

NEW REUSABLE WISE PROTEC FACE MASK ACTIVELY DESTROYS COVID-19 VIRUS ON CONTACT



As face masks become a fact of everyday life world-wide, new technology is emerging to provide improved safety, wearability and durability for consumers and for employers equipping their staff.

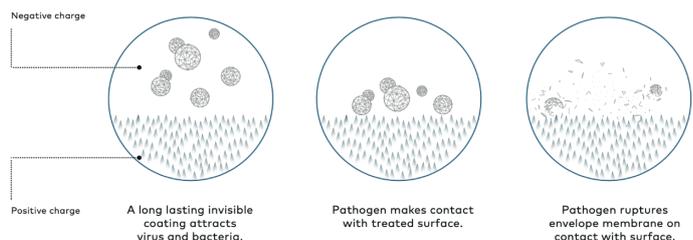
A new range of antimicrobial, reusable face masks from fabric technology specialists, Wise Protec, sets unrivalled safety standards for non-professional masks. Wise Protec's antimicrobial fabric is proven to destroy 99.9% of SARS-CoV-2, the virus that causes Covid-19. Wise Protec masks virtually self-sterilise in an hour. The fabric has passed antiviral tests for the Covid-19 virus at one of the first labs in Europe to have that capability – IMM (Molecular Medicine Institute, Lisbon). The antimicrobial formula used to treat the masks' fabric is certified as skin safe and does not include heavy metals, such as silver or zink, which are often used in antimicrobial fabrics and which have unproven effects on the human respiratory system.

Through a unique combination of chemical process technology, multi-functional fabric layers and ergonomic design, the masks retain their antiviral action for up to 50 washes, are breathable, water repellent and moisture wicking, filter >90% of small particles and are light and comfortable enough to wear all day.

The breakthrough for Wise Protec is the proprietary chemical fixing process which creates such a strong bond between the active antimicrobial agents and the fabric that antiviral and antibacterial activation remains 99.9% effective after 50 domestic washes. Antiviral agents will not migrate onto the wearer's airway, skin or into the environment.

Antimicrobial process

Wise Protec's long lasting, positively charged antimicrobial coating attracts negatively charged virus and bacteria. On contact with the treated surface, the coronavirus' protective membrane ruptures, destroying the virus. This action can be visualised as detergent bubbles popping on contact with a hard surface. Because the coating works physically, it is not eroded by reaction with microbes and so lasts longer.



Every fabric element of the masks has been treated with Wise Protec's antimicrobial formulation (is non-toxic and skin safe, it does not interfere with the natural, beneficial bio fauna found on human skin). As well as destroying Covid-19 it is also effective on a wide range of bacteria, fungi and algae. It also prevents odors forming in the masks and bacterial and viral cross-contamination. This is particularly important as face masks hold moisture and heat, which creates an environment particularly conducive to the growth of microorganisms. The masks reduce the risk of active bacteria and virus transmission from person to person, and of transporting Covid-19 into people's homes.

wise protec.

Wise Protec masks were conceived to add redundant layers of protection that combine to offer unprecedented levels of protection, safety, and comfort.

Outer layer

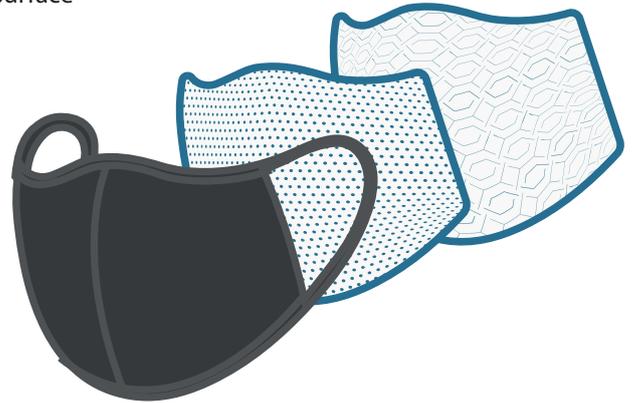
As well as its resilient antimicrobial function, this layer also has a water-repellant treatment. It protects the wearer against viruses transported in small water droplets, also known as aerosols. Recent research suggests that aerosol virus transmission can happen in circulating air, such as offices or aeroplanes¹. The fabric repels contaminated droplets. Any droplets that remain on the surface are removed by the wearer's movement and air friction.

Filter layer

The middle filter layer has been tested and certified to provide more than 90% filtration of particles of three microns diameter or more. This reduces the wearer's exposure to air borne particles, while also allowing excellent breathability.

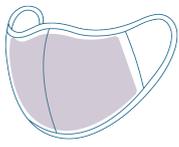
Inner layer

One of the main wearability challenges with many cheap or disposable masks is that they quickly become hot and sweaty. A high-density polymer is applied to the inner layer of Wise Protec's masks which creates an intelligent moisture management system. It improves moisture distribution in the mask which helps it dry faster and more efficiently.



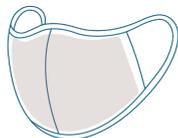
The masks are also designed for exceptional fit from stretchy, silky polyester with premium elastic bands that are comfortable around the ears.

Variations in the masks' inner layer, offer additional benefits: skin kind antioxidants (vitamin E and Ubiquinol Q10), CBD for calming and wellbeing, eucalyptus and echinacea to relieve breathing problems and allergies. There are also children's sizes available in various colours.



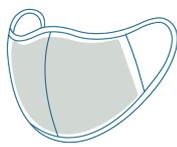
Breathe Better

Airway relief
Relieves airways congestion, reduces inflammation and improves immunity.
£20.00



Skin Care

Moisturize your skin
Nourish, protect and enrich your skin with Vitamin E and Ubiquinol Q10.
£20.00



Stress Relief

99.9% pure CBD
Relax and relieve pain with the CBD infused inner layer of the mask.
£20.00

Wise Protec was set up by Jorge Machado to specialise in technical performance finishing for fabrics. Its manufacturing partner is Adalberto, one of Europe's leading textile plants Adalberto manufactures Wise Protec masks in Portugal, with all components originating in Europe. Wise Protec antimicrobial fabric sets a new international safety standard and will soon be used in lines of clothing, uniforms and bedding.

Jorge Machado said of his inspiration for Wise Protec, "Adalberto has over 50 years expertise in fabric technology. I saw an opportunity to build on expertise designed to impregnate fabric with dyes to create a new way to safely and powerfully bond active antimicrobial agents to durable, flexible fabric, to create Wise Protec. I invented the process and Adalberto brings the product to life. There is limitless potential for this technology as the world becomes hyper vigilant to controlling the current pandemic and preparing for new virus threats. Anti-viral masks and protective clothing and bedding will become a fact of life beyond clinical settings."

1. <https://www.thetimes.co.uk/article/linsey-marr-coronavirus-airborne-transmission-c9dlrn13g?shareToken=4afc0118a81f6d3e930c36256e6bdd42>

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