

AccuSilverSol™ Silver Nano Colloid

Gives Various Roles from its Silver Magic

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- Anti-bacteria, anti-fungus and deodorization function of Silver Nano
- Printable Conductive Inks of synthesized Silver Nano Sol
- Silver Nano Fluid for Heat Transfer Media
- Printed Silver Nano Antenna for Radio Frequency Identification



Product Descriptions

Silver Nano Colloid is a product with anti-bacterial properties, being effective for sterilizing bacteria, fungi, and viruses. Its nano-colloidal form allows it to easily be added with other materials or coated on a surface. Thanks to its small size (5-15 nm) and large surface area (from its nano-particles), antimicrobial effects can be seen only within few minutes and last very long, even if small amounts are used.

Product Descriptions

Our Silver Nano Colloid can be applied in many different fields. This includes a variety of antimicrobial finishes (for fabrics, paper products, leather, and sponges), antibacterial deodorant treatment (for all kinds of shoes, toys, and daily necessities), antibacterial additives (for various water-based and oil-based paints), cleaning supplies, and building materials. Furthermore, this product can be used in medical fields, such as disinfectants, medical rubber hoses, antibacterial gels, lotions, tablets, and soaps. It can also be added to plastics (PE, PP, PC, PET, ABS, etc.) to exhibit antibacterial function. Poultry (chicken, ducks, geese, etc.) and livestock farms can be disinfected using our Silver Nano Colloid. It can be used to crop too, as a substitute for pesticides. With its antibacterial functions, it is highly effective against Corona 19 virus and can be used for disinfecting homes, factories, hospitals, and schools.

The Features of *AccuSilverSol*[™]

- Uniformed size and high stability during suspension
- Strong antibacterial effect from its smaller size than other commercial silver nanoparticle products
- Safe, non-toxic and environmentally friendly
- Wide range of applications, including disinfection, hygiene, paints, plastics, textiles, pharmacy, and ink (for highly conductive printed circuit boards)

Properties	<i>AccuSilverSol</i> [™]
Silver Concentration (ppm)	10,000
Average Particle Size (nm)	5~15
pH	4.3
Solvent	Water, Organic Stabilizer (food grade)
Dispersed Colloid Color	Tawny

TEM Image

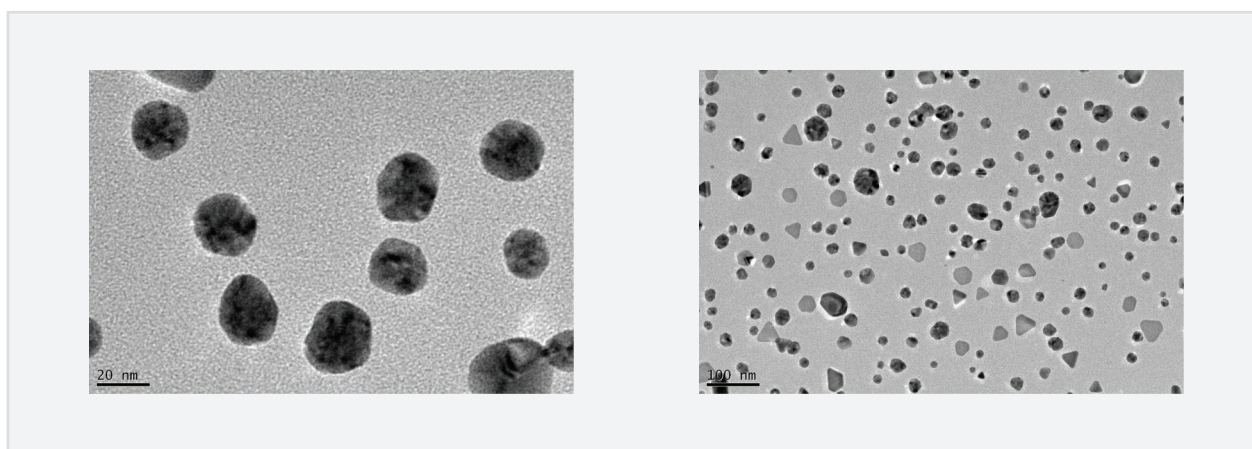


Figure 1. Pictures are TEM images of Silver Nano Particles.

