

Wein Technology and SARS

SARS (Severe Acute Respiratory Syndrome) infection can spread not only by touch but also by viral coating on micro-droplets expelled in human coughing, sneezing, talking and respiration to those nearby. According to the Centers for Disease Control, a surgical mask is helpful but does not stop all of the droplets from reaching the nose, mouth and eyes.

The Wein AS150MM (MiniMate) has been extensively tested under strict laboratory conditions, including aircraft cabin simulation by leading aerosol authorities and microbiologists at the University of Cincinnati School of Medicine. The researchers concluded that the unit can substantially reduce the concentration of toxic aerosols from .3 to 3 microns. SARS-coated droplets are well within this particle size. The MiniMate creates a toxic “particle exclusion” zone in front of the wearer’s mouth, nose and eyes. The unit substantially repels these charged particles, including bacteria, viral micro-droplets, dust, smoke, pollens, allergens and anything that is light enough to float in the air away from the breathing zone.

Testing also indicates that the Wein AS150MM ionic space charge is a lethal environment for many types of germs. Germs that are not repelled are killed before entering the breathing zone. These results were presented to the European Aerosol Conference in Leipzig, Germany, and were published in the journal “Atmospheric Environment” in 2004.

According to experts who peer-reviewed the studies, the unit’s effectiveness does not depend on how infectious the particle is, as long as it is affected by the forces of electrostatics, diffusion, turbulence and gravity. Even if the pathogen is lethal, it will still be controlled by these physical forces. In addition, surgical masks may be coated with viral micro-droplets very near the user’s mouth, nose and eyes, whereas the MiniMate repels these SARS micro-droplets away from the wearer and does not store infectious agents on the surface. Masks also do not protect the eyes. For added protection, a surgical mask together with the Wein AS150MM could be used.

Disclaimer: Neither the AS150MM nor any other germicidal protective technology can offer a 100% protection against viral or bacterial infection. These germs can enter the body by touch contact, hand contamination or food ingestion. Accordingly, Wein Products Inc. does not guarantee the AS150MM will protect against SARS, especially since the wearer could have been infected by the airborne SARS virus prior to use.