

January 2020

To whom it may concern:

The complete range of Intersurgical breathing filters has been validated against the passage of a variety of bacterial and viral species of varying particle sizes.

The Clear-Therm 3 HMEF device (code 1541000) has been independently validated against the passage of *Bacillus subtilis* (1.0µm x 0.7µm) and φ174 bacteriophage (0.027µm) to represent the bacterial and viral challenge it may face in the clinical environment. These tests show the filter to be >99.99% efficient against these challenge organisms.

The challenge presented in the viral test protocol (φ174 bacteriophage, 0.027 µm) will be at least as severe as that posed by the Coronavirus (2019-nCov) which originated in Wuhan PRC (0.05 - 0.1µm).

As such, it can be concluded that the 1541 range of products will provide at least the same level of quoted efficiency (>99.99%) as reported in the independent microbiology tests when challenged with Coronavirus. Copies of these test protocols are available upon request.



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Duly authorised for and on behalf of Intersurgical Ltd