DR.PEROX

The Best Cleaning Solution for Dental Health Clinics

- *Cuspidor Bowl Cleaning*
- *Suction Line Cleaning*
- *Drain Cleaning*
- *Sterilizating & Disinfecting*
- *Rapid Deodorizing*

DR.PEROX
MEDICAL SOLUTIONS

HYDROGEN PEROXIDE HYGIENE SOLUTION

DR.PEROX

The only solution for complete dental hospital hygiene

DR.PEROX
MEDICAL SOLUTIONS

WWW.DRPEROX.COM

Contents

DR.PEROX

Total Solutions for Hospital Hygiene

Eliminate all harmful bacteria, fungi, viruses and pollutants with our all-in-one Dr. Perox through the use of free oxygen radicals and hydrogen peroxide.

· Dr. Perox is dissolved in water and hydrolyzed, producing hydrogen peroxide, a powerful oxidizer.

· Free oxygen radicals, which are highly reactive with hydrogen peroxide, oxidizes and removes the cell's protective membranes from bacteria, viruses and fungi.

· According to various environmental conditions, Dr. Perox inhibits the growth of harmful microorganisms and promotes the growth of beneficial bacteria.

· Active oxygen radicals are a natural metabolite of microorganisms that decomposes into oxygen and water, resulting in no toxic gas emissions or residual toxic substances.

· Removes through oxidization and the neutralization of compounds such as hydrogen sulfide, mercaptan (hydrogen sulfide), amine, and aldehyde, which are all culprits of bad odor.

· Controlling the generation of pollutants, such as sludge.

· Breaks the carbon bond of organic matter to improve biodegradability leading to ease in cleaning.

· Oxidize residual chlorine and sulfide compounds to prevent corrosion of pipes and equipment.

Dr. Perox is an eco-friendly cleaning agent that quickly sterilizes various germs and viruses without corrosion in metal products, such as drain pipes and medical equipment

HOW IT WORKS

Principle of Operation

Dr. Perox has a mechanism of hydrogen peroxide that reacts with water to produce abundant free oxygen radicals

DR.PEROX's products are dissolved in water and hydrolyzed to produce hydrogen peroxide, a powerful and fast oxidizer. The resulting active oxygen radicals then oxidizes and removes the protective membranes of harmful cells such as bacteria, viruses, and fungi, and inhibits harmful microbial growth while promoting the growth of beneficial bacteria.

Active oxygen radicals are a natural metabolite of microorganisms that breaks down into harmless oxygen and water and does not produce toxic gases such as chlorine or any other residual toxic substances.

Also, DR.PEROX has been proven to be effective against odors. DR.PEROX is an alkaline substance that completely removes odor-causing substances such as hydrogen sulfide, mercaptan, amine, and aldehyde, which are common in daily life or industrial environments.

DR.PEROX is also very effective in the maintenance of medical devices. Typical ethanol is made from a mixture of 30 percent water and 70 percent ethanol for sterilization. Therefore, corrosion can occur slowly if the ethanol is not dried properly after disinfection and cleaning. Chlorine, which is another widely used product for disinfection, is also corrosive. DR.PEROX, on the other hand, completely avoids the corrosion of pipes and equipment by oxidizing the residual chlorine and sulfide compounds in organic matter.

And even after use, the carbon bonds of organic materials are broken down to improve biodegradability and ease of cleaning. In addition, it inhibits the generation of pollutants such as sludge, increasing the effectiveness of the product even further.

WHY DR.PEROX

Hygiene is very important in hospitals and dental clinics. In particular, it is more important where foul odors are likely to occur due to bacterial substances such as medical equipment, central clinic units, sinks, and toilets. With the constant progression of living standards, consumers are increasingly prioritizing hygiene and cleanliness when choosing dentists and hospitals.

If one were to use basic substances or alcohol to clean the central clinic units, sinks, or toilets, the effects will not be long lasting, and rather the pungent smell of the cleaning agent will lead to headaches and even expose users to harmful substances.

