular limits on VOC’s</td>
</tr>
</tbody>
</table>


TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Dimensions: 57cm x 47cm x 25cm</th>
<th>MODEL #</th>
<th>LQFC475UK</th>
<th>LQFC875UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight: 12kg</td>
<td>Sanitizing Time</td>
<td>Up to 4 hrs</td>
<td>Up to 24 hrs</td>
</tr>
<tr>
<td>Flow: Continuous - 30 minute shut off safety feature</td>
<td>Cleaning Time</td>
<td>Up to 8 hrs</td>
<td>Up to 24 hrs</td>
</tr>
<tr>
<td>Rate: up to 12 litres per minute</td>
<td>Cartridge Life</td>
<td>Series I - 6,500 litres¹</td>
<td>Series II - 3,250 litres¹</td>
</tr>
<tr>
<td>Power: Standard 220V (Power consumption about 90 watts)</td>
<td>Built-in mechanical backflow prevention</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹Varies according to local water pressure

For support reference, visit our website at www.tersano.com
WHERE DO I USE IT?

lotus® PRO technology for extended sanitising power.

Universities, factories, hospitals, office buildings, hotels and retail stores all over North America and Europe have put us into their janitor closets and cleaning stations to clean, sanitise, and deodorize with Stabilized Aqueous Ozone instead of cleaning chemicals. It works hard as a natural all-purpose cleaning and sanitising agent for hours, after which point it turns back into water and oxygen.


BENEFITS

› Cut costs of buying, storing & mixing chemicals
› No mixing, rinsing, fumes or toxins
› Eliminates multiple chemicals & guesswork
› Meets highest safety & performance standards
› Attaches to walls, cleaning carts easily
› Long-lasting reliability & performance
› Increased productivity, safety & greenability
› On-demand availability and power for any job, anywhere
› No more trips to the cleaning closet for refills
› Proven to reduce slips & falls *

FEATURES

› Organic cleaning solution
› All-in-one cleaning, sanitising & stain removal
› Regulatory approval by EPA, FDA, OSHA, CSA, UL
› Mounting systems standard
› Durable base with shatter-proof bottle
› No mixing, rinsing, fumes or toxins
› Runs on cold tap water & 220V power

APPLICATIONS

• Windows/Mirrors
• Stain Remover on Carpets and Fabric
• Carpet and Upholstery Stain Remover
• Kitchen Counters
• Granite, Marble and Slate Counter Tops
• Wood Surfaces

• Floors
• Sinks
• Shower and Bathtub
• Appliances
• Stainless Steel
• Kills Mold and Mildew
• Pet Dander/Odor, Stain Remover

• Room/Closet Deodorizing
• Smokers area
• Cars/RV/Boat Interiors
• Toys
• Baby’s Highchair
• Personal Grooming Tools
• Fruits and Vegetable

* Slip & Fall Friction Study
For support reference, visit our website at www.tersano.com

01530 275 520
www.tersano.co.uk
# TURI LABORATORY CLEANING TEST RESULTS

<table>
<thead>
<tr>
<th>CONTAMINANT</th>
<th>SUBSTRATE</th>
<th>EQUIPMENT</th>
<th>LOTUS</th>
<th>IONIZED WATER</th>
<th>WATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Films</td>
<td>Ceramics</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Soaps</td>
<td>Ceramics</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Films</td>
<td>Plastic</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Soaps</td>
<td>Plastic</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Films</td>
<td>Fiberglass</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Soaps</td>
<td>Fiberglass</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Films</td>
<td>Chrome</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Soaps</td>
<td>Chrome</td>
<td>Manual Wipe</td>
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<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Films</td>
<td>Glass/Quartz</td>
<td>Manual Wipe</td>
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<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Soaps</td>
<td>Glass/Quartz</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Films</td>
<td>Plastic</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Soaps</td>
<td>Plastic</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✔</td>
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</tr>
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<td>Chrome</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Soaps</td>
<td>Chrome</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✔</td>
<td>✗</td>
</tr>
<tr>
<td>Hucker’s Soil</td>
<td>Ceramics</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Hucker’s Soil</td>
<td>Plastic</td>
<td>Manual Wipe</td>
<td>✔</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>Hucker’s Soil</td>
<td>Steel</td>
<td>Manual Wipe</td>
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<td>✗</td>
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</table>

