

ScreenShield

Anti-Viral & Anti-Bacterial Screen Protectors

Product Introduction



www.screenshieldgroup.com
contact@screenshieldgroup.com

Introducing ScreenShield

Founded in 2010, ScreenShield is a leading supplier of screen protective solutions. We've made it easy for businesses, schools, institutions and consumers to get the most from their investments by protecting their devices, with the added benefit of proven anti-viral and anti-bacterial properties.

Service

As a truly independent company, we're completely dedicated to supplying our valued customers with quality protective products at competitive prices alongside unbeatable service.

Quality

All of our screen protectors are designed and manufactured in-house using the highest quality materials with a range of finishes and features. All screen protectors are rigorously tested before being offered to market. Our testing process includes thorough quality inspection, field-testing, damage and durability testing. Our Anti-Viral and Anti-Bacterial protectors are thoroughly tested to international ISO standards by the material manufacturer.

All our products are designed and manufactured to cut tolerances of $\pm 100\mu\text{m}$. Designed from OEM device blueprints or custom-designed by our in-house team with approval sample runs available.

Aftercare

From day one we've been about making it easy for our customers to get the most out of their I.T. investments. Our business customers find it easy to build their own catalogue of ScreenShield products, and simply self-re-order using our online portal or by contacting our sales team - whether those screen protectors be for widely available smartphones or custom designed solutions, unique to their business needs.

Customers

Ten years in the business of supplying screen protective solutions means we've worked with customers large and small right across the globe. No order is too large or too small.

- Device Manufacturers choose us for our exceptional attention to detail.
- Business Customers choose us for our industry-leading range of products and modest pricing.
- Retail customers choose us for our customer-centric buying process and pricing.

“Over the past few years, ScreenShield have been able to assist us with several large orders of Screen Protectors cut to the specific size we required. Having the equipment to custom cut locally means they have always been able to fulfill orders quickly, with competitive rates.”

Andrew Conway - NZ Post

Clear Diamond™ Screen Protectors

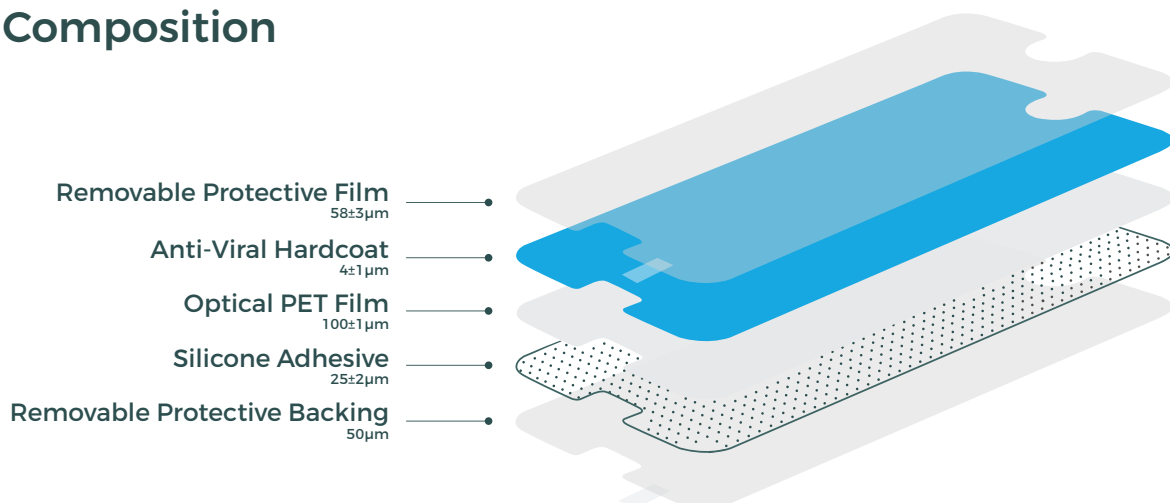
ScreenShield is proud to be the exclusive distributor and authorised converter of Clear Diamond™ Anti-viral and Anti-Bacterial Screen Protectors. Based in the UK, Clear Diamond™ is synonymous with enhanced screen protective solutions. Clear Diamond's Anti-Bacterial and Anti-Viral Screen Protectors protect some of the largest brands across the UK and Europe. We're thrilled to be selected to bring this brand to the APAC market.

Anti-Viral/Anti-Bacterial Screen Protectors

The ongoing COVID-19 pandemic has shone new light on the potential of active Anti-Viral screen protectors. It's well documented that touch screens can harbour and facilitate the transmission of viruses and bacteria. The Clear Diamond™ Anti-Viral range is scientifically proven to neutralise 99+% of viral and bacterial activity on the film surface within 30 and 10 minutes respectively, while providing all the benefits of a usual screen protector.

