



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

Sampling - Consulting - Plant Engineering - Analytics

**PD Dr.med. Dipl.-Chem. Dipl.-Ing. (FH) Ulrich-Friedrich
Schmelz Head of the Competence Center**

Buchenweg 20, 34323 Malsfeld, Germany

Certificate

**Disinfection – effectiveness (dynamics of action) of the plasma infection
procedure in the device „PLASMOCAR“ against microorganisms
on surfaces in the vehicle interior using the example of "Enterococcus faecium" and
"Escherichia coli" (as an indicator, or "Escherichia coli").
Surrogate, according to VAH recommendation), according to EN 14476 and EN 17272**

Tested series:

"PLASMOCAR" with plasma technology for disinfection

Manufacturer and place on the market:

Company WK Med Tec

Timon Schorling

Nordring 27A – 31675 Bückeburg – Germany

Review:

- The plasma disinfection device "PLASMOCAR" with plasma technology for disinfection from WK Med Tec GmbH; Bückeburg, shows in laboratory tests and in application-oriented field tests against surface disinfection indicator microorganisms (Enterococcus faecium and Escherichia coli) a disinfectant effect in the sense of asepsis:
 - Compared to untreated surfaces, a reduction of the surface germ count by > 99.99% (4 log steps) is achieved after only 15 minutes.
 - Furthermore, in an application-oriented field test in the load compartment of a Mercedes-Benz Sprinter model, a lowering of the surface germ by > 99.99% (4 log stages) is also detected under continuous application over 7 days.
- **The disinfection effect during continuous operation of the device thus corresponds under testing according to EN 14476, as well as DIN EN 17272, an elimination of up to 99.99% of microorganisms on surfaces in the active classes A (native bacteria and fungi), as well as class B* (limited virucidal, virucidal effect in enveloped viruses) of the RKI list, indicated by Surrat germs (Enterococcus faecium and Escherichia coli).**
- Thus, the method eliminates native bacteria and fungi (RKI class A), as well as viruses (RKI class B*, limited virucidal; Virucidal against enveloped viruses) in such a way that there is no risk of infection after treatment / exposure of the surfaces > 15 min.
- The new virus SARS-CoV-2 is also included in the spectrum of action.
- The evaluation is based on the expert opinion of Dr. Schmelz GmbH / Umwelthygiene Marburg GmbH & Co. KG dated 22.09.2022.
- The laboratory is accredited according to DIN EN ISO/IEC 17025 (DAkkS Berlin). The tests were carried out in accordance with EN 14476 and DIN EN 17272.
- The procedure is harmless to health. The plasma disinfection process in the hand Sanitizer HS 100 is harmless to health. Cytotoxicity (EN ISO 10993-5) and mutagenicity (EN ISO 10993-3) studies have been carried out and no evidence of acute or chronic toxic potential has been found and the method is therefore considered safe for health.

Malsfeld, 22.09.2022

Privatdozent Dr.med. Dipl.-Chem. Dipl.-Ing.(FH) Ulrich F. Schmelz (Expert reviewer)