## SAFETY SCORE

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>VALUE</th>
<th>POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC (Volatile Organic Compound)</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Global Warming Potential</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Ozone Depletion Potential</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>NFPA Rating (H/F/R - Health/Flammability/Reactivity)</td>
<td>0/0/0</td>
<td>10</td>
</tr>
<tr>
<td>pH</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

**TOTAL SAFETY SCREENING SCORE: 50/50**  
The higher the score, up to 50, implies a potentially safer product.

## HOW OZONE CLEANS

Aqueous Ozone attacks organic matter, breaking it down into smaller particles and suspending it in solution.

### Analytic Breakdown

- **Ozone reacts with proteins which are large organic compounds and consist of strings of amino acids held together by peptide bonds**
- **Peptide bonds react with the 3rd oxygen molecule in ozone and break apart the proteins, leaving behind base amino acids**
- **The base amino acids will continue to react with ozone and break down into even more stable/inert inactive matter**
- **These minute particles are then readily suspended in solution (water)**
- **Ozone infused water (Aqueous Ozone) breaks down organic matter on hard surfaces**
- **A wipe of a cloth/mop removes the suspended soil from the surface**
- **Aqueous Ozone can break down red wine, tomato juice, fatty acids, oils, dyes, urine, mold, mildew, coffee, tea, etc.**

## VENDOR PROVIDED INFORMATION

**Product classification:** neutral aqueous

**Recommended contaminants:** dirt, films, fingerprints, hucker’s soil, soaps.

**Recommended equipment:** low pressure spray, manual wipe.

**Recommended substrates:** brass, ceramics, chrome, concrete, fiberglass, glass/quartz, plastic, steel.

**MSDA/TDS:** None
PATHOGEN KILL SUMMARY

HOW EFFECTIVE ARE WE?

Natural Commercial Cleaning, Stain Removal & Sanitising.

Aqueous ozone is very effective as a cleaner, and with higher concentrations and longer dwell times as a sanitiser against various pathogenic molds and fungi, yeasts, pesticides, chemical residues and other common contaminants. The list below provides a brief summary:

<table>
<thead>
<tr>
<th>Algae &amp; Yeasts</th>
<th>Cryptoporidium parvum</th>
<th>Molds &amp; Fungi</th>
<th>Sclerotium rolfsii</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternaria solani</td>
<td>Cysts &amp; Protozoa</td>
<td>Nematode eggs</td>
<td>Vibrio clorarae</td>
</tr>
<tr>
<td>Botrytis cinerea</td>
<td>Fusarium oxysporum</td>
<td>Pythium Ultimum</td>
<td>Virrio ichthydodermis</td>
</tr>
<tr>
<td>Candida albicans</td>
<td>Giardia lamblia</td>
<td>Rhizopus stolonifera</td>
<td>V. parahaemolyticus</td>
</tr>
<tr>
<td>Chlorulla vulgaris</td>
<td>Giaria Murray</td>
<td>Saccharomyces</td>
<td></td>
</tr>
</tbody>
</table>

Tersano’s patented lotus PRO cleaning sanitising system turns ordinary tap water into the world’s most effective chemical-free commercial cleaner and sanitiser by infusing it with ozone. Aqueous ozone eliminates germs, odors, stains, mold, mildew and other contaminants on any item or surface before changing back into water and oxygen. Leave no residues behind. Perfect for mop buckets, carpet extractors and auto scrubbers.

Aqueous Ozone kills:

