

With the recent pandemic and an increase in virus/bacteria numbers, hygiene has become increasingly important like never before. As a result, we have observed the development of antimicrobial protection that revolutionizes hygiene, allowing us to fight microbes.

The Toppan Gravity Activated card is one of the first antiviral and antibacterial smart cards available on the market. These one of a kind self-decontaminating cards are activated by Pylote's antimicrobial mineral technology.

Thanks to the unique permanent and non-release antiviral and antibacterial mineral agent embedded into the card surface, users are protected from bacteria and viruses* that could contaminate the cards' surface.



ACTIVATED CARD BENEFITS

EFFICIENT TECHNOLOGY SAFE TECHNOLOGY ■ Kills >99% of human No mineral microspheres coronavirus (ISO21702) ■ Kills >99.999% of No nanoscale particles bacteria (JIS Z 2801) No metal No skin irritation Non-cytotoxic Certified for food contact pulote SUSTAINABLE **ROBUSTNESS** Effective for the entire life Green chemistry process of the card One step manufacturing Maintains efficiency even Water and thermal heat based process after abrasion ■ Kills >99.999% of bacteria High purity mineral before and after 500 composition abrasion cycles





OUR INNOVATIVE ANTIMICROBIAL TECHNOLOGY

440



Utmost Effectiveness

- Kills >99% of a large spectrum (viruses, bacteria, resistant bacteria, yeast,...etc.)
- Qualified in real-life conditions
- Certified to the highest standards (ISO 22196, ISO 20743, ISO 21702, ISO 18184)



Robustness

- Long lasting efficiency over time & uses
- 4-year antimicrobial activity effectiveness, even after mechanical & chemical sollicitations



No Side Effects

- Mineral
- Cleantech
- No release, nano-free, metal-free
- Food contact EU, noncytotoxic & non-irritant (ISO 10993)























HOW DOES PYLOTE'S TECHNOLOGY WORK?

The innovative technology used for the Activated card is based on a patented antimicrobial mineral technology. It is composed of mineral oxide microspheres developed as the result of 10 years of research.

The solution is loaded on both sides of the card, protecting the user from contamination and preventing viruses & bacteria from spreading.



















