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Air Purifier Efficiency Test with SEOS Ozone Result Report

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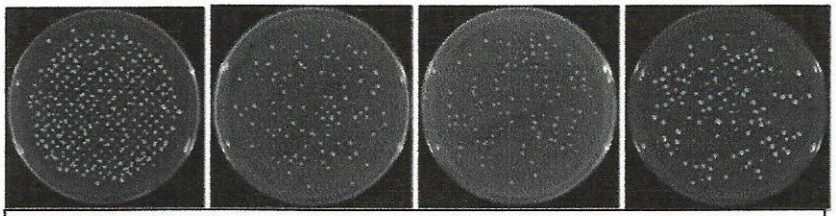
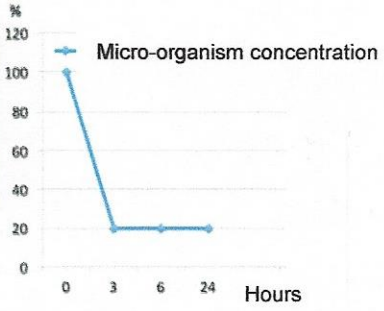
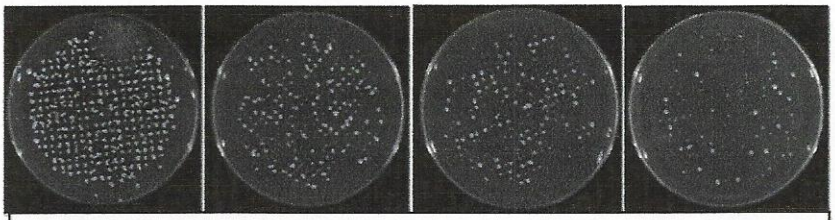
The "Seos" brand 03-8892 household type air sterilization device, produced by Onaran Teknoloji Company, was examined in terms of its effectiveness in killing airborne microorganisms. For this purpose, the device was first operated for 24 hours in a room with 75m3 air volume, so as to have an ozone concentration of approximately 0.1 ppm in the air, which is the harmless level for human health according to the regulations, as reported by the company. Air samples were collected before the device was operated and 3, 6 and 24 hours after the device is operated with automatic air sampler device, by blowing a total of 1 m3 of air on Mueller Hinlon medium in a Petri box and allowing the microorganisms to cling there. The bacteria and fungal colonies formed after the sampled media were kept in the incubator at 37 °C for 24 hours were counted and the number of viable microorganisms in the air was calculated in terms of colony forming units (cfu) versus time. The decrease in the rate of time-dependent microorganisms was evaluated. In the second experiment, the device was operated at maximum power, this time, air samples were taken before the device was started and 15, 30 and 60 minutes after it was operated; cultivation, incubation and evaluation of the formed colonies were performed on the media.



A

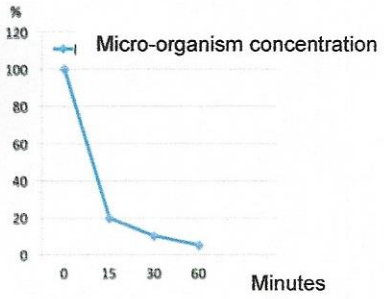
Start	3 hours	6 hours	24 hours
Micro-organism decrease rate	80%	80%	80%





B

Start	15 minutes	30 minutes	60 minutes
Micro-organism decrease rate	80%	90%	95%



Picture: Purification of air from living microorganisms by SEOS 03-8892. Each formed colony (white spots) indicates a viable microorganism that fell into the medium during sampling.
A: Viable microorganism reduction effectiveness when the device is set for ozone amount of 0.1 ppm in the air, **B**: The effectiveness of reducing microorganisms when the device is operated at full capacity.

Conclusion: When the SEOS 03-8892 ozone generator is adjusted for ozone amount of 0.1 ppm in the air, it reduces the amount of living microorganisms in 75m3 air by approximately 80% within 3 hours and keeps it at this level (picture A), when it is operated at full capacity, it was found that the amount of live microorganisms decreased by approximately 80% in 15 minutes, 90% in 30 minutes and 95% in 1 hour.

(**Signed**)

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