Furthermore, in the case of bleach and chlorine series products, chlorine gas is generated when mixed with other detergents or used in areas with high levels of contamination, irritating one's eyes, respiratory system, and mucous membrane, and forces users the inconvenience of always having to ventilate everything after use.
DR.PEROX is a product with excellent results in various reliability and validity test reports. Dr.perox's new product has solved all hygiene issues through the use of hydrogen peroxide, active oxygen radicals and medicinal alkaline substances to sterilize, clean, and deodorize.

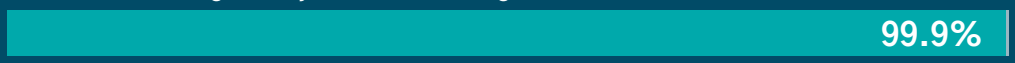
It is an undeniable fact that the patient are able to discern any smells that the doctor and other staff members can detect. Switch from bleach, chlorine and ethanol based products to DR.PEROX for the health and cleanliness of everyone in your hospital.

SKIN IRRITATION
Probability of causing erythema, edema, blisters, etc.

MOLD REMOVAL RATE
Antibacterial removal rate for a total of 11 species, including candidazine bacteria, aspergillus bacteria and penicillium.

DEODORANT
Deodorant for ammonia, hydrogen sulfide, acetaldehyde, trilmethylamine, etc.

STERILIZATION POWER
Sterilization power for salmonella, yellow staphylococcus, etc. according to the Ministry of Food and Drug Safety's disinfectant guidelines.



HAZARDOUS SUBSTANCE ANALYSIS
The degree of CMIT, MIT, DDAC, and formaldehyde, which are harmful ingredients caused by disinfectants.

DR.PEROX PRODUCT INFORMATION

DR. PEROX TABLET

Excellent effect of sterilizing and deodorizing the central clinic unit and all related equipment such as the cuspidor bowls and chair filters.

▪ **Type**
Sterilizing and deodorizing cleaning agent

▪ **Intended use**
① Sterilization and cleaning of the central clinic unit and all related components
② Chair filter sterilization and cleaning

▪ **Capacity**
4g×10, 20 tablets

▪ **Effect**
① Removal of encrusted residues and stains
② Deodorization of foul odors
③ The removal of various fungi and bacteria
④ The prevention of corrosion in medical devices

▪ **Feature**
Very effective in sterilizing and deodorizing without causing harmful fumes or gases in tablet form, which is also an eco-friendly sterilizers through the use of hydrogen peroxide.

▪ **Usage**
Simply place the product in the dental drain.
(Installation is not required.)

DR. PEROX POWDER

Practical and economical multi-purpose disinfectant

▪Type
Sterilizing and deodorizing cleaning agent

▪ Application
① General and all-purpose
②Pipe and Drainage Suction Line

▪ Capacity
100g, 200g

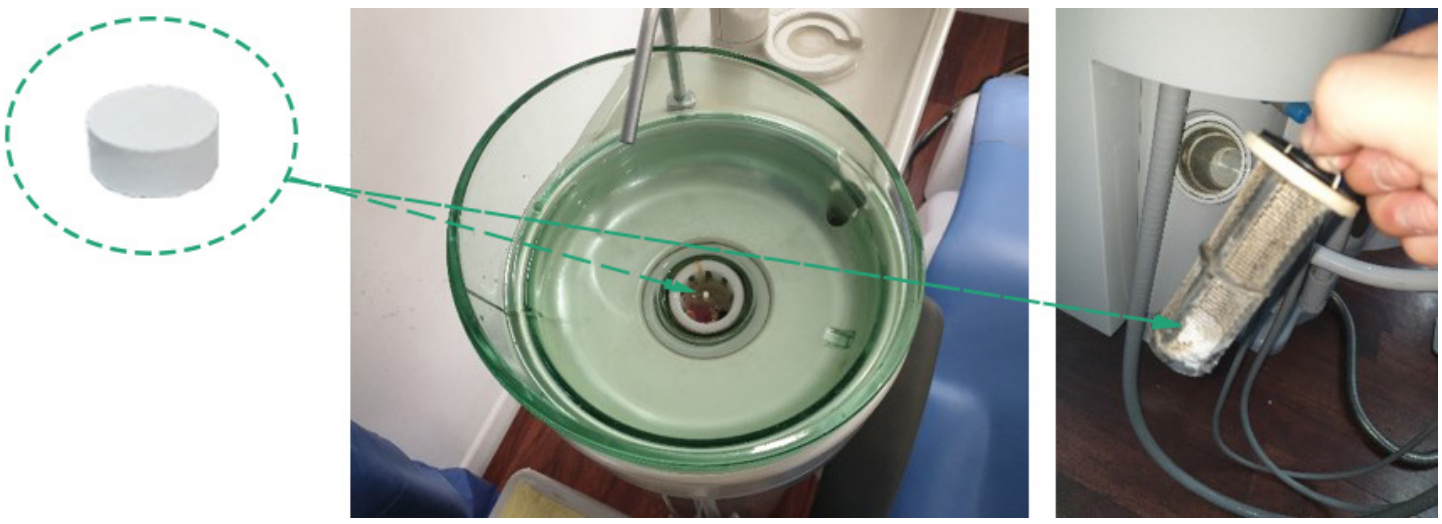
▪Effect
Sterilization of buildings interiors, floors, sewers and pipes

