



Uplus,  
Life Plus!

Ag<sup>+</sup>  
**NANO<sup>U</sup><sup>+</sup>**

# Nano-silver Antibacterial Film/Sticker

Energy-saving  
building materials

Application of  
Nano Technology

Application of  
Consumer Goods





Trolley/ Shopping  
cart handle



Door handle

## Nano-silver Antibacterial Sticker

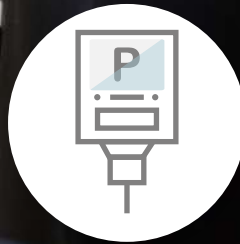
NanoU+ Antibacterial Sticker can be made into transparent and non-transparent materials.

It can be used on various surfaces not limited to flat shapes but also curved surfaces that are not easy to stick, including public areas such as cart handles, door handles, handrails, elevator buttons, etc.

| Nano-silver Antibacterial Sticker | UNCS Transparent | UNCS Non-transparent |
|-----------------------------------|------------------|----------------------|
| VLT %                             | 86               | -                    |
| Thickness $\mu\text{m}$           | 12               | 100                  |
| Adhesion                          | No residue       | No residue           |



Self check-in  
Kiosk in the airport



Parking lot  
Payment systems

## Nano-silver Antibacterial Film

The nano silver antibacterial technology is applied on the no residue and good bubble discharge substrate, so that the film can be used on touch screen products, such as: ATM touch screen, kiosks and other touch panels, achieving the best antibacterial performance in your daily life.

| Nano-silver Antibacterial Film | UNTF                                       |
|--------------------------------|--|
| Transmittance %                | 90   |
| Thickness $\mu\text{m}$        | 150  |
| Adhesion                       | No residue<br>(With good bubble discharge) |
| Hardness                       | 2H   |

90%

VLT



## Comparison of various sterilization

Compared to the hypochlorous acid and alcohol, nanosilver ions is mild, non-irritating, and it does not have poisonous side effects.

|  | Principle   | Performance   | Risk  |
|--|---|---|---|
|  | Silver ions pierce through the external surfaces of the cells and damage their DNA, as well as the protein structure, halting their metabolism and reproduction until they die. | Effective and continuous  | Silver ions are trace elements in the human body. Using it for sterilization is very safe.                              |
|  | Alcohol kills bacteria through a process known as denaturation.   | Changes in temperature will cause a reduction in sterilization capacity, and the effect will not last after volatilization. | May cause skin allergic reactions.  |
|  | Oxidation breaks down pathogens.  | Strong performance, but the effect will be gradually decreases with oxidation.  | Oxidation in a weakly acidic environment will release chlorine gas while redox in hypochlorite gives hydrochloric acid. |

### Get protection without limits

You no longer need to worry about the spread of germs through contact which can endanger your health and your loved one's too. Choose the most effective and safest method, that works on both flat and curved surfaces, and provide the best protection for everyone.



Test result from ETC ( Electronics testing center, Taiwan)  
99.99% reduction of E.coli in 24 hours  
The best shortcut to complete self-cleaning in public areas



01

Self-Cleaning  
Gentle and  
not irritating

02

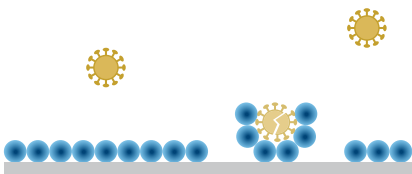
Easy to clean  
Anti-fouling

03

Convenience  
Easy to use

04

Long-lasting  
Physical  
antimicrobial method



 Virus     Ag<sup>+</sup>

Research indicates that nano silver has an tremendous effect on the elimination of germs and bacteria, and can be successfully sterilized in a very short time. The antibacterial principle is to use Nano-silver turn into Silver ions [Ag<sup>+</sup>] through moisture. Ag<sup>+</sup> attack the negatively-charged cell membrane, nucleic acids, and enzymes of the bacteria, disintegrating the bacterial and killing the bacterium.

# Uplus Life plus.



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