



### **HygieniaTouch**

A revolutionary approach to surface hygiene and safety using an advanced, ecological microbiota technology.

HygieniaTouch is a safe and effective hygiene methodology engineered to protect against bacterial and viral spread and is ideal for use in high footfall locations such as offices, hotels, restaurants, shops, leisure and sport facilities seeking to protect surfaces from COVID-19 contagion risk.

Our specially formulated HygieniaTouch coating provides a physical and mechanical action to prevent water droplets and related particles adhering to surfaces such as door handles and other touch-points, eliminating the risk of pathogenic cross-infection.

### **How does HygieniaTouch work?**

Over the last decade, developments in nanobioscience, nano-instrumentation and live imaging optical microscopy have shown how single cell bacteria and viruses behave and develop. Bacteria are shown to communicate in communities and deploy numerous and complex forces at the nano and subatomic level to sense, manipulate, deposit and anchor to surfaces. Water, water-droplets and aerosols (miniscule water vapour molecules) help transport and support bacterial-viral ecosystems.

Surface hydrophobicity (i.e. repellent capability) is the dominant factor determining the attachment force of water droplets hosting bacterial and viral colonies and this can be impacted by surfactants designed to repel bacteria and viruses, dramatically reducing risk of cross-infection and bacterial colonisation.

The ability to repel water and water vapour from surface touch-points is a major starting point in building a COVID-19 protective health and safety strategy.

HygieniaTouch works by applying a thin-film microbiota barrier to surfaces which makes bacterial adhesion or viral attachment exceedingly difficult or impossible. This is critical for a bacterial cell to divide. For a cell to grow, it must divide and expand. If you completely block the bacterial wall from forming an appropriate life supporting surface, it cannot expand or grow and will die naturally.



Prevention is better than cure. We prevent step one, we prevent increase in cell numbers

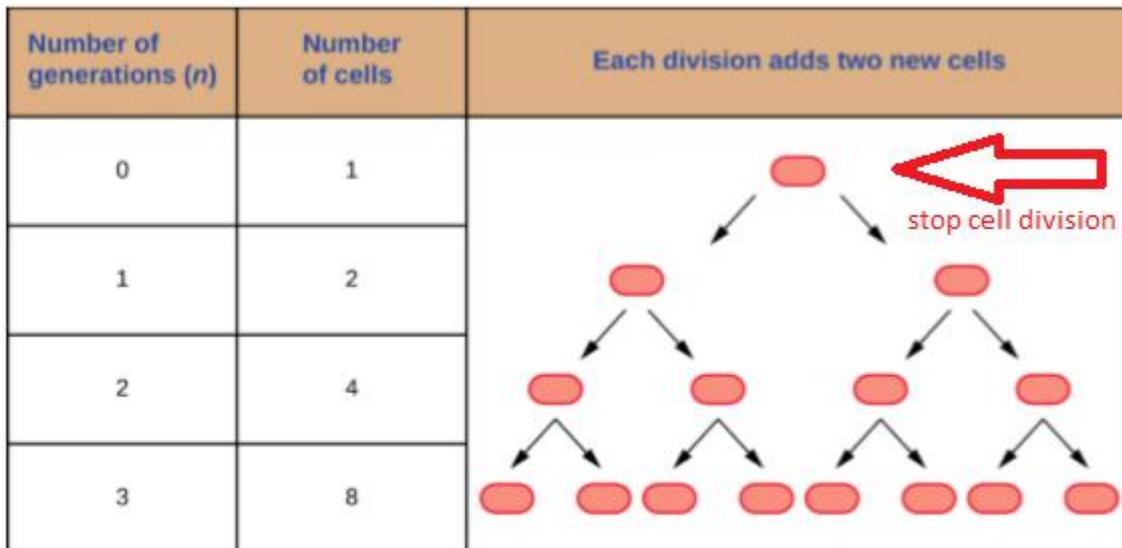


Figure 1. This image displays the binary fission process

Appl. Sci. 2019, 9, 2801; doi:10.3390/app9142801 www.mdpi.com/journal/applsci

Abrasion testing has shown that HygieniaTouch can remain effective for six months and longer, even in high wear environments such as touchscreens.

### Antimicrobial Action

HygieniaTouch reduces health and environmental risk associated with traditional disinfectant usage and bacterial immunity which pose increasing challenges in healthcare and society.

Biocides can have toxic, carcinogenic, or endocrine disrupting properties affecting skin, eyes, respiratory system, nervous system, and other organs.

HygieniaTouch can be used safely in all environments, including those where there may be vulnerable persons.

### Contact:

Dermott Reilly  
[dermott.reilly@nanolandglobal.com](mailto:dermott.reilly@nanolandglobal.com)  
+44 (0)2032879234  
[www.nanolandglobal.com](http://www.nanolandglobal.com)