▪Features
1 powder-type eco-friendly cleaning agents using hydrogen peroxide, which are soluble in water and economical.
2 Multi-purpose sterilizing cleanser can be used anywhere that needs sterilization

▪ Usage
Dissolve 2~3 grams of the product in 1 liter of warm water (dose the powder 2~3 times)

DR.PEROX TABLET

Fast and safe sterilizing agent for chair filters and bowls



Sludge decomposition and removal, antibacterial and deodorizing effects with long lasting action.

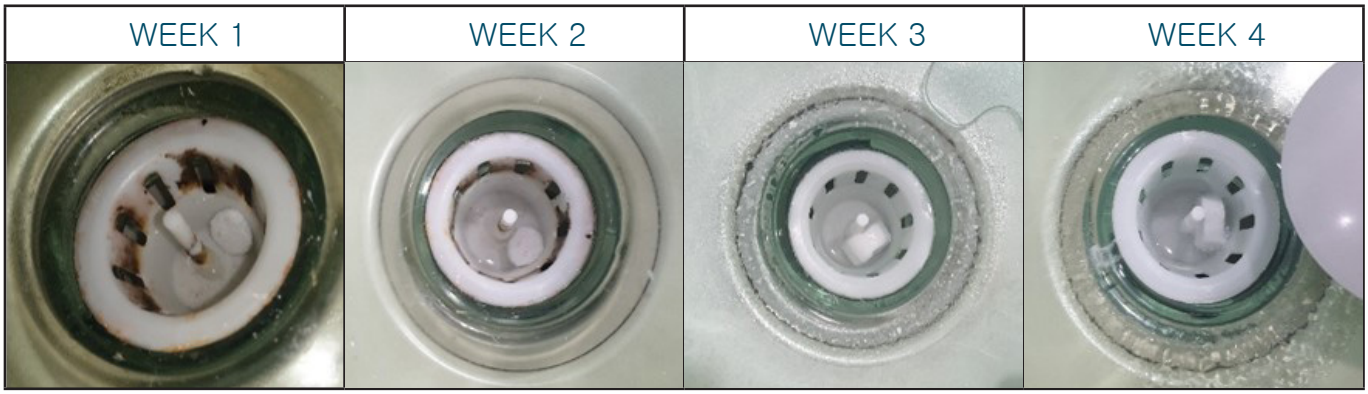
▪ Effect

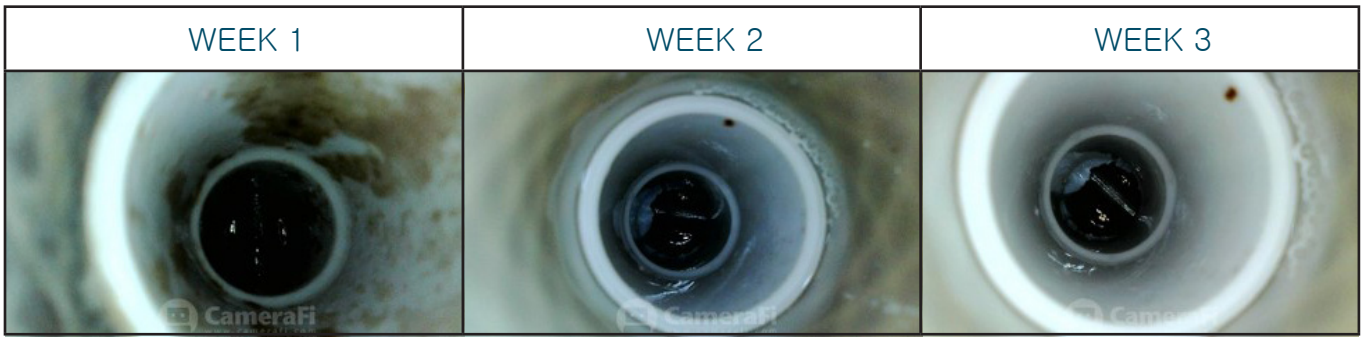
