



**Competence Centre for Technical Hygiene and Applied Microbiology Dr. Schmelz GmbH and Umwelthygiene Marburg GmbH & Co.KG**

**Hospital hygiene - Sampling - Consulting - Plant engineering - Analytics**

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## Certificate

**Disinfection efficacy (dynamic of action) of the plasma disinfection process in the hand disinfection device "Hand Sanitizer HS - 100" against Escherichia coli K12 in a hand disinfection test (hygienic hand disinfection) according to EN 1500 with 18 test persons, and the recommendations of the RKI (Robert Koch Institute) and the VAH (Association for Applied Hygiene).**

### Tested devices / series:

**"Hand Sanitizer HS - 100" with plasma technology for hygienic hand disinfection  
Manufacturer and placing on the market:  
Company WK Med Tec  
Timon Schorling  
Nordring 27A – 31675 Bückeburg – Germany**

### Bewertung:

- The plasma disinfection device "Hand Sanitizer HS 100" with plasma technology for hygienic hand disinfection of WK Med Tec GmbH, Bückeburg, shows a sufficient effect against the tested test germ in the test according to EN 1500 with Escherichia coli K12.
  - After testing according to EN 1500, an average reduction of germs by > 5.30 log levels is achieved (> 200,000-fold germ count reduction; > 99.999% of the test germs are eliminated).
  - The exposure time to the tested procedure is 15 seconds, corresponding to the standard operating condition of the unit.
- **According to EN 1500, a germ reduction of 5.3 log levels (powers of ten) is achieved when used as intended, which meets the requirements of the German professional societies for hygiene and microbiology with regard to germ-activating efficacy.**
- The hand disinfection test with Escherichia coli according to EN 1500 includes the efficacy against relevant pathogenic bacteria and enveloped viruses. The bactericidal effect is thus determined in the range of effect class A (according to the RKI list) against native bacteria, as well as in the range of effect class B with restriction to enveloped viruses (limited virucidal, class B\*).
- The new virus SARS-CoV-2 is also included in the spectrum of activity.
- The effect against mycobacteria, fungi, non-enveloped viruses and spore-forming bacteria was not tested, as it is not subject of the efficacy test according to EN 1500.
- The assessment is based on the appraisal and testing of the unit in accordance with EN 1500 by Dr. Schmelz GmbH / Umwelthygiene Marburg GmbH & Co. KG on 14.11.2021
- The laboratory is accredited according to DIN EN ISO/IEC 17025 (DAKKS Berlin).
- The process is harmless to health. The ozone concentration produced as an unmeasurable by-product is below toxicologically relevant concentrations.

Malsfeld, 14.11.2021

Private lecturer Dr.med. Dipl.-Chem. Dipl.-Ing.(FH) Ulrich F. Schmelz (Expert Reviewer)