- **Bacillus Bacteria**: Destroyed by 0.2 mg/1 within 30 seconds
- **Bacillus Anthracis**: Causes anthrax in sheep, cattle and pigs. A human pathogen. Ozone susceptible.
- **Clostridium Bacteria**: Ozone-Susceptible.
- **Clostridium Botulinum Spores**: Its toxin paralyses the central nervous system, being a poison multiplying in food and meals. 0.4 to 0.5 mg/1.
- **Echo Virus 29**: This virus most sensitive to ozone. After a contact time of 1 Minute at 1 mg/1 of ozone, 99.999% killed.
- **Escheriachia Coli Bacteria (from feces)**: Destroyed by 0.2 mg/1 within 30 seconds.
- **Encephalomyocarditis Virus**: Destroyed to zero level in less than 30 seconds with 0.1 to 0.8 mg/1.
- **Enterovirus Virus**: Destroyed to zero level in less than 30 seconds with 0.1 to 0.8 mg/1.
- **GDVII Virus**: Destroyed to zero level in less than 30 seconds with 0.1 to 0.8 mg/1.
- **Herpes Virus**: Destroyed to zero level in less than 30 seconds with 0.1 to 0.8 mg/1.
- **Influenza Virus**: 0.4 to 0.5 mg/1.
- **Poliomyelitis Virus**: Kill of 99.999% with 0.3 to 0.4 mg/1 in 3 to 4 minutes.
- **Proteus Bacteria**: Very Susceptible.
- **Pseudomonal Bacteria**: Very Susceptible.
- **Rhabdovirus Virus**: Destroyed to zero level in less than 30 seconds.
- **Salmonella Bacteria**: Very Susceptible.
- **Stomatitis Virus**: Destroyed to zero level in less than 30 seconds with 0.1 to 0.8 mg/1.
- **Streptococcus Bacteria**: Destroyed by 0.2 mg/1 within 30 seconds.
- **Aspergillus Niger (black Mount)**: Destroyed by 1.5 to 2 mg/1.
- **Diphtheria Pathogen**: Destroyed by 1.5 to 2 mg/l.
- **Eberth Bacillus (Typhus abdominalis)**: Destroyed by 1.5 to 2 mg/l.
- **Klebs-Loffler Virus**: Destroyed by 1.5 to 2 mg/1.
- **Staphylococci**: Destroyed by 1.5 to 2 mg/1.

*Pathogen Matrix with references available for download from our website at www.tersano.com
PATHOGEN KILL SUMMARY

HOW EFFECTIVE ARE WE?
Common organisms killed by ozone

FUNGUS & MOLD SPORES
- Aspergillus candidus
- Aspergillus flavus (yellowish-green)
- Aspergillus glaucus (bluish-green)
- Aspergillus niger (black)
- Aspergillus terreus, saitoi & oryzac
- Botrytis allii
- Colletotrichum lagenarium
- Fusarium oxysporum
- Grotrichum
- Mucor recomosus A & B (white-gray)
- Mucor piriformis
- Oospora lactis (white)
- Penicillium cyclopium
- P. chrysogenum & citrinum
- Penicillium digitatum (olive)
- Penicillium glaucum
- Penicillium expansum (olive)
- Penicillium egyptiacum
- Penicillium roqueforti (green)
- Rhizopus nigricans (black)
- Rhizopus stolonifer

YEAST
- Baker’s yeast
- Candida albicans-all forms
- Common yeast cake
- Saccharomyces cerevisiae
- Saccharomyces ellipsoideus
- Saccharomyces sp.

CYSTS
- Cryptosporidium parvum
- Giardia lamblia
- Giardia muris

ALGAE
- Chlorella vulgaris
- Thamnidium
- Trichoderma viride
- Verticillium albo-atrum
- Verticillium dahliae

REFERENCE

International Ozone Association - AOAC Official method 961.02; Germicidal Spray Products as Disinfectants; and Detergent Sanitizing Action of Disinfectants. FDA GRAS Notification. EPA Organic Program compliance. Data compiled from third party independent industry and academic sources, and is for general information purpose only. Kill rates vary with temperature, surface texture, pH and other factors which are not accounted for in this document.

Staphylococcus aureus/MRSA
http://aem.asm.org/content/61/9/3471.full.pdf
Based on the graphs (Fig.1) there is a 5 log reduction in 5 minutes with water that has organic matter (bovine serum albumin) added. The ozone concentration was <0.2ppm (0.15-0.188)

Tested to meet or exceed TUV, UL and CSA standards. EPA, FDA, TURI, USDA and OSHA compliant. Meets GS - 37 standard.

