

Model SG-OzPAK SG-OzVest

Sustainable, Green and Portable Battery Operated, Ozonated Water Jet Spray

The OzPak and OzVest are powered by a rechargeable battery providing up to 12 continuous hours of Ozonated Water with over 2PPM of dissolved ozone



SG-OzPak



SG-OzVest

ProMedUSA Professional SG-OzPAK and SG-OzVEST Ozonated Water Jet Spray

Why use Ozonated Water?

ProMedUSA's Professional Ozonated Water Solutions are battery operated, lightweight and produce a powerful stream of Ozonated Water with over 2PPM of Dissolved Ozone.

- 1. Ozonated Water is 100% GREEN and SUSTAINABLE. When discharged down the drain it changes back instantly into plain tap water. It will never pollute the environment.
- 2. Saves Energy there is no need to use hot water
- 3. Saves Water, Time and Manpower there is no rinsing required
- 4. Ozonated Water has been tested and proven to kill up to 99.999% of Viruses including SARS-Cov-2 Coronavirus, Germs and Bacteria including Norovirus, E.coli, Salmonella and Listeria
- 5. Ozonated Water is 3,000 times more powerful than Chlorine, yet the MSDS of Ozone Water is 0.0.0.0 (the same as tap water)
- Ozonated Water is completely 100% safe and totally harmless for Humans, Pets, and Plants. It is so safe; you can drink it or bathe with it. (Dentists use ozonated water to for rinsing after dental procedures.)
- 7. Ozonated Water Cleans, Sanitises and Deodorises almost any surface in seconds without rinsing, so you save water
- 8. Quickly clean, sanitise and deodorise Toilets, Bin Centres, Rubbish Chutes, Floors, Walls, Food Processing Equipment, Schools, Childcare Centres, Hospitals, Clinics, Pet Shops, Spas
- 9. Clean and sanitise all foods including seafood, meats, poultry, fruits and vegetables extending shelf life and killing food borne pathogens without changing the colour, flavour or texture.

ProMedUSA SG-OzPAK and SG-OzVEST

Ozonated Water for Surface Cleaning, Deodorizing and Sanitizing Excellent also for Food Preparation Surfaces, Foods, F&B

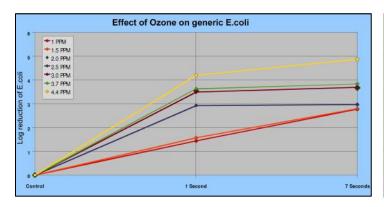
The ProMedUSA Model SG-OzPAK or SG-OzVEST Ozonated Water Generator Jet Spray instantly produces Ozonated Water with a dissolved ozone level of over 2ppm with just the touch of a button, the turn of a tap or by pulling the trigger on the jet spray nozzle.

Ozone is the world's most powerful disinfectant. It is 3,000 times more powerful than Chlorine, leaves no residue behind, and reverts back into pure oxygen in moments. It has been tested and proven to kill almost all known pathogens with only a brief exposure including SARS-CoV-2, E.Coli, Salmonella, Staphylococcus, HFMD, Hepatitis, MRSA, Listeria, and Norovirus.

Ozonated Water is used worldwide in Hospitals, Clinics, Dental Clinics, Military and Governmental agencies, the Food Preparation Industry, Schools, Restaurants.

It is GREEN, Sustainable and safe for the environment. It has been approved by the both the US FDA and US Department of Agriculture. Ozonated water is harmless, non-allergenic and safe for humans, children, pets and plants.

It will quickly clean, deodorize and sanitize almost any washable surface, killing odours, mould and mildew, removing grease and dirt. It will sanitize all food preparation surfaces, kill food borne pathogens on your meats, seafood, poultry, vegetables, remove pesticides, and prolong the shelf life of your foods by up to 40%.



