THE WORLD'S ONLY

NANO SILVER ION ACTIVE DISINFECTANT SOLUTION GENERATOR FOR COMMERCIAL USE



IDD DEMETER THE FUTURE OF DISINFECTION SOLUTION

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HISTORY OF SILVER

Silver has been used for a very long period of time, it was mentioned in Egyptian writings datedback in 2000 BC. Since then, it has been used for many different applications.





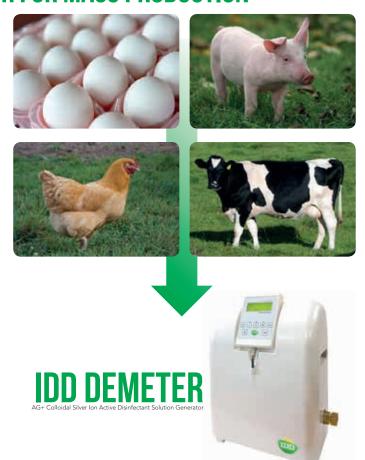




- Romans used silver for water purification (500BC)
- Silver was used in healing wound infections during The First World War
- Silver was widely used in hospitals and some commercial airlines used for water filters
- Since 2000, the use of silver has been dramatically increased, now it's easy to find manydifferent products in our daily life claiming nano-silver technology(Ag+) for disinfection and anti-bacterial purpose
- CDC and WHO recommended using silver filters as a way to purify water in developing countries
- Silver dressings are regularly used in hospital settings to help control infections in major wounds and burns
- There are prescription drugs contain silver such as silver nitrate which is used to prevent conjunctivitis in newborns
- Silver is currently being used by NASA for water purification on space shuttles

IDD DEMETER, WORLD'S 1ST AND THE ONLY AG+ DISINFECTION SOLUTION GENERATOR FOR MASS PRODUCTION

Nano Silver Ion Active Water, which is produced through our breakthrough/patented technology using 99.9979% pure silver, can kill more than 650 types of viruses and pathogenic bacteria without having any toxicity and harmful substances in work area. It is extremely important that livestock farms (Poultry, Swine, Cattle) are kept clean without having pathogenic bacteria/viruses because hygiene of the farm condition directly affects the animal health, performance and overall productivity. Our newest technology will help you control the infectious diseases in most effective manner, anti-bacteria, anti-virus, anti-fungal; disinfection of surfaces, floors, walls and equipment in farms, extremely effective during the egg production, cattle breeding, dairy, and poultry production.







RESULT OF STERILIZATION TEST

Percentages indicate reduction rate of bacteria *Time: from the point of contact

BACTERIAIN	IN 30 MINUTES	IN 2 HOURSIN	IN 24 HOURS
E.coli	89.2%	99.8%	99.9%
S.aureus	58.6%	95.9%	99.9%
S.typhimurium	96.6%	99.9%	99.9%
P.aeruginosa	42.0%	99.9%	99.9%
S.flexneri	26.7%	60.0%	99.9%
B.cereus	91.3%	99.0%	99.9%
B.subtilis	89.1%	99.9%	99.9%
L.monocytogenes	43.1%	92.4%	99.9%

ANTI-VIRAL AND STERILIZATION EFFECT ON PATHOGENS ORIGINATED FROM CHICKEN (AVIAN INFLUENZA AND SALMONELLA)

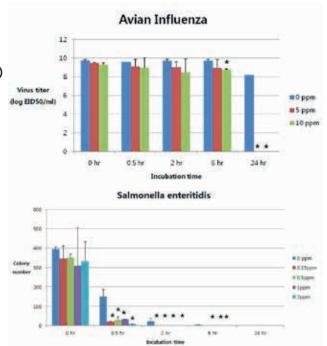
Test conducted by Laboratory of Avian Diseases College of Veterinarian Medicine, Chungbuk National University

TEST OBJECTIVE

To measure the anti-viral and sterilization effect of active silver ion water produced by IDD DEMETER on H9N2 low pathogenic avian influenza virus (LPAI) and two types of salmonella (salmonella enteritidis:SE and salmonella qallinarum:SG)

FOR AVIAN INFLUENZA (LOW PATHOGENIC AVIAN INFLUENZA)

Test result showed that the experimental group where samples containing active silver ionwater produced by IDD DEMETER at high concentrations (2, 5, 10 ppm) were mixed with LPAI (Low Pathogenic Avian Influenza) and reacted for 24 hours had statistically significant anti-viral effect compared to negative control group.