- High-level physical protection (damage, scuffs, scratches).
- Anti-fingerprint oleophobic coated.
- ISO21702 Anti-viral Certification.
- FDA Certification, CE Mark.
- Neutralises 99+% of Viruses (inc. SARS, MERS, Covid-19) in <30min.
- Neutralises 99+% of Bacteria in <10min.
- Premium IT Grade Silicone Adhesive.
- Optical Grade PET base film.
- Anti-viral efficacy: 1 year.
- Can be cleaned with commercial cleaning agents.
- Converted by ScreenShield to any size, for any device.

Film Composition



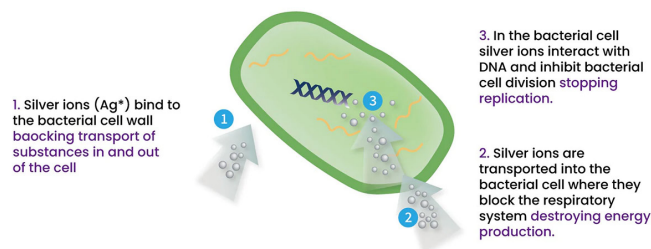
How it works

Clear Diamond™ Anti-Viral films are the only screen protectors to have achieved the world’s top three certifications including ISO 21702, the CE Mark in Europe, and FDA approval in the U.S.

Clear Diamond™ Anti-Viral films are scientifically proven to be the most effective within the industry. Clear Diamond™ Anti-Viral films neutralise 99.24% of viruses including the Coronavirus within 30 minutes and kills 99+% of bacteria within 10 minutes. Silver-ion-mediated reactive oxygen species (ROS) generation, in the hardcoat, promotes virucidal & bactericidal activity.

Effects of silver ions on Bacteria

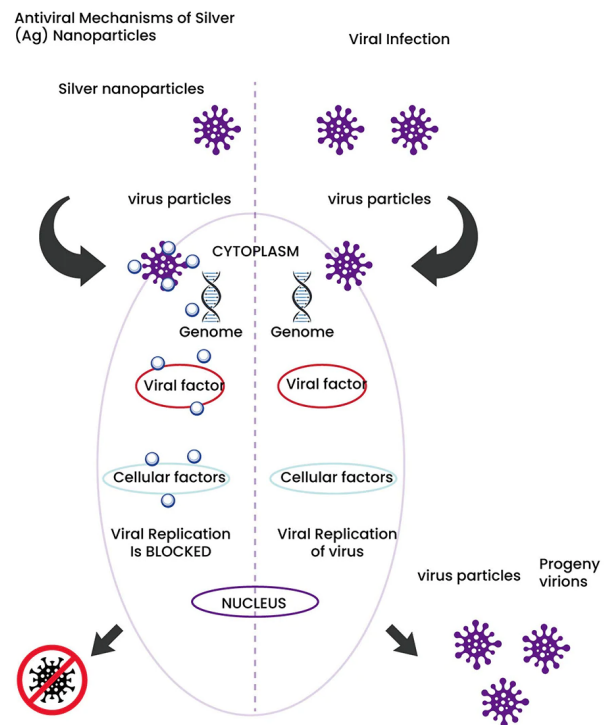
1. Silver ions are incorporated into the bacterial cell membranes and bind to membrane proteins responsible for transport of substances in and out of the bacterial cells.
2. Silver ions are also transported into the cells and will block cell division by binding to the DNA, in turn preventing bacteria multiplication.
3. Silver ions block the bacterial respiratory system and thereby destroy the energy production of the cell. Ultimately, the bacterial cell membrane will burst, and the bacteria is destroyed.



Effects of silver ions on Viruses

There are two ways the AgNP (Silver Nano Particles) interacts with the pathogenic virus:

1. The AgNP will bind to the outer coat of the virus thus inhibiting the attachment of viruses towards cell receptors and;
2. The AgNP will bind to the DNA or the RNA of the virus thus inhibiting the replication or propagation of the virus inside the host cells. The below illustrates the antiviral properties of AgNPs towards different types of pathogenic viruses.



View the full paper “[Antimicrobial Effects of Biogenic Nanoparticles](#)” to learn more. (External Link)