BACTERIA	REDUCTION (%) At 2PPM Ozone	(Seconds)	
E. Coli	99.99	1-3	
Listeria	99.999	3-11	
Salmonella	99.99	11	
Streptococcus	99.999	23	
Legionella	99.99	9-12	
VIRUSES			
Bacteriophage F2	99.999	2-5	
Norovirus	99.9	2	
Hepatitus A	99.9	1	
Parvo Virus	99.99	30	
Rotavirus	99.99	63-120	
Coxsackie (HFMD)	99.99	15	

As shown above, a 1 second exposure to Ozonated water with just a 2 PPM ozone concentration will kill 99.99% of all E.coli bacteria on a surface.



Bacteria on hands before and after washing with 5 PPM ozonated water for 5 seconds



Swab test results

SIMPLE AND EASY TO USE





ACTUAL TEST RESULT
BEFORE AND AFTER OZONE WATER







AFTER APPLYING OZONE WATER THE BACTERIA COUNT IS JUST 99

ProMedUSA SG-OzPAK

Ozonated Water Generator

Hand Wash Effectiveness*



PATHOGEN	WASH TIME	% REDUCTION
Staphyloccus aureus	5 seconds	99.9%
	15 seconds	99.999%
E.coli	5 seconds	99.9%
	15 seconds	99.999%
Salmonella	5 seconds	99.999%
	15 seconds	99.9999%
MRSA	5 seconds	99.99%
	15 seconds	99.999%
HFMD (Coxsackie)	5 seconds	99.9%
	15 seconds	99.99%
Listeria	5 seconds	99.999%
	15 seconds	99.999%
Legionella	5 seconds	Not tested
-	15 seconds	99.99%
Hepatitis A	5 seconds	99.9%
-	15 seconds	99.99%
Norovirus	5 seconds	99.9%
	15 seconds	99.999%

^{*}Tested by Dokkyo Medical University (Japan) and also by SGS Worldwide Testing and Certification Service (Swiss) with 5 and 15 second exposures to ozonated water of 5ppm

PROVEN - VERIFIED RESULTS Men's Toilets

LOCATION	READINGS			
	ODOUR READING Cosmos XP-329 Odour Meter		BACTERIA SWAB TEST RESULTS SystemSure Plus ATP Monitor	
	BEFORE	AFTER	BEFORE	AFTER
LITTLE INDIA NEL MRT STATION GENTS TOILET	586	478	5272	20
BUKIT TIMAH FOOD CENTRE GENTS TOILET	496	345	1143	29
BERSEH FOOD CENTRE GENTS TOILET	472	338	621	100

Test Procedure: The smell in the Men's Toilet at these 3 test sites was first measured for odour using the standard Cosmos Model XP-329 Odour Meter.

We then swabbed the urinals with the hospital Grade SystemSure Plus ATP meter and measure the relative bacterial count.

The Toilets were then washed down briefly with the Ozonated Water from the SG-OZPak and the readings were taken again.

The results: Odours immediately reduced by at least 30% with a single wash (repeated washing will further reduce the odours).

The bacteria count was reduced to a level that would be acceptable by the AVA for serving food on (100 counts or less). Theoretically, the urinals were sanitised enough to eat from!



TEST OF THE OZONATED WATER PRODUCED BY THE SG-OzPAK's OZONE GENERATOR IN DEACTIVATING THE CORONAVIRUS SARS-CoV-2

Tested at Nara Medical University, Level3 Biohazard Lab October 2020

A study conducted at the Nara Medical University, by Professor Hisakazu YANO, Associate Professor Ryuichi NAKANO, Department of Microbiology and Infectious Diseases, confirmed the novel coronavirus SARS-CoV-2 inactivation effect of low-concentration ozone water generated by the Professional Use Ozone Generator used in ProMedUSA's SG-OzPAK.

The study confirmed the inactivation effect on the novel coronavirus of approx. 0.2 mg/l of low- concentration ozone water (hereafter referred to as "the ozone water") generated using an actual production model of the equipment to infuse tap water with ozone gas from a nozzle directly connected to the faucet.

