



Competence Center for Technical Hygiene and Applied Microbiology
Dr. Schmelz GmbH

Sampling – Consulting – Plant Engineering Analytics

PD Dr. med. Dipl.-Chem. Dipl.-Ing. (university of applied sciences)

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Certificate

**Disinfection efficacy (effect response) of the “STEREX” process in the
“CUBUSAN” device against airborne microorganisms using the
example of the disinfection indicator organism “Enterococcus
faecium”**

**as per the DGHM [German Society of Hygiene and
Microbiology] recommendation, pursuant to EN
14476**

Tested series:

“CUBUSAN” – equipped with “STEREX” plasma technology
STEURER Trocknungs- und Aufbewahrungssysteme GmbH; Staudenstrasse 34
6844 Altach | Vorarlberg | Austria
Part of the **WINTERSTEIGER** Group; WINTERSTEIGER AG
4910 Ried im Innkreis | Upper Austria | Austria

Assessment:

- The plasma disinfection device “CUBUSAN” with “STEREX” plasma technology from STEURER GmbH, 6844 Altach, Austria, displays a disinfectant effect in terms of asepsis in the exposure test against airborne distributed disinfection indicator microorganisms (Enterococcus faecium as per DGHM):
 - In comparison with untreated air, a reduction in the airborne germ count > 90% is achieved after just 15 min.
 - A reduction in the germ count of > 4 log levels (99.99%) is recorded after 60 min.
- **The disinfection effect during continuous operation of the device (> 60 min; continuous disinfection) has therefore been proven to eliminate 99.99% of microorganisms in efficacy classes A (native bacteria and fungi) and B* (limited virucide, virucidal effect on enveloped viruses) of the RKI list in a test pursuant to EN 14476.**
- The process thus eliminates native bacteria and fungi (RKI class A) and viruses (RKI class B*, limited virucide; virucidal effect on enveloped viruses) such that, after treatment/exposure of the air, there is no longer any risk of infection.
- The novel SARS-CoV-2 virus is also included in the efficacy spectrum.
- The assessment is based on the expert opinion of Dr. Schmelz GmbH/Umwelthygiene Marburg GmbH & Co. KG dated December 28, 2020.
- The laboratory is accredited for investigations pursuant to DIN EN ISO/IEC 17025 (DAkkS Berlin). The tests were carried out pursuant to EN 14476.
- The process is harmless to health. The ozone concentration that is produced – as an unavoidable by-product – is below toxicological relevant concentrations.

Malsfeld, December 28, 2020

Privatdozent Dr. med. Dipl.-Chem. Dipl.-Ing. (university of applied sciences) Ulrich
F. Schmelz (Assessor)