① Removal of blockage and odors caused by blood, dregs and pus caused by patients gargling
② Dissolves the hardened protein lumps on the walls of wastewater receptacle, removing germs and odors

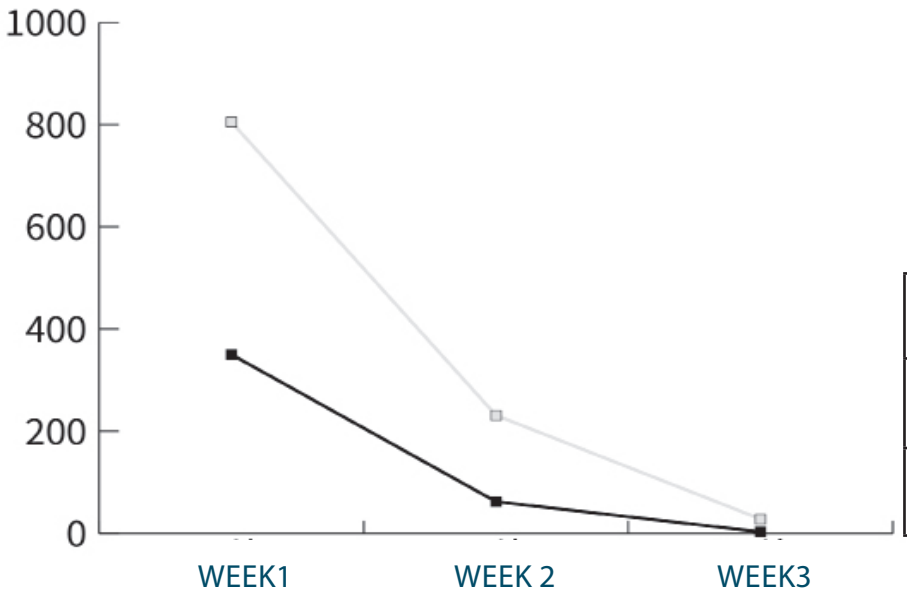
▪ Usage and Capacity

① Cuspidor bowl: 1 tablet in the first two weeks of use, then 1 tablet a one month after the initial two weeks
② Chair Filters: 1 tablet for each chair suction filter a month, drastic results after three weeks of usage
* Usage frequency can vary with water usage volume and level of contamination.