Size distribution diagram

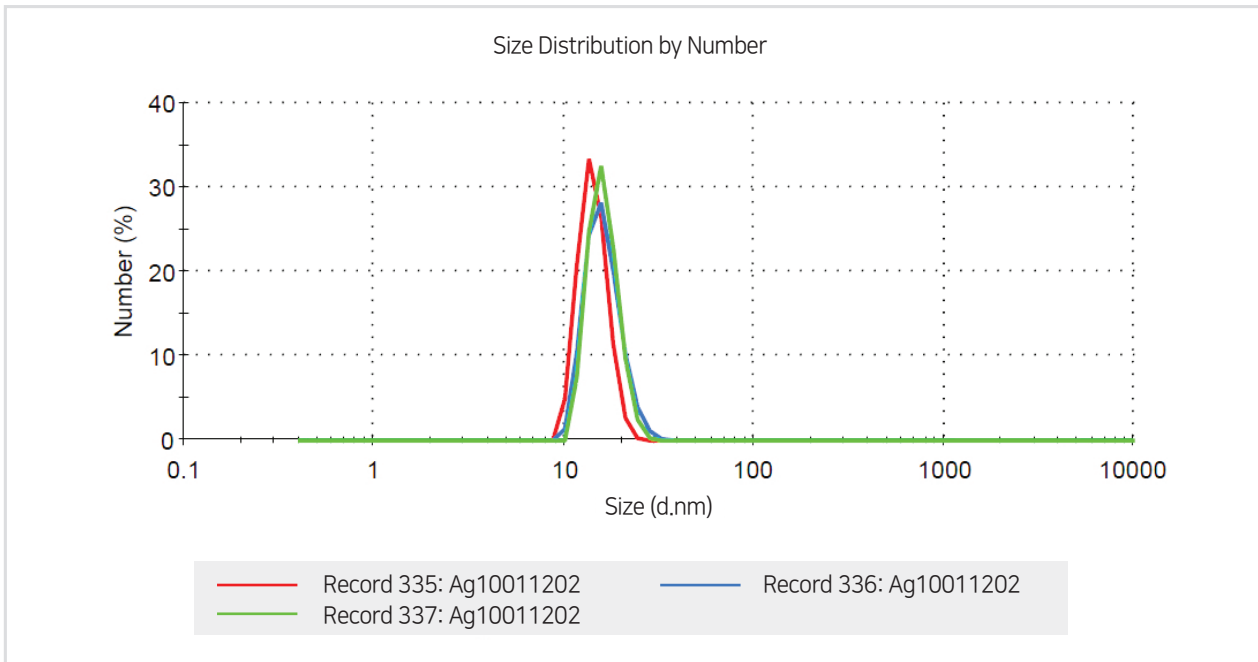
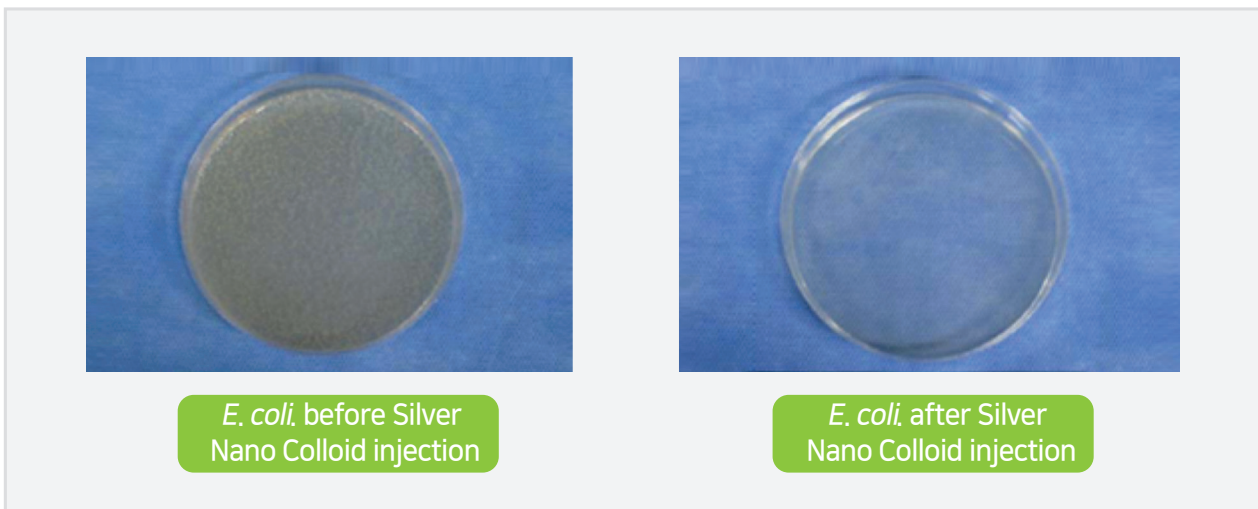