Technical Specifications

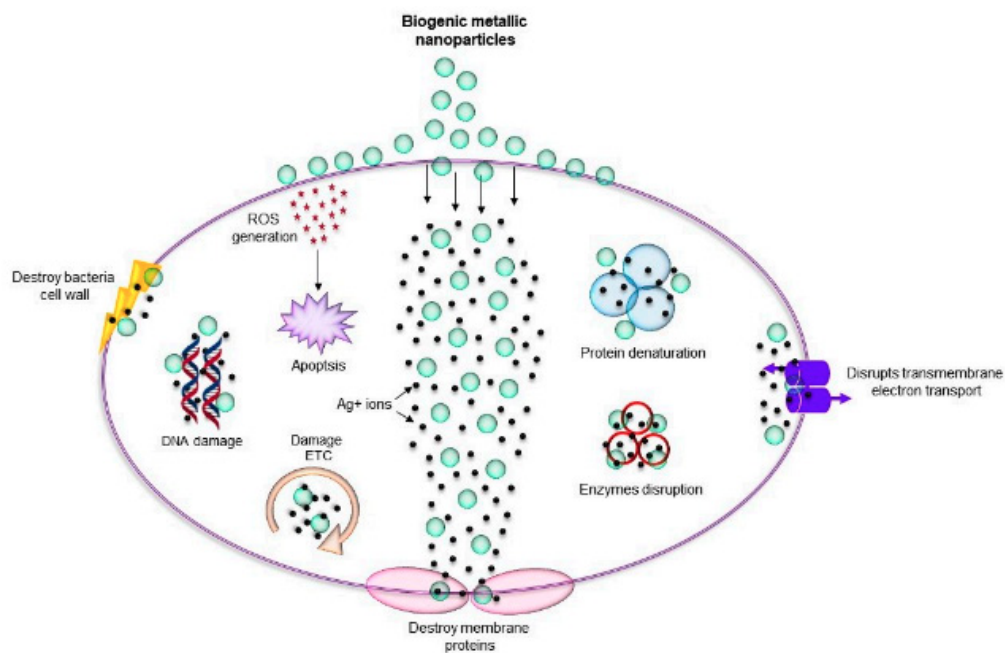
Multi-layer Material Properties:

1. Surface Protection release liner ($58\pm 3\mu\text{m}$)
2. Anti-Viral & hard coating ($4\pm 1\mu\text{m}$)
3. Clear Optical Grade PET (Polyethylene terephthalate) ($100\pm 1\mu\text{m}$)
4. IT Grade Silicone Adhesive ($25\pm 2\mu\text{m}$)
5. Rear Protection release liner ($50\mu\text{m}$)

Anti-microbial properties

IONIC Reaction

Silver-ion-mediated reactive oxygen species (ROS) generation reduces virucidal & bactericidal activity

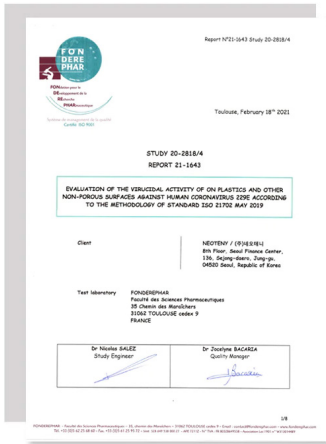


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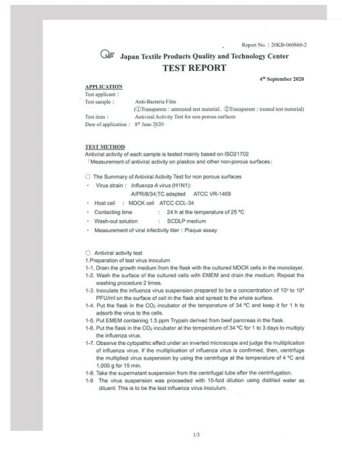
ScreenShield's conversion process

ScreenShield converts the raw material for the desired end-use. We use CNC cutting equipment with production tolerances of less than $100\mu\text{m}$. All finished products are quality tested and shipped with application kits and step-by-step application instructions - in hard copy and interactive. The conversion process does not alter the chemical makeup and efficacy of the product.

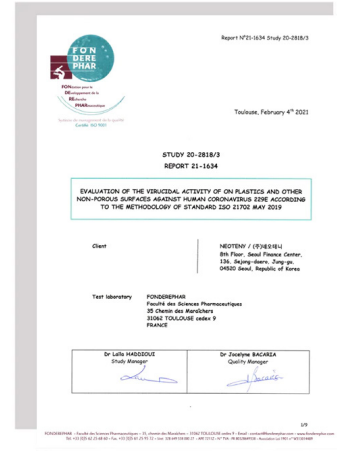
Anti-Viral Certification - ISO 21702



Lab Name: France – Fonderephar.
 Test Standard: ISO21702:2019
 (Measurement of Antiviral Activity on Plastics).
 Tested Virus: Human Coronavirus 229E.
 Virus Eradication Rate: 99.9% in 30min, 1 hour
 and 24 hours.



Lab Name: Japan Textile Products Quality and
 Technology Center.
 Test Standard: ISO21702:2019
 (Measurement of Antiviral Activity on Plastics).
 Tested Virus: Influenza A virus (H1N1)
 Virus Eradication Rate: 99.9% in 24 hours.



Lab Name: France – Fonderephar.
 Test Standard: ISO21702:2019
 (Measurement of Antiviral Activity on Plastics).
 Tested Virus: Human Coronavirus 229E.
 Virus Eradication Rate: 99.9% in 30min, 1 hour
 and 24 hours.

ACCREDITATION Certification of the ISO21702 Lab

This certifies the lab that tested against ISO21702 for Human Coronavirus is accredited by the French Government and global organisations. Globally, there are more than 10,000 labs, but less than 5% have accreditation to certify the reliability of test results.



For more information on certifications, please contact ScreenShield.

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