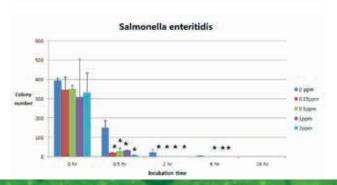


FOR SALMONELLA ENTERITIDIS

Statistically significant anti-viral and sterilization effect was found from all experimental groups reacted with active silver ion water generated by IDD DEMETER at low concentration for longer than 30 minutes.

FOR SALMONELLA GALLINARUM

Statistically significant sterilization effect was observed when silver ion active water produced by IDD DEMETER at 0.25 ppm or higher concentrations was treated to cultured bacteria for 30min or longer. In particular, 2 ppm active silver ion water showed extremely fast sterilization action from 30 minutes.

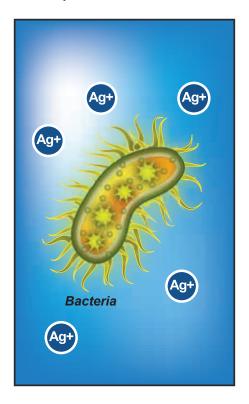


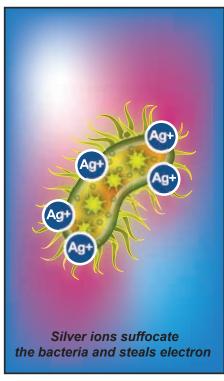


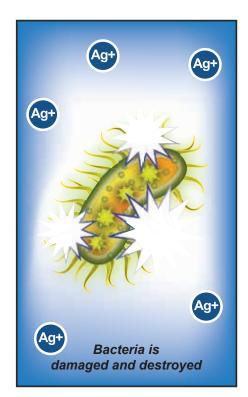


MODE OF ACTION

Silver ions produced by IDD DEMETER magnetically find and surround the cells of pathogenic viruses and bacteria. It then suffocates the viruses and bacteria and as a result, viruses and bacteria loses its electron to the silver ions and immediately be destroyed.







COMPARISON BETWEEN THE DEMETER PRODUCED DISINFECTANT SOLUTION VS. COMMON COMPETITOR PRODUCTS

Nano-Silver ion disinfectant produced by IDD DEMETER is completely safe, odorless, colorless and tasteless. It is the most powerful and eco-friendly disinfection solution available for the farm areas, keeping animals away from more than 650 types of virus/bacteria and infectious diseases, including Avian Influenza, FMD, Salmonella, etc.

	CHLORINE	ALDEHYDES	IDD DEMETERE
Temperature Independent	Х	Х	✓
Odorless, Colorless, Tasteless	Χ	X	✓
pH Neutral	Χ	Χ	✓
Rinsing is Not Required	Χ	Х	✓
Free from Harmful by-product	Carcinogenic	Carcinogenic	✓
Non-Toxic	Χ	Х	✓
Bio-degradable	Χ	Х	✓





CASE STUDIES - 1

Location LAYER FARM, SOUTH KOREA

Application Drinking water with 1PPM

Benefits Replaced salmonella vaccines = economical benefitsSignificantly improved egg shell quality

150,000 birds have been fed with silver ion active water at 1PPM produced by IDD DEMETER machine. After installation of IDD DEMETER machine, farmer has stopped using salmonella vaccine and has been receiving a significant economical benefits by saving the cost approximately USD 5,000 per month. Less stress to the chickens and significant improvement on egg shell quality were observed.