Figure 2. Size distribution diagram of various synthesized Silver Nano Colloid.

Anti-bacteria Test

After injecting our Silver Nano Colloid product, 99.9% of *E.coli* were eliminated within 24 hours



Applications

Field	Product
Plastic Industries	<ul style="list-style-type: none"> Using additives for PE, PP, PC, PET, ABS and other plastics for anti-bacteria Antibacterial toothbrush, PVC pipe, PP and PE food containers, PET water bottles
Textile & leather industries	<ul style="list-style-type: none"> Manufacturing antibacterial products such as weaving textiles or coating leather products Antibacterial socks, underwear, hospital bedding, sports clothing
Paint Industries	<ul style="list-style-type: none"> Mixing or using a coating material to produce antibacterial paints Sanitary walls of hospitals and food production facilities, Antibacterial paint for internal coating of water steel pipes and drinking water tanks
Construction industries	<ul style="list-style-type: none"> Inhibiting mold growth by adding it into a cement White cement for bathroom with excellent antibacterial effect
Pulp & paper industries	<ul style="list-style-type: none"> Adding antimicrobial effects during paper production or by coating on paper Antibacterial wet tissue, egg-box panel, fruit and vegetable storage
Hygiene industries	<ul style="list-style-type: none"> Adding antibacterial effect to products such as deodorants Silver nano deodorant for dogs, Antimicrobial protective film for mobile phones

Legal Statement

"AccuSilverSol™ Silver Nano Colloid technology" is covered under Korea patent 10-0763036 and its corresponding patents.

Ordering Information

Cat.no.	Products Name	Pack size	List Price (\$)
Silver Nano Colloid:			
TM-2020-1	Silver Nano Colloid in water 10,000 ppm, eco	60 ml	US\$ 360
TM-2020-2	Silver Nano Colloid in water 10,000 ppm, eco	400 ml	US\$ 450
TM-2020-3	Silver Nano Colloid in water 10,000 ppm, eco	800 ml	US\$ 585

*Please inquiry for bulk orders.

Contact Us

Bioneer Corporation

8-11 Munpyeongseo-ro, Daedeok-gu
Daejeon, 34302, Republic of Korea
Tel: +82-42-930-8777 (Korea: 1588-9788)
Fax: +82-42-930-8688
E-mail: sales@bioneer.com

Bioneer Inc.

155 Filbert St. Suite 216
Oakland, CA 94607, USA
Toll Free: +1-877-264-4300
Fax: +1-510-865-0350
E-mail: order.usa@bioneer.us.com

Bioneer R&D Center

Korea Bio Park BLDG #B-702
700 Daewangpangyo-ro, Bundang-gu, Seongnam-si
Gyeonggi-do, 13488, Republic of Korea
Tel: +82-31-628-0500
Fax: +82-31-628-0555