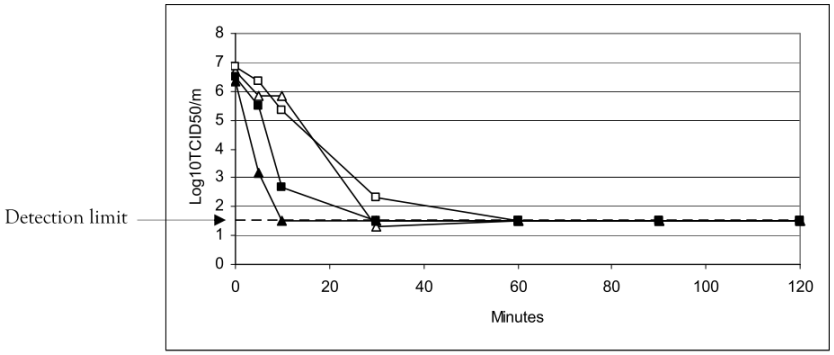
Studies regarding the evaluation of SARS coronavirus decontamination procedures

Studies have verified that thermal treatment is leading to a significant reduction of active virus components. This evaluation used different profiles of temperature of 58-75°C (Viscusi et. al., Liao et al., Pagat et al.). By means of dissolved Sars-CoV in media the usability of thermal treatment was depicted by Pagat et al.

**Figure 1**

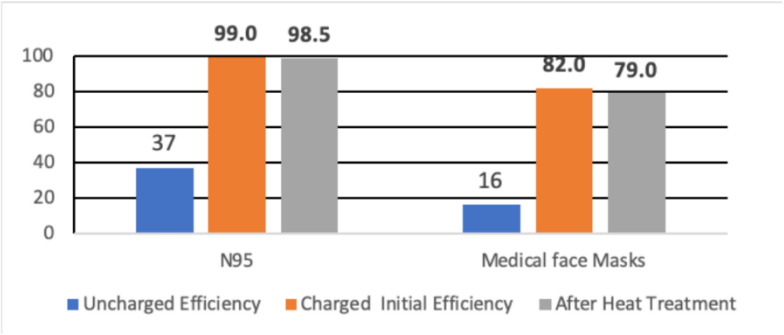
Kinetic curve for the heat treatment of SARS-Coronavirus.




Batch A was heated at 58°C (△) or 68°C (▲) and batch B was heated at 58°C (□) or 68°C (■). The detection limit of the viral titration technique (1.5 log10$TCID_{50}$/ml) is presented with a dotted line and arrows.

Furthermore, they assume a thermal treatment of 60°C and a duration of 60 minutes is generally an efficient method to inactivate the viruses (Pagat et al.).
Regarding the decontamination and reusability of FFP2 masks, we would like to refer to the Stanford University report (Lia et al).
With the current shortage of protection masks, hot air decontamination (75 °, 30 min) is described as an approved means of recycling of FFP2 protection masks. During test series after 20 decontamination cycles no loss of functionality of the filter under 95% or loss of functionality of the mask was depicted. Likewise, Dr. Tsai described:

Figure 2 shows the FE of the uncharged, charged, and the charge decay after the heat treatment at 70℃ for 24 hours.

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