

REUSE

PROTECTIVE MASKS

Procedure for the resource saving use of mouth nose protection (MNS), FFP, N95 and N99 masks

Due to the Corona Pandemic, protective equipment is becoming scarce in the health sector. In fact, oronasal protection masks or FFP masks are usually disposable items in daily hospital routine.

Recent studies have shown that the new types of corona viruses are effectively destroyed by heat.

Based on these results, we would like to provide a device that gently warms and cleans the masks.



Technical information about the product:



- Save handling, loading and unloading from different sides to keep a separation between contaminated and sterile side.
- Adjustable heating programs with optional temperature 60 - 100°C and timer
- Traceable temperature curves of the heating cycles
- 4 integrated temperature sensors inside heating chamber
- Heating chamber with 5 drying trays, optional hanging storage
- External and internal housing made of stainless steel
- Dimensions (WxDxH) 800 x 1000 x 1800 mm
- Capacity for approx. 200 masks per heating cycle

In the attached PDF „Scientific research on the evaluation of SARS-CoV-2 decontamination procedures“ you will find a detailed presentation of the current situation of research concerning the thermal treatment of protective masks, as well as further internet links to more information on the topic.

Our Contact details



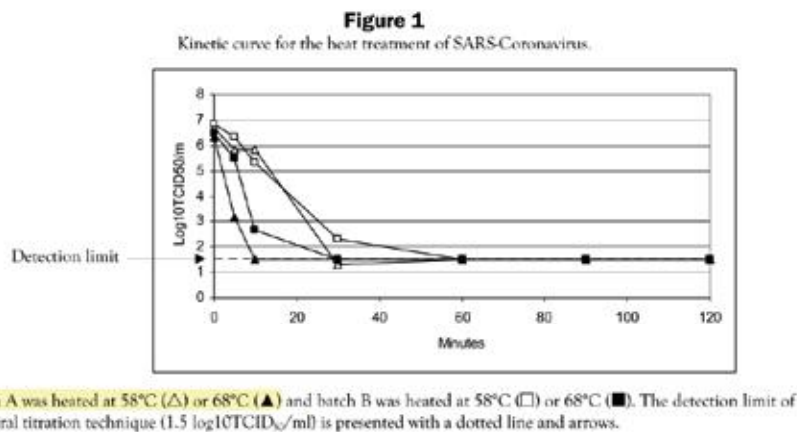
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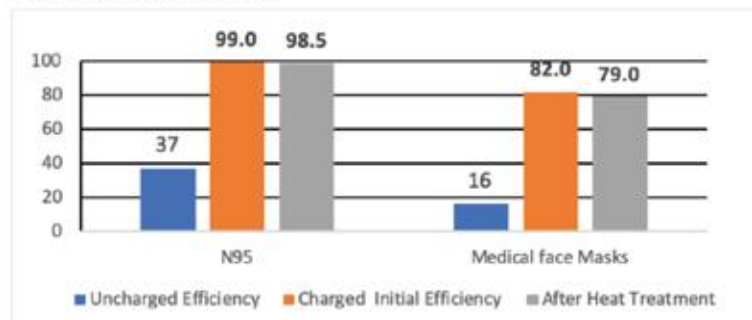


Studies regarding the evaluation of SARS coronavirus decontamination procedures Studies have verified that thermal treatment is leading to a significant reduction of active virus components. This evaluation used different profiles of temperature of 58-75°C (Viscusi et. al., Liao et al., Pagat et al.).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



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°C for 24 hours.



<https://journals.sagepub.com/doi/pdf/10.1177/153567600701200206>

<https://www.vet.cornell.edu/sites/default/files/Cui-N95%20disinfection%20and%20reuse%202020-3-25.pdf>

<https://www.apsf.org/news-updates/potential-processes-to-eliminate-coronavirus-from-n95-masks/>

<https://utrf.tennessee.edu/information-faqs-performance-protection-sterilization-of-face-mask-materials/>