DENTAL TEST RESULTS



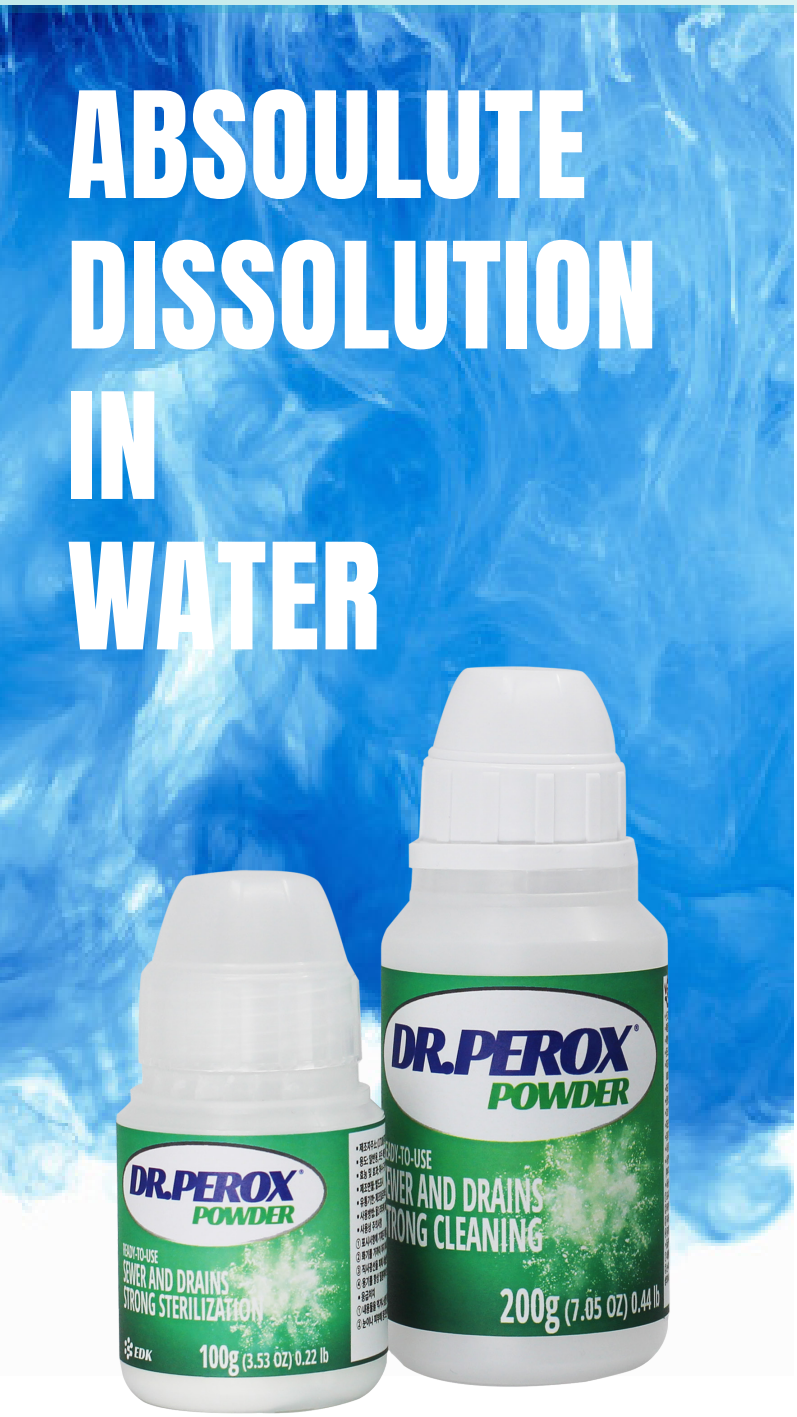




	WEEK1	WEEK2	WEEK3
GERMS	350	62	28
ODORS	805	231	3

DR.PEROX POWDER

Suction line sterilizing cleaning powder, perfectly dissolves in water



▪ Effect

① Sterilization of suction lines
② Cleaning and sanitizing building floors, windows, desks, etc.
③ restroom cleaning and bacteria and odor removal
④ Other mold removal and multi-purpose use.

▪ For the use of

① suction line: Dissolve 2~3 portions of powder in 1 liter of water then suction to clean suction lines once a week
② Other versatile cleaning: Dissolve 2~3 portions of powder in 1 liter of water.

▪ Feature

① It dissolves well in cold water, but is more effective when used in warm water (60 to 70°C).
② Unlike bleach and other chlorine products, it does not produce toxic gases.
③ There is a slight fragrant scent but generally odorless, so does not lead to headaches and others causes of affliction.