For more detailed kill rate data, please contact your Tersano Customer Representative or download the Pathogen Matrix with references from our website at www.tersano.com

lotus is a registered trade mark of Tersano Inc. All other marks are property of their respective owners.
# TECHNOLOGIES & SOLUTIONS

<table>
<thead>
<tr>
<th>AQUEOUS OZONE</th>
<th>ELECTROLYZED WATER</th>
<th>SODIUM HYPOCHLORITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap water is saturated with ozone and stabilized for up to 24 hours active life. Ozone eliminates harmful pathogens, contaminants, and organic soils via oxidation process. After use, ozone breaks down into simple water and oxygen. Zero organic residuals, no harmful effluents and is 100% organic. No excess waste discharge, on-demand AO solution provided. Simple and intuitive to use. Aqueous ozone is compatible with equipment, pipes, and fittings. Eliminates odour. No consumables.</td>
<td>Multiple processes exist for using tap water and electricity to create alkaline and/or acidic solutions. EW has a short active life or needs charging to remain active. Some pathogen claims can be made around the acid solution. After use, the solution contains, sodium hydroxide, hypochlorous acid and hard mineral (calcium &amp; magnesium from water softener) which flows into the waste stream. New technology provides 2 streams of solutions at the same time. When one solution is dispensed, if the tank is full, the other solution is discharged down the drain which is considered waste discharge. System is more complex and involved. Hypochlorite &amp; sodium have the potential for corrosion over time. Wear components need to be replaced periodically. EW has potential for residual odours. No consumables.</td>
<td>It can be manufactured in most locations since it can be obtained through the electrolysis of salt water. Typically used on large scale for surface purification, bleaching, odour removal and water disinfection, it disinfects the same way as chlorine does. It is unstable and is a strong oxidator that reacts with flammable compounds and reductors.</td>
</tr>
</tbody>
</table>

## CERTIFICATIONS & APPROVALS

<table>
<thead>
<tr>
<th>AQUEOUS OZONE</th>
<th>ELECTROLYZED WATER</th>
<th>SODIUM HYPOCHLORITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>TURI 50/50, EPA, FDA, OSHA, USDA, TUV SUD, CSA/UL, Health Canada, CFIA</td>
<td>NSF, NSF, EPA, FDA, OSHA, USDA, TURI, TUV SUD</td>
<td>NSF, FDA, EPA, USDA</td>
</tr>
</tbody>
</table>

## PATHOGEN CLAIMS

<table>
<thead>
<tr>
<th>AQUEOUS OZONE</th>
<th>ELECTROLYZED WATER</th>
<th>SODIUM HYPOCHLORITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very rapid pathogen kill. Brodest pathogen claim package. Kills 99.9% of Norovirus, Hep A, Cryptosporidium MRSA, H1N1, E.coli and Staph. Medium-duty cleaning power, 50% greater oxidizing power vs electrolyzed water</td>
<td>Ineffective against Cryptosporidium, Hepatitis A, and Noro-virus. Light-duty cleaner, ongoing industry debate over its effectiveness.</td>
<td>The effectiveness is affected by turbidity, organic matter, temperature and pH. The manufacturer’s instructions for specific sodium hypochlorite products need to be followed. The required dose and contact time varies with water quality (e.g. turbidity, pH, temperature). Kills Mold: No Deodorizes: Yes Residue Free: No Chemical Free: No</td>
</tr>
<tr>
<td>Kills Mold: Yes * Deodorizes: Yes Residue Free: Yes Reverts back to water: Yes</td>
<td>Kills Mold: No Deodorizes: Yes Residue Free: No Chemical Free: No</td>
<td></td>
</tr>
</tbody>
</table>

## SPACE REQUIREMENTS

<table>
<thead>
<tr>
<th>AQUEOUS OZONE</th>
<th>ELECTROLYZED WATER</th>
<th>SODIUM HYPOCHLORITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall Mounted System 57 cm X 47 cm X 25 cm 12 kg</td>
<td>Both Sterilox and Tennant systems require significant floor space. Size ranges from: 46 cm x 38 cm x 15 cm / 17 kg units up to 135 cm x 58 cm x 112 cm / 263 kg units (about 3x size of our unit)</td>
<td>Varies by type of system or process</td>
</tr>
</tbody>
</table>

* Pathogen Kill Summary & Matrix.