Customer is extremely satisfied with the result

CASE STUDIES - 2

Location LAYER FARM, SOUTH KOREA

Application Cleaning/Washing Egg Shell with 0.25PPM

Benefits Bacteria Free on eggs Significantly reduced bad odor around the work area and farm equipments

Keeps the freshness of egg during the distribution period

Previously customer used heated water (around $40\sim42^{\circ}$ C) to clean the outside of eggs, but after the installation of IDD DEMETER machine, customer now uses the silver ion active water (with cold water) at 0.25PPM. There has been no pathogenic bacteria found on the eggs and the work area and cleaning equipments have significantly reduced bad odor. Improved freshness of eggs was also observed which helps the excellent distribution of premium eggs to the market.



CEO of IDD Group is evaluating the egg shell quality at the egg farm located in Cheonan City of South Korea. Outstanding egg shell condition is observed





STERILIZATION EFFECT TEST OF DEMETER ON DIFFERENT OBJECTS

APPLICATION A)
STERILIZATION EFFECT ON CLEANING EGGS





<Eggs that are not cleaned with IDD DEMETER>
Eggs that are not cleaned with IDD DEMETER has shown bacteria numbers of 395ATP ~ 802ATP







<Eggs that are cleaned with IDD DEMETER 0.5PPM>
Eggs that are cleaned with 0.5PPM IDD DEMETER have shown the significantly low amount of bacteria.
And even after 3 days, there was no proliferation of bacteria.





<Eggs that are cleaned with IDD DEMETER 1.0PPM>
Eggs that are cleaned with 1.0PPM IDD DEMETER have shown the significantly low amount of bacteria.
And even after 3 days, there was no proliferation of bacteria.





APPLICATION B)

STERILIZATION EFFECT ON DIFFERENT OBJECTS "BEFORE AND AFTER"

*After spraying silver ion active water on objects and in about 30 minutes, the amount of bacteria has significantly reduced. And after 2 hours, bacteria has completely disappeared

BACTERIA ON DRILL HAND





Before spraying with IDD DEMETER Bacteria: 1925ATP





Spraying and after 20minutes.
Bacteria: 101ATP

BACTERIA ON APPLE SKINA





Before spraying with IDD DEMETER Bacteria: 5236ATP





Spraying with IDD DEMETER and after 30 minutes.

Bacteria: 290ATP





APPLICATION B) STERILIZATION EFFECT ON DIFFERENT OBJECTS "BEFORE AND AFTER" BACTERIA ON JEANS





Before spraying with IDD DEMETER

Left: 1279ATP Right: 842ATP





Spraying with IDD DEMETER and after 40minutes. Left: 123ATP Right 129ATP

BACTERIA ON TABLE





Before spraying with IDD DEMETER Bacteria: 170ATP





Spraying with IDD DEMETER and after 40 minutes Bacteria: 24ATP







SILVER CARTRIDGE



IDD DEMETER CAN PRODUCE

UP TO 100 TONS OF SILVER ION ACTIVE WATER PER DAY (1~90L/MIN)

CONCENTRATION OF SILVER IONS (PPM) CAN BE CONTROLLED FROM 0.0001 TO 50 PPM

AT 0.25PPM, SILVER CARTRIDGE CAN GENERATE 2,720 TONS OF SILVER ION ACTIVE WATER BEFORE NECESSARY TO REPLACE





IDD DEMETER SPECIFICATIONS

SPECIFICATION OF MACHINE

Product Name IDD Demeter

Size 420(width)x450(height)x 180(Deep) millimeter

Weight 6.4 KG
Material ABS
Power Consumption 120W

Power supply $220V (50\sim60Hz)$ In/out port size $20\emptyset / (15\emptyset)$ Permitted pressure $0.05\sim1.0$ Mpa

Nano-Silver Ion Active Water

Generating Capacity per day 100ton / day (1~90L/min)

Silver Concentration Adjusted on the controller panel

SPECIFICATION OF EXCLUSIVE CARTRIDGE

Size 420 x 180 x 110

Weight 2.9 KG

Replacing time for cartridge
Using 0.25 ppm
Replace after use of 2.720 tons Water
Using 0.5 ppm
Replace after use of 1.360 tons Water
Using 1.0 ppm
Replace after use of 680 tons Water
Using 2.0 ppm
Replace after use of 340 tons Water





NOTES



MY IDD DEALER:



IDD DEMETER
THE FUTURE OF DISINFECTION SOLUTION