Sterilization and cleaning of suction lines

Sterilizing surgical instruments

Sterilizing and cleaning hospitals

<CURRENT LIMITATIONS OF STERILIZING AGENTS>

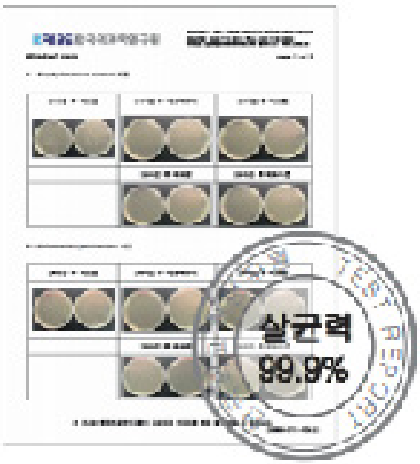
Component Name	Features and Degrees of Sterilization	Drawbacks
Hypochlorous Acid	– Wide sterilization spectrum – Spore sterilizing power – Easy to store liquid or powder form – Relatively affordable price point	– Corrosive to rubber and metal. – Unstable and short shelf life – Rapid degradation of sterilization effect when in contact with organic matter, light, air and metal – Poor biofilm removal ability
Ozone Water	– Wide range of antimicrobial effectiveness – No by-products generated – No noticeable residue	– Unstable (environmental conditions are highly affected) – Reduced sterilization effect due to contact with organic matters – Manufactured directly on-site – High costs. – Poor biofilm removal ability
Hydrochloric acid dioxide	– Less effect received from organic materials compared with chlorine – Less corrosive – Less affected by ph – Wide sterilization spectrum and spore sterilization power – Can also be used on biofilms	– Manufactured on-site – Instructions for use should be strictly observed. – High initial and unit cost – Sensitive to light and potential harm for humans.

<COMPARISON OF OXYGEN BASED AND CHLORINE BASED PRODUCTS>

Categorization	Oxygen based (Dr. Perox product)	Chlorine based
Principal Component	Peroxides	Sodium hypochlorite
Operating Principle	Hydrogen peroxide is generated when product comes in contact with water and oxygen.	Caustic soda, which is produced through the electrolysis of salt and chlorine are the main ingredients leading to high levels of oxidizing forces.
Effects	Sterilization, bleaching, cleaning, and deodorization.Breaks down organic materials, preventing pipe blockages.	Sterilization and bleaching
Bleaching & Cleaning efficacy	Eliminate protein stains, fat/greasy stains and other persistent stains.	Strong cleaning power, but surfaces and materials become bleached.
corrosive property	High levels of convenience due to non-corrosive nature in relation to materials such as piping, tiles, glass, metals, etc.	Corrosive to metals due to high oxidation levels.
Safety	– Harmless to humans because main ingredients are eco-friendly water and oxygen. (Does not cause strong odors and skin or respiratory irritation) – No lasting residual effects so safe to use – Do not need to increase dosage, simply maintain same dosage levels. – Safe to store long-term without fear of deterioration of sterilization power .	– Risk of respiratory and skin irritation. – Risk of safety accidents such as corneal damage – Toxic when mixed with acid products. – Chlorine gas generation and formation of explosive substances.

CERTIFICATE

Test report of public certification authority (stability, validity)



Sterilization test

Detection test for salmonella, yellow phytoplasm

Antibacterial force test

Superbacterial, streptococcus, pleural pulmonary bacteria, E. coli, salmonella, and a total of 18 species

Hazardous Substances Analysis Test

Disinfectant harmful ingredients such as cmit, mit, ddac, and formaldehyde are included in the

Deodorant test

Ammonia, hydrogen sulfide, acetaldehyde, trilmethylamine

Antibacterial test

12 types of bacteria including candidazine bacteria, penicillium and aspergillus bacteria

Safety Standards Conformity Test

Risk & Conformity Test for Items Subject to Safety Verification

Skin irritation test

20 healthy adults tested for erythema, edema, blisters, etc. after use of the product