

ALTO 405 ACTIVATED

Frequently asked questions

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What is the Pylote technology?

Pylote's natural antimicrobial protection technology works like a protective shield to significantly and durably reduce surface contamination. This technology is effective against bacteria, resistant bacteria (capable of resisting antibiotics or biocides designed to kill or control them) and viruses.

2

How is the Pylote technology produced?

Pylote technology is produced using an exclusive "cleantech" process that generates no waste. Entirely mineral-based, this technology contains no metals and no nanoparticles. It comes in the form of additives to be added during the manufacturing process of materials and objects.

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How is the Pylote technology embedded in the glove?

During the manufacturing process of MAPA's Alto 405 Activated glove, the technology is added to the glove's material, without changing its production process as well as its intrinsic properties and performances. In fact, the technology is so efficient that only a very small quantity needs to be added to the glove's latex mix (thus preserving its initial color).

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How is the Pylote technology activating the glove?

Antimicrobial action is triggered by contact with the surface of products and equipment. It is the result of a catalytic reaction between moisture/air and the glove surface containing the microspheres, generating reactive agents that kill germs. When micro-organisms come into contact with surfaces activated by the Pylote technology, a catalytic self-decontamination reaction takes place.

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How to prove the efficiency of the glove's antimicrobial action?

The Alto 405 Activated glove has a rapid, stable and permanent action. Tested in real-life conditions on viruses and bacteria, this glove ensures the destruction of 99% of viruses and 99.99% of bacteria in 24h. These results are based on ISO 21702:2019 and JIS Z 2801 standards. The first test measures viral activity on plastics and other non-porous surfaces. The second one measures the ability of plastics, metals, ceramics and other antimicrobial surfaces to inhibit or kill the growth of micro-organisms.

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How long the effects of the Pylote technology last inside the glove?

The antimicrobial property of the Alto 405 Activated glove remains unchanged throughout its lifetime.

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What is the difference between the Pylote Technology and silver chloride?

Both options have antimicrobial properties. The selection of an antimicrobial function must follow the 3 well-established criteria:

1. Effectiveness on a large spectrum of micro-organisms,
2. Robustness over time and use,
3. Safety.

Regarding these criteria, the Pylote technology is the world-first to check all the boxes. This technology has no negative impact on human health or the environment, preserving the integrity of ecosystems.

Why did you embed the Pylote Technology to the Alto 405 glove?

The Alto 405 glove is manufactured by Mapa Professional and not outsourced, which means we can incorporate the Pylote technology while retaining our own level of expertise. Moreover, this latex glove is used in numerous industries, generally for cleaning tasks in industrial environments, and can often come into contact with bacteria or viruses. That's why this glove also protects users against viruses, in compliance with EN 374-5 standard. The Pylote technology completes this protection, limiting the risk of cross-contamination from one surface to another. Mapa Professional is carrying out industrial tests to study the feasibility of integrating this technology into other Mapa gloves.

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In which type of industries can the Alto 405 Activated be used?

The Alto 405 Activated is the perfect glove for any cleaning activity. Here are a few applications :

- Public authorities (Cleaning) : Handling household detergents or aggressive chemicals, Routine cleaning tasks in public areas ;
- Healthcare : Common cleaning tasks in healthcare facilities ;
- HORECA.

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What is the difference between Pylote Technology and the use of disinfectant?

The Pylote technology has a longer-lasting effect than a basic disinfectant. What's more, without the Pylote technology, the disinfectant will destroy germs on treated surfaces, but the glove that comes into contact with the surface may be contaminated. With the Alto 405 Activated glove, the risk of contamination transfer is reduced for the duration of the process. When viruses or bacteria come into contact with the glove, they are killed thus not spread to the surface.

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Is there any substance that compromise the Pylote technology's efficiency?

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The Pylote technology has been tested with aggressive, hospital and industrial disinfectants, and its performance remains the same (results published scientifically in 2018 and 2023). Using the Alto 405 Activated glove with disinfectants offers enhanced antimicrobial action thanks to the complementary nature of the two technologies: continuous, autonomous action for Pylote and rapid action for disinfectants.

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Do we need to take a break or clean the glove between uses for the Pylote technology to work again?

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It is not necessary to wash the Alto 405 Activated glove or to take a break between uses for the technology to be triggered. However, if the glove is soiled (grease, stain), we recommend disinfecting or cleaning it before resuming use. To find out more about how the technology works, please refer to question n°1.

As the glove is not food contact, can it be used on material that will be in contact with food?

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When talking about food contact, we refer to direct contact with food. The migration test consists of placing the glove in contact with a chemical product that simulates food (acetic acid, ethanol, olive oil, isooctane) and seeing if any of the glove's constituents pass into the simulant. In the case of kitchen utensils, this phenomenon between two solids is highly unlikely. Therefore, a non-food contact glove can not be used directly with food, but it can be used with kitchen utensils (e.g. for kitchen cleaning).



Are there special storage condition to respect?

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The Pylote technology has no impact on the intrinsic properties of the Alto 405 glove. Therefore, no special measures are recommended for glove storage.

How do we discard this glove?

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Mapa Professional gloves are effective for 5 years. The Alto 405 Activated glove's ability to destroy viruses and bacteria does not imply any particular destruction method.

Can we find Pylote technology on other types of product?

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The Pylote technology is compatible with a wide range of materials: rubber, plastic, fibre, resin, paint, silicone, etc.

Here are some examples of application: cell phone casings, worktops, stair railings, food packaging, cosmetic pumps and sprays, car interiors, medicine packaging, paints, switches, door handles...

To know more, you can access [Pylote website](#).

