

## Livinguard introduces mask to inactivate COVID-19

18 June 2020 | News

**Swiss hygiene company Livinguard has come up with a revolutionary and first of its kind face mask**



With the development of medication to combat the novel coronavirus still in the works, it has become imperative to find an immediate solution for this global pandemic. After conducting more than 65,000 experiments and filing more than 100 patents, Swiss hygiene company Livinguard, with operations also in India, as well as Germany, USA, Singapore, Japan, and South Africa, has come up with a revolutionary and first of its kind face mask, that can directly inactivate bacteria and viruses, including 99.9% of the novel coronavirus SARS-CoV-2.

While most masks available across counters or open markets are preventive in nature, Livinguard face masks are protective and prevent bacteria and viruses from spreading, benefiting both self and others in close proximity. The globally patented technology was invented by Mr. Sanjeev Swamy, an entrepreneur of Indian origin, who also heads the company.

Researchers from the Free University of Berlin at the Institute for Animal Hygiene and Environmental Health have been able to demonstrate that textiles treated with Livinguard Technology can reduce very high amounts of SARS-CoV-2 particles by more than 99.9% within a few hours. "The textiles in these masks can thus continuously inactivate the exhaled viruses and can make handling these masks even safer overall," says Professor Uwe Rösler. "In addition, such textiles could also help to reduce hygienic issues in other general and medical areas, even beyond COVID-19." The masks were launched recently in India through a virtual press conference where the founder joined from their Swiss headquarters.

Mr. Sanjeev Swamy, Founder, Inventor & CEO, Livinguard Technologies said, "The World Health Organization estimates 89 million medical masks will be required every month throughout the pandemic. Providing superior quality of daily life has always been our aim. Our mission is to provide hygiene suited for the modern world, hence the reason that we chose to conduct our tests at the FU Berlin, who is renowned for their highest standards; and we are honored to be able to introduce Livinguard masks in India. With the number of cases rising in the country daily, it has become crucial to find an answer to the problem. The unique characteristics of Livinguard masks will provide users with an unprecedented level of security. Fine Hygienic Holding in the Middle East is one of our biggest users, as well as millions more across Singapore, Japan, Germany and China. I am confident that we will have similar success in India too."

He further added, "Livinguard's current focus is to apply this Technology to solutions that lessen the health risk and economic impact of the crisis by enabling people to protect themselves, return to work, and take back their lives. Since our product is

washable and reusable, and mostly made from cotton, the mask is eco-friendly and sustainable. Our research shows that if a million people use one reusable Livinguard mask 210 times, we can save 36,000 tonnes of waste. It is also cheaper than a regular mask because one will need 210 masks to compare with one of ours.”

One of the most respected science leaders of India, Dr Raghunath Mashelkar, said “This scientific breakthrough of deactivating SARS-COV-2 virus on contact with the mask, authenticated fully by world’s top universities, is a global game changer. Every effort should be made so that every Indian benefits from this unprecedented paradigm shift in this provision of safety, security & sustainability, going far beyond the current pandemic.”

The principle underlying the Livinguard Technology is empowering the textile surface with a strong positive charge. When microbes come in contact with fabric, the microbial cell which is negatively charged, is destroyed leading to permanent destruction of the microorganism. Unlike heavy metal-based solutions, such as silver, zinc and copper, this novel technology has been found to be safe for both skin and lungs. Moreover, Livinguard Technology destroys continuously and allows users to reuse the mask up to 210 times with no compromise on safety or efficacy. Livinguard AG believes that the future is tied to sustainable solutions that treat our world kindly. The Livinguard Face Mask not only harnesses powerful coronavirus killing technology but also minimizes waste and uses resources efficiently, thereby offering a unique solution for an overheated supply chain.

The Livinguard mask comprises 3 layers that give 5 levels of protection. The unique patented Tripellent Technology on the Outer layer offers 3 levels of protection - Livinguard Antiviral and repellent coating on the outside of the fabric, Livinguard Antiviral Technology bonded into the fabric itself and Livinguard Antiviral and repellent coating on the inside of the fabric. Non-woven industry-standard filters in the middle layer channels viruses for destruction to the outer or inner layers. Sandwiched between disinfecting fabrics, it is protected from biological contamination, allowing the mask to be safely washed and reused. Denser than the outer layer, and also treated with Livinguard Antiviral Technology, the fabric of the inner layer provides powerful inactivation of coronavirus. Odour free and quick drying with low humidity, the soft and stretchy fabric gives a comfortable fit for the mouth and nose. This specially treated fabric has 36 billion positive charges per  $\text{cm}^2$ .

The Livinguard mask can be washed up to 30 times with undiminished efficacy of its protective properties. If used daily and washed weekly under normal usage conditions, the mask can be used for 6 months, effectively replacing the need for single-use masks. The mask can be used for extended periods and reused before washing because the fabric covering the filter media continuously destroys microorganisms upon contact. This significantly diminishes the risk of transferring them to the user and to other surfaces. The mask is proven to be non-toxic and safe for use. The masks are being used by frontline COVID warriors across the world. Depending on the type of mask required, the cost is INR 1490-1990 only.

Livinguard is a member of the World Economic Forum’s Innovators Community. Arnaud Bernaert, Head of Health and Healthcare, World Economic Forum commented, “The World Economic Forum is happy to have Livinguard join our Global Innovators community. We are delighted to work with Livinguard as their innovation holds the potential to greatly advance the world’s response toolkit in the fight against COVID”.

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