The test and confirmation of effectiveness in the study were implemented under proper pathogen containment measures ex situ at bio-safety level 3 (BSL3), and do not constitute proof of effectiveness in an actual-use environment using the equipment.

TEST VIRUS USED: NOVEL CORONAVIRUS (SARS-CoV-2)

METHODOLOGY:

A total of 190 μ l of the ozonated water produced by the SG-OzPAK's Ozone Generator and 10 μ l of virus fluid were mixed and allowed to react with each other for a fixed time. As a control group, the same amount of phosphate-buffered saline (PBS) and virus fluid were mixed and allowed to react in the same way.

After reaction, $800~\mu l$ of culture medium containing 10~mM of sodium thiosulfate was added to each fluid to stop the reaction, the fluid was collected, and the amount of virus was then calculated using the plaque assay technique. The test was conducted twice for each fluid.

The virus reduction rate was calculated using a logarithmic decrease value and the following formula:

Reduction rate [%] = (1-1/10 logarithmic decrease value) ×100





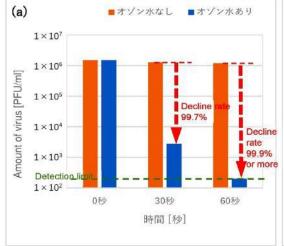
Ozonated Water Generator, and the mixing of the SARS-Cov-2 Virus

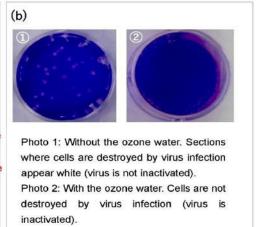
TEST RESULTS:

After mixing the ozone water with the virus fluid, a virus amount of 1.49×10⁶ PFU/ml decreased to 2.75×10^3 PFU/ml in 30 seconds, then decreased to within the detection limit of 2.00×10² PFU/ml in 60 seconds. The virus reduction rate at this time was 99.7% and at least 99.9% respectively. These values are the average values of two tests.

	0 seconds	30 seconds	60 seconds
Without the ozone water	1.49×10 ⁶	1.28×10 ⁶	1.17×10 ⁶
With the ozone water	1.49×10 ⁶	2.75×10 ³	< 2.00×10 ²
Decline rate (%)	•	99.7 %	> 99.9 %

^{*} Detection limit value: < 2.00×10²; decline rate (%) is rounded down to two decimal places. Changes in amount of virus due to the ozone water (units: PFU/ml)





Orange Without ozone water, Blue: With ozone water. Time in seconds: 0, 30, 60 $^{\circ}$

The test results confirmed that the ozone water renders the novel coronavirus SARS-CoV-2 inactive at a rate greater than 99.9%.

This confirms that cleaning with the ozone water may be effective for preventing contact infection via substances infected with the novel coronavirus.

SUMMARY

Confirmation of the effects of high concentrations $(10 \text{ mg/l})^{*3}$ and low concentrations $(2 \text{ to } 0.4 \text{ mg/l})^{*4}$ of ozone water on the novel coronavirus have already been reported.

Generation of ozone water is broadly classified into generation by electrolysis or by generation by mixing ozone gas into water using the venturi injector which is the process used in the SG-OzPAK. With the venturi injector methodology as used in the SG-OzPAK, the dissolved ozone concentration in the water is lower.

In this study, the effect of a relatively low-concentration (0.2 mg/l) of dissolved ozone in the test water generated by an actual production model of the SG-OzPAK's ozone generator verifies the effectiveness of the SG-OzPAK against the actual coronavirus SARS-CoV-2 (Covid-19) in achieving a rapid 99.9% deactivation (or destruction) of the virus.

This validates that ozone water need not be limited to high-concentration use for medical equipment, etc., and that low-concentration ozone water may be sufficiently and widely utilized for general public sanitation use with regard to the novel coronavirus SARS-CoV-2.

SOME OF OUR CLIENTS:





































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