



# Combating the Spread of Covid-19 with Legionella-X Viral Shield Self-Disinfecting Coating for all Inanimate Surfaces

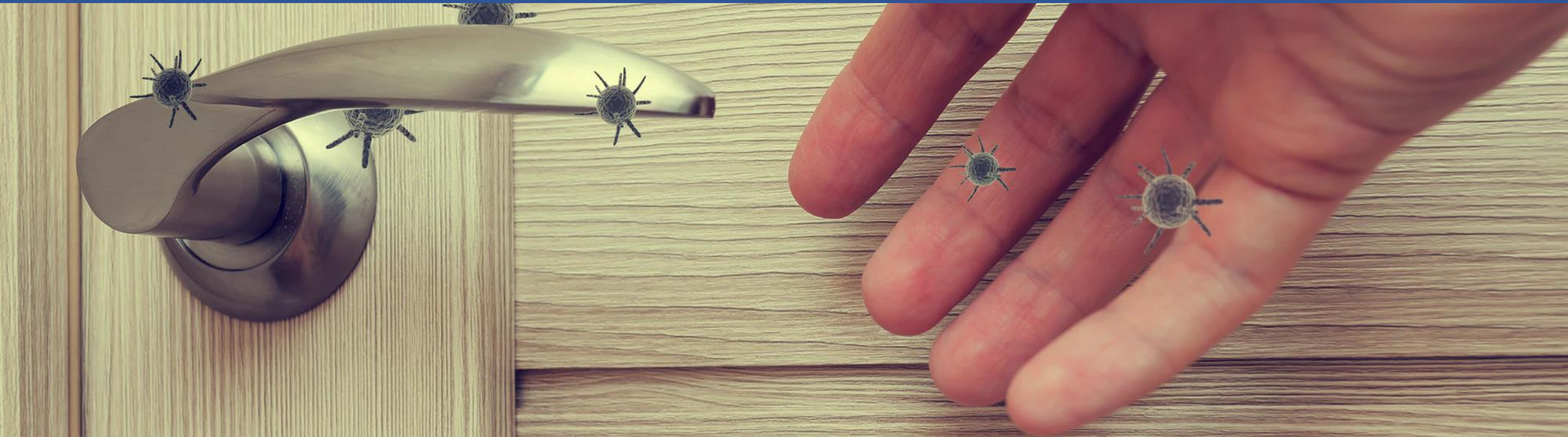
- AS global lockdowns start to ease, mass rapid transport trains, buses,
- Schools, restaurants, offices, etc. are becoming an even greater focus of anxiety, with large numbers of people considering when and how to resume to travel or work.
- Large crowds could pose a greater risks of infection to commuters and workers .
- In view of the above Magna and its Think Tank Group have developed a self-disinfecting coating to minimize the risks of infection.
- Viral Shield provides up to 60 days of residual inactivation efficacy on all inanimate surfaces.



The coronavirus that causes COVID-19 mainly spreads from person to person. When someone who is infected coughs or sneezes, they send droplets containing the virus into the air.

A healthy person can then breathe in those droplets.

We may also catch the virus if we touch a surface or object that has the virus on it and then touch our mouth, nose, or eyes.



- The coronavirus can live for hours to days on surfaces like countertops and doorknobs. How long it survives depends on the material the surface is made from.
- Hence, to prevent any infections via touching the contaminated surfaces, it is only prudent for us to disinfect all surfaces as frequent as possible.



However, in practice it may not be as convenient or even not possible where the human traffic is extremely heavy.

In view of the said issue, Legionella-X Viral Shield was specially developed to solve the said issue.



## What is Legionella-X Viral Shield Self-Disinfecting Coating

Legionella-X Viral Shield fortified with Silver and Copper Nanoparticles is a potent water-based disinfectant coating specially developed to provide lingering disinfecting effect on all inanimate surfaces.