For support reference, visit our website at [www.tersano.com](http://www.tersano.com)
### COMPARATIVE SUMMARY OF CLEANING TECHNOLOGIES

<table>
<thead>
<tr>
<th>TECHNOLOGY OR PRODUCT TYPE</th>
<th>FDA GRAS FOOD SAFETY</th>
<th>ON-SITE TEST</th>
<th>LISTERIA 4 LOG KILL</th>
<th>FLU VIRUS 4 LOG KILL</th>
<th>EPA COMPLIANT</th>
<th>HUCKER’S SOIL¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQUEOUS OZONE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>IONIZED BUBBLES</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>ELECTROLYZED WATER</td>
<td>N/A</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>STEAM CLEANING</td>
<td>N/A</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>CHEMICAL CLEANERS</td>
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<td>Some</td>
<td>Some</td>
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<td>GREEN CLEANERS</td>
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<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Some</td>
</tr>
</tbody>
</table>

¹ Hucker’s soil is the industry accepted standardized soil designed to replicate common soils found when cleaning. Distilled water 48.8%, evaporated milk 13.8%, creamy peanut butter 9.2%, salted butter 9.2%, stone ground wheat flour 9.2%, egg yolk 9.2%, printer’s ink with linseed oil 0.9%, and saline solution 2.7%

International Ozone Association - AOAC Official method 961.02; Germicidal Spray Products as Disinfectants; and Detergent Sanitizing Action of Disinfectants. FDA GRAS Notification. EPA Organic Program compliance. TURI.org. Data compiled in 2009 from third party independent industry and academic sources. *

### SUSTAINABILITY

Considered an ‘organic’ cleaning product, the All-In-One Multipurpose Cleaner provides a vast number of benefits that will help your company in many ways.

- On demand production
- Simple and safe to operate
- Reduce operating costs
- Replaces multiple chemicals
- Compatible with existing machinery and work process
- Powerful & effective solution
- Environmentally sustainable

* For support reference, visit our website at www.tersano.com.
lotus® PRO and the Stabilized Aqueous Ozone it makes are subject to close regulation by a number of government agencies including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the US Department of Agriculture (USDA) and Department of Labor Occupational Health and Safety Administration (OHSA) as follows:

**EPA:** The lotus® PRO device itself, the Stabilized Aqueous Ozone it manufactures and the performance claims are subject to separate and distinct treatment by the EPA:

**lotus® PRO Unit:** The device itself does not require registration but it must be manufactured in an EPA registered establishment. Production in an unregistered establishment is a violation of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA – 1947). lotus® PRO’s EPA registered establishment number is 89093-CAN-001. The lotus® PRO device also adheres to strict EPA regulations with regard to labeling, production, record keeping, packaging and import/export requirements.

**lotus® PRO Stabilized Aqueous Ozone:** With the exception of ozone, FIFRA mandates that any substance intended to prevent, destroy, repel, or mitigate any pest, must be registered before sale or distribution. To obtain an EPA product registration number, a manufacturer must submit specific data regarding its safety and the effectiveness. Because it is chemical-free, Stabilized Aqueous Ozone is unique in the opinion of the EPA. Unlike chemical, biochemical and microbial pesticide substances, the EPA does not require a product registration number for Stabilized Aqueous Ozone.

**Stabilized Aqueous Ozone Performance Classification:** The Stabilized Aqueous Ozone made on demand by lotus® PRO is classified by the EPA with regards to how it be may effectively used, e.g. as a general cleaner versus a hard surface sanitizer. lotus® PRO’s Stabilized Aqueous Ozone is classified a food surface sanitizer because an EPA approved lab followed strict protocol and showed a 99.999% reduction of test bacteria in 60 seconds or less.

**FDA:** In 1997 the FDA approved the use of ozone as an indirect food additive through use as antimicrobial agent with indirect contact with foods. In 2002 the FDA approved ozone for use on food contact areas and directly on food with its Generally Regarded As Safe (GRAS) designation. GRAS substances are those that are intentionally added to food which are reviewed and recognized by qualified experts, as having been adequately shown to be safe under the conditions of its intended use.

