

# Agenda

- ◆ About Tersano / GWI
- What is Aqueous Ozone and how does it Work
- ♦ How Tersano creates Aqueous Ozone
- **♦** Cleaning Performance
- **♦** Disinfecting Performance
- ♦ Health & Safety Benefits
- **♦** Environmental Benefits
- Where Tersano Technology is being used
- Questions & Answers





### Introduction



- World leader in stabilised Aqueous Ozone
- **♦** Headquarters in Windsor, Ontario, Canada
- ◆ Patents and continuing R&D for technology that converts cold tap water into long lasting Aqueous Ozone (AO)
- ◆ Installation base of 6,000+ commercial units across all sectors including retail, warehousing, financial institutions, hospitals, hotels and restaurants.

### Introduction



- **♦** GWI headquartered in Coventry, United Kingdom
  - Directors and shareholders involved in cleaning all of their working lives and have over 50 years of combined experience
- Secured Tersano distribution rights for the Europe
  - Spent the last 2 years researching and understanding the technology
- **♦** Dedicated to Providing Viable Environmental Solutions
  - Supports companies with their green initiatives





### Where Tersano has Been Recognized









- 2006 Tersano technology declared one of the best inventions by Time Magazine.
- **2008** Premier's Catalyst Award for Innovation.
- World leader and innovator in AO applications R&D
- **♦** Continued growth − 2012 European office opens.





### What is Ozone



- Ozone is a gas
- **♦** Created naturally every day in the world we live
- **♦** Aqueous ozone is natures most effective cleaner
- Highly effective cleaning agent, stain remover, deodoriser and sanitizer
- ♦ Natures safest product, it leaves no residue when its work is done it reverts back to H2O

# How does Aqueous Ozone Work?



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



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 sanitises





# Tersano Extended Shelf Life Methodology





#### Methodology:

- 1) Batch sample of food divided into 2 portions.
- 2) Portioned sections of food cleaned in ozonated water and ordinary tap water.
- 3) Stored in separate re-sealable storage containers and refrigerated.
- 4) Samples reviewed and documented daily for a period of 8 to 16 days.
- 5) Visual record of comparisons taken on day 8 for strawberries or 16 for broccoli.





### How Tersano Create Aqueous Ozone (AO)

- 1 Cold tap water enters the lotus PRO® Stabilizer.
- 2 The lotus PRO® Stabilizer stabilizes the cold tap water, extending the cleaning time up to 24 hours.
- 3 Treated water leaves the lotus PRO® Stabilizer.
- 4 Stabilized water enters the lotus PRO® Unit.
- Oxygen enters the dispenser through the replaceable filter cartridge.
- **6** 4,500 volts of electricity transforms  $O_2$  to  $O_3$ .
- Ozone gas that is not saturated in the water is separated and safely dispensed.
- 8 Aqueous ozone leaves the dispenser.







### **Applications**



- Daily maintenance cleaning
- ♦ Glass, mirrors, tables, floors, Bathrooms, Carpets, Stainless steel
- **♦** Any hard floor surface
- **♦** General fixtures and fittings
- **♦** Liberally whatever you spray it on it will kill germs

# Tersano = Great Disinfecting Results

♦ Escherichia coli >99.999%

♦ Staphylococcus aureus >99.999%

◆ Under the conditions of the test, the lotus PRO was effective at reducing the microbial populations by greater than 99.999%.

♦ All of the controls met the criteria for a valid test.







# Tersano = Great Disinfecting Results

"We wanted to make sure that our super – resistant bacteria would also be killed by this agent so what we did was in-house we did our own testing on different strains of MRSA and VRE bacteria and we found that it was equally effective at killing the bacteria."

France Champoux

Integrated Laboratory Manager







### Tersano = Excellent for Staff





#### **Potential Acute Health Effects:**

Non-corrosive for skin. Non-irritant for skin. Non-sensitizer for skin.

Non-permeator by skin. Non-irritating to the eyes. Non-hazardous in case of ingestion. Non-hazardous in case of inhalation. Non-irritant for lungs.

Non-sensitizer for lungs. Non-corrosive to the eyes. Non-corrosive for lungs.

#### **Potential Chronic Health Effects:**

Non-corrosive for skin. Non-irritant for skin. Non-sensitizer for skin.

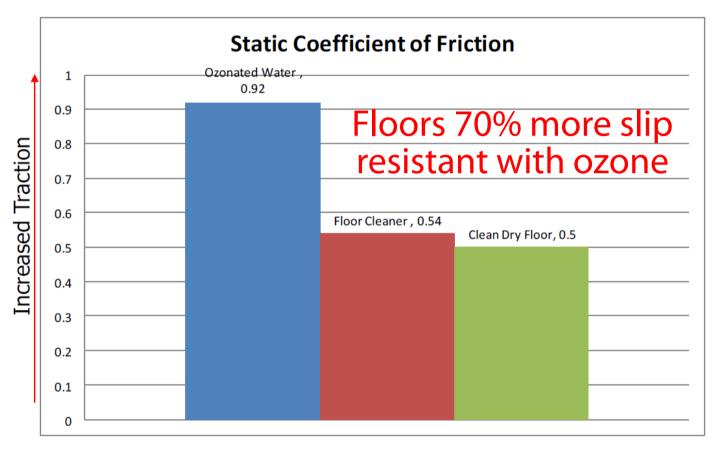
Non-permeator by skin. Non-irritating to the eyes. Non-hazardous in case of ingestion. Non-hazardous in case of inhalation. Non-irritant for lungs.

