

Taiwan introduces world's first biomedical application mask

01 June 2021 | News

Revolutionizes face mask to resist aerosol transmission

Taiwan-based Taer Innovation has developed world's first biomedical application mask. The RTV facemask is a 100% transparent facemask. It is made of a medical-grade RTV silicone rubber and its transparency allows people to see and communicate with ease.

Together with the exclusive microcurrent discharge filter, it can effectively block COVID-19 viruses with a pore diameter at 75nm, which is finer than that of N95 facemask. More importantly, it is reusable with a lifespan of 3 years to significantly reduce environmental hazards.

The company's filtration masks consist of physical filtration, based on the nanoporous structure of the membrane (PTFE) as the barrier, infused with micro-current electric field filter (Bio-electric technology), along with biocompatible medical silicone.

Not only does the company employ PTFE filter technology that gives 99.9% protection, but also a patented physiological electric field-induced antimicrobial impact, which helps to kill viruses and bacteria for up to seven days.

The technology uses the metal powder matrix of the embedded micro battery to generate an electric field for which the moisture in the breath generates a conductive medium, harnessing the power of electricity to reduce risk of infection. It can be eliminated within one minute after contact, resulting in damage to the structural integrity of the virus and reduction in the virus' ability to infect.