**USDA:** The Organic Foods Production Act (OFPA) authorizes the establishment of the National List of allowed and prohibited substances. The National List identifies Stabilized Aqueous Ozone as a substance that is allowed for use in organic crop and livestock production.

**OHSA:** Regulations address the toxicity of gaseous ozone and acknowledge the safety of Stabilized Aqueous Ozone. Strict limits are set for exposure to gaseous ozone while no limits are set for exposure to Stabilized Aqueous Ozone even with high concentrations. Stabilized Aqueous Ozone is considered to pose no health or safety threats; requires no safety training, certification or reporting; and requires no protective gear or compliance for safe use. Additionally, the Stabilized Aqueous Ozone produced by lotus® PRO carries a zero health hazard, reactivity and fire hazard NFPA ratings.

**TÜV SÜD:** TÜV SÜD America Inc, a subsidiary of TÜV SÜD AG, is a business-to-business engineering services firm providing international safety testing and certification services. Founded in 1987, TÜV SÜD America has grown to more than 1,000 experts in over a dozen locations throughout the U.S., Canada and Mexico. Operating
under the brand names of Product Service, Management Service, Industry Service, Automotive and PetroChem, TÜV SÜD America has partnered with thousands of companies throughout the NAFTA region, assuring product and management systems excellence, and acceptance in the global marketplace.

**CSA-UL:** CSA International (Canadian Standards Association), a member of the CSA Group, is a provider of product testing and certification services for electrical, mechanical, plumbing, gas and a variety of other products. Recognized in the U.S., Canada and around the world, CSAs marks appear on billions of products worldwide.

CSA International certification marks indicate that a product, process or service has been tested to a Canadian or U.S. standard and it meets the requirements of an applicable CSA standard or another recognized document used as a basis for certification.

For consumers, CSA International certification marks are intended to provide increased assurance of quality and safety. For manufacturers, international recognition of the mark may help to ease their entry into North American markets. CSA International certification marks are accepted by many North American regulators and by a large number of North American retailers. Billions of products bearing CSA International certification marks are found on the shelves of well-known retail chains and sold by major product distributors.

**HEALTH CANADA & CFIA:** Approved by Health Canada and Canadian Food Inspection Agency (CFIA) through a letter of non-objection for the use of lotus PRO High Capacity Unit as cleaning, deodorizing, disinfecting and sanitising unit for food premises, food plants and other commercial and industrial use.

Health Canada is the Federal department responsible for helping Canadian maintain and improve their health, while respecting individual choices and circumstances. To achieve this goal, it relies on high-quality scientific research, conducts ongoing consultations to meet Canadian's long-term health care needs, releases information to Canadians to protect them from avoidable disease risks and encourages Canadians to take an active role in their health. To help hold health care costs down and improve quality of life in the long term, the Department is committed to support research and work collaboratively with the provinces and territories to test ways in which the Canadian health care system can be improved and ensure its sustainability for the future.

The Canadian Food Inspection Agency (CFIA) ensures the safety of Canada's food supply, working from the farm gate to the consumer's plate to protect public health and safeguarding the plants and animals upon which safe and high-quality food depends. CFIA also enforces policies and standards, set by Health Canada, governing the safety and nutritional quality of all food sold in Canada.

**LOTUS® PRO IN FOOD SERVICE AREAS**
The lotus® PRO is particularly effective in cleaning and sanitizing food contact surfaces. Unlike chemical sanitizer (which must be used off hours and with protective gear) Stabilized Aqueous Ozone can be used to clean and sanitize in the close presence of food without concerns of chemical contamination. Since Stabilized Aqueous Ozone reverts to oxygen and water, food preparation surfaces do not require post-application rinsing to eliminate potentially harmful residues, nor do they require careful handling and preparation of chemical cleaning concentrates.

**LOTUS® PRO ANTI-MICROBIAL EFFICACY**
A recent article published in the Association for Professionals in Infection Control and Epidemiology found that ozone was able to inactivate more than 99.9% of most bacteria including Acinetobacter baumannii, clostridium difficile ("C. difficile") and methicillin-resistant Staphylococcus aureus ("MRSA") in both laboratory and field conditions. The study concluded that ozone is a valuable decontamination tool for the removal of bacteria in many institutions and communal settings including hospitals and other health care institutions.