Non-sensitizer for lungs.





# Tersano = Reduced Slip Injuries



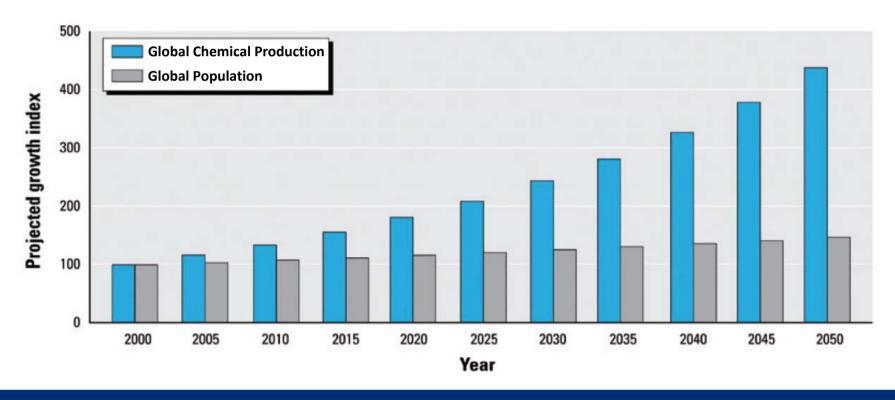
This study was conducted on an epoxy floor using the American Slip Meter (ASM 825). The higher the number, the more slip resistant the floor.





### We Can Make a Difference

Global chemical production is projected to grow at a rate of 3% per year, rapidly outpacing the global population growth. On this trajectory, chemical production will double by 2024, indexed to 2000. (From Wilson and Schwarzman, 2009)







### Tersano = Green, Sustainable & Safe

- ♦ Beyond "Green" Natures' Cleaner
- ♦ Zero waste water residuals
- ♦ Safe for human contact (50/50 TURI score)
- Minimum carbon footprint we even recycle our stabilizers











### COULD BE STOPPING



BARRELS or LITRES OF CHEMICALS

FROM GOING DOWN THE DRAIN OR INTO A LANDFILL EACH YEAR \*





LITRES or 333,143 BARRELS OF CHEMIC! LS

FROM GOING DOWN THE DRAIN OR INTO A LANDFILL EACH YEAR \*

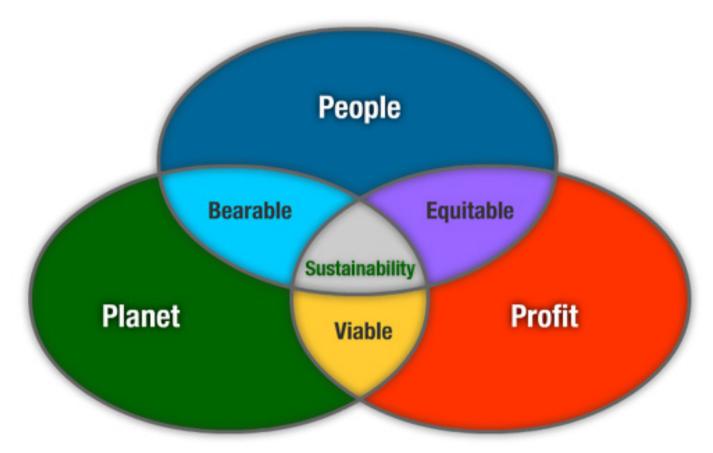
### **Triple Bottom Line**

- ♦ The notion is relatively simple: measuring business success through economic, ecological and social filters.
  - "People" relates to fair and beneficial business practices toward labour and the region in which a company conducts its business.
  - "Planet" refers to sustainable environmental practices.
  - "Profit" is the bottom line shared by all commerce.
- ♦ The Ghandi inspired phrase sums up the triple bottom line concept: "Be the change".





# The Triple Bottom Line



Partnering for a more sustainable tomorrow





### Be the Change

#### **PROFIT**

#### **ECONOMIC GROWTH**

- Saves up to 30% versus chemical cleaners
- Overall reduction in:
  - Cleaning time
  - Distribution and inventory cost
  - Inventory management and multiple chemicals
  - Sick days as a result of chemical exposure
- Increased worker productivity because of higher morale.
- Lower facility maintenance costs extends life of cleaning equipment and building materials.
- All-in-one solution that addresses multitude of cleaning challenges (No COSHH, chemical mixes, safety issues, storing of chemicals, PPE, etc.)





























# Where is Tersano Being Used?



































By using lotus Pro aqueous ozone for their cleaning & sanitising, PwC and Fisher Clinical alone will prevent over 175,000 litres of chemical from being discharged into our fragile UK ecosystem every year.





