

ANTIMICROBIAL SURFACE PROTECTION

Self adhesive virudical and bactericidal film

COALA COVERS SAFE™ is a self-adhesive film with outstanding anti-microbial properties. It can be easily applied to all types of surfaces, such as tables and door handles. Effective against viruses (including coronaviruses), bacteria, yeasts and molds, COALA COVERS SAFE™ strongly limits the spread of viruses and bacteria and protects humans.

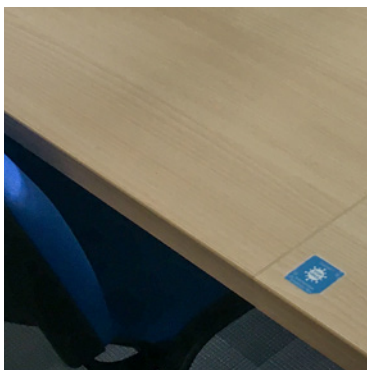
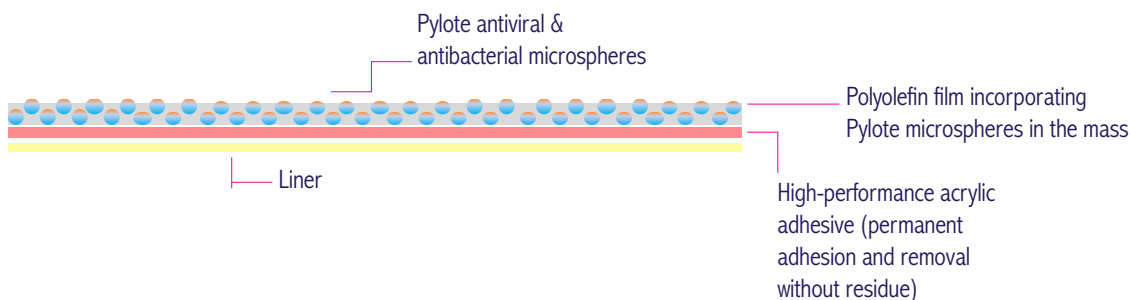
The COALA COVERS SAFE™ antimicrobial film is developed and manufactured by GERGONNE INDUSTRIE. It incorporates the natural and revolutionary technology of the PYLOTE company.



STRUCTURE

Technical features and structure of the COALA COVERS SAFE™ film:

- Total thickness (excluding liner): 0,14mm



BENEFITS

Piece of mind for employees and customers.

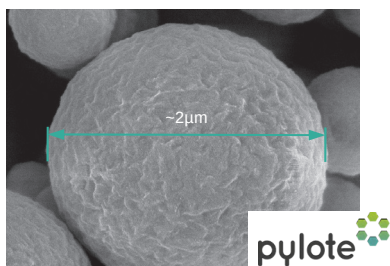
The COALA COVERS SAFE™ adhesive film has major advantages:

- A continuous triple protection (24 hours a day): viruses (including coronavirus); bacteria; yeast and molds a rapid action (example on coronavirus 229E : **90% in 1h ; >99,9% in 24h**)
- A permanent and stable action over time (technology validated for 4 years of continuous use, without loss of efficiency)
- A natural and biocompatible technology: safe for the skin
- Discreet once applied (thin, transparent and matt)
- Easy installation and removal without residue
- Can be cleaned with common cleaning products (soap, bleach, disinfectant) without degradation of the antimicrobial activity.

ANTIMICROBIAL EFFICIENCY OF COALA COVERS SAFE™

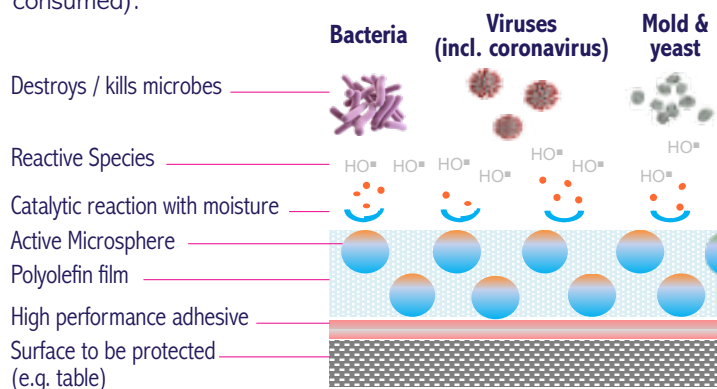
PULVERIZED PYROLYSIS - PATENTED TECHNOLOGY

- 100% antimicrobial mineral microspheres are incorporated into the polyolefin film.
- The mineral microspheres are manufactured by Pulverized Pyrolysis, a patented and exclusive process (PYLOTE technology).
- The pulverized pyrolysis manufacturing technology makes it possible to get mineral microspheres with remarkable antimicrobial properties.