- It provides up to 60 days disinfecting efficacy on all coated surfaces and is most ideal to be used on sheltered public places and public transports such as MRT Trains, Taxis, Buses, etc.
- It has a killing efficacy of up to 99.9998% to 99.99994% against positive-gram, negative-gram bacteria and enveloped viruses.



## What are its Benefits

- Passed JIS Z 2801:2010 /A 1:2012 Test.
- Disinfecting Efficacy up to 99.99994%
- Effectively kills positive-gram, negative-gram bacteria, and enveloped viruses
- Provides up to 60 days of disinfecting efficacy for all inanimate surfaces after coated with Viral Shield
- Non-Flammable
- Water-based facilitates indoor usage
- Pleasant lingering fragrance

## What are its Benefits

### Well Tested by World's Renowned Institutions

- Tested effective against enveloped viruses, positive-gram and negative-gram bacteria by world's renowned institutions; Societe Generale de Surveillance (SGS), Singapore General Hospital (SGH), TUV SUD PSB and Institut Pertanian Bogor (IPN)
- Passed the following tests:
- Modified Capacity Kelsey Sykes Test Option for Hospital Grade Disinfectant.
- Japan Industrial Standard (JIS) L 1902:2015 Determination of Antibacterial Activity of Textile Products.
- Japan Industrial Standard (JIS) Z 2801:2010/A1 2012 Test for Antibacterial Activity and Efficacy.
- British Standard European Norm (BSEN) 1040:2015 Test for Chemical Disinfectants and Antiseptics.
- British Standard European Norm (BSEN) 1040: 1997 Test for Chemical Disinfectants and Antiseptics Against Legionella pneumophila bacteria.
- SGS inhouse Inactivation Efficacy Test for one-minute contact time against Staphylococcus aureus and Escherichia coli.
- IPN Test Against Enveloped Virus H5N1

## What are its Benefits

### High Inactivation Efficacy Against Enveloped Viruses, Positive-Gram and Negative-Gram Bacteria

- Inactivates 100% against H5N1 (enveloped virus)
- Inactivates 99.99992% Legionella pneumophila bacteria.
- Inactivates 99.9992% of Proteus Vulgaris, Pseudomonas Aeruginosa, Streptococcus, Escherichia coli
- Inactivates 99.99994% of Staphylococcus aureus within 5 minutes
- Inactivates 99.99984% of Klebsiella pneumonia.

## What are its Benefits

### Multiple Inactivation Mechanisms Used Against Viruses and Bacteria.

- Denaturation Inactivation
- Reactive Oxygen Specimen (ROS) Inactivation
- Ozone Inactivation
- Photocatalytic Inactivation
- Molecular Inactivation

## Products Featured in ResearchGate, Academia.edu and International Journal of Current Trends in Engineering, Technology (IJCTET) and International Journal of Scientific Research Publications.



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- 1) Chemical Composition of a High Efficacy Disinfectant against Avian Influenza H5N1 Virus and Test Method Used to Ascertain it Killing Efficacy.
- 2) Research Paper on Low Mammalian Toxicity Insecticide and Disinfectant Using a Range of Synergistic Environmentally Friendly Chemicals.
- 3) Establishing the Efficaciousness of Legionella-X-Viral Scrub Against Pseudomonas Aeruginosa, Escherichia Coli
- 4) Ascertaining the 24 Hours Residual Inactivation Efficacy of the Chemical Composition of Legionella-X Viral Off (Fortified with Silver Nanoparticles) Against Bacteria and Enveloped Viruses (Coronavirus, SARS, MERS and Influenza) After Impregnation of Surgical Masks Using JIS L 1902:2015 Test Method Ascertaining the 24 Hours
- 5) Test Method, Staphylococcus Aureus and Proteus Vulgaris Bacteria Using Modified Kelsey Sykes Test Option.

## Conclusion

Major Customers of Legionella-X Products include:

TEMASEK



COMFORTDELGRO



SINGAPORE  
POLICE FORCE

Sport  
SINGAPORE

# Thank you

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