ANTIMICROBIAL ACTIVITY

- The microspheres create by catalysis with air humidity Reactive Species
- Reactive Species destroy microorganisms (by oxydation)
- The same type of mechanism (Reactive Species) is found in the metabolism of human cells
- The start of antimicrobial activity is immediate and the action of the microspheres is unlimited (they are not consumed).



SAFE ALL AROUND

- Not cytotoxic (not harmful to humans) – ISO 10993-5 compliant
- Environmentally safe – EcoCert Certified
- Food safe: FDA GRAS certified
- Listed in EU, US and Japanese Pharmacopoeias
- Compared to metallic substances, absence of: potential toxicity to humans, nanometric size, loss of efficiency over time



PROVEN ANTIMICROBIAL EFFICIENCY

Bacteria type	24-hr efficiency
Escherichia coli	5.75 logs (> 99.999%)
Staphylococcus aureus	3.01 logs (> 99.9%)
Salmonella enterica	5.84 logs (> 99.999%)
Pseudomonas aeruginosa	4.07 logs (> 99.99%)

Virus type	24-hr efficiency
Influenza virus A / Flu (H1N1)	2.60 logs (> 99%)
Human Rotavirus (Gastroenteritis)	2.26 logs (> 99%)
Herpes virus type 1 (HSV-1)	2.20 logs (> 99%)
Adenovirus Type 3 (Conjunctivitis)	2.40 logs (> 99%)
Coronavirus 229E	3.28 logs (> 99.9%)

NOTES:

- All tests were conducted in an accredited laboratory
- Test method according to JIS Z 2801 (Test for Antimicrobial Activity of Plastics) and ISO 21702 (Measurement of antiviral activity on plastics and other non-porous surfaces)

RESISTANCE TO CLEANING AGENTS

Resistance to common active ingredients used in cleaning products

Type of cleaning product	Log reduction	% Reduction in microbial population
None (control)	5.86 logs	> 99.999%
Isopropyl alcohol	5.86 logs	
Surfanios Premium (hospital disinfectant)	5.86 logs	
Cleaning agent with bleach	5.86 logs	

NOTES: Each sample was exposed to the disinfectant 100 times, and then antimicrobial activity was tested according to JIS Z 2801.

RESISTANCE TO AGING

Efficiency of antimicrobial activity after aging

Type of cleaning product	Log reduction	% Reduction in microbial population
No aging, Ambient conditions (Control)	> 6.3 logs	> 99.999%
6 months, 40 °C / 75% RH	> 6.1 logs	
50 months, Ambient conditions	> 6.1 logs	

NOTES: Antimicrobial activity has been tested before and after aging according to JIS Z 2801.

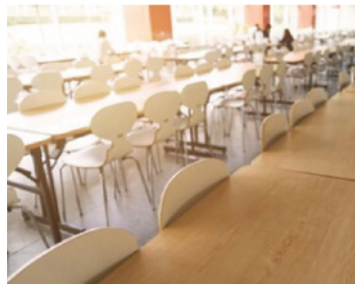
APPLICATIONS

- The COALA COVERSAFE™ adhesive film is intended for all sectors: retail stores, companies, nurseries, schools, administration, hospitals, retirement homes, clean rooms for the medical industry and others.
- It can be applied, among others, on tables (meeting, catering, offices), counters/cash counters, door handles, switches, banisters, handrails automatic terminals and payment terminals.
- We all have the same objective: make the environment around us safer against risks of microbial contamination.
- Thanks to COALA COVERSAFE™, it is now possible to drastically reduce the tactile transmission of viruses and bacteria in public areas.

EXAMPLES



Meeting rooms



Break rooms and dining halls



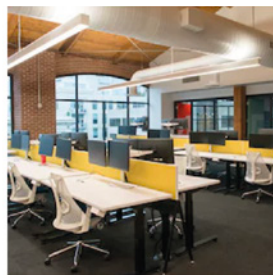
Door handles, switches etc.



Restaurants



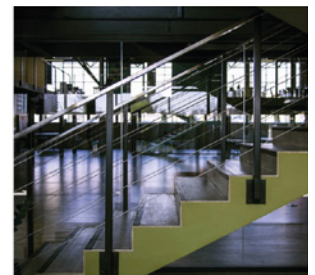
Bars



Open and shared office space



Automatic dispensers (drinks, money...) and coffee machines



Stair railings



Handrails and handles in public transport (subway, bus, train etc.)



Handrails and handles in hospitals and retirement homes



Industrial cleanrooms



Handrails and handles in shopping malls