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Effectiveness of the virucidal decontamination and disinfection of bedpans and urine bottles in the Washer-Disinfector Meiko TopLine 20 type M2 with the reprocessing program 08 intensive (A0 3000)

## **Expert Opinion**

In June 2021, tests on the effectiveness of the virucidal decontamination and disinfection of bedpans and urine bottles in the Washer-Disinfector Meiko TopLine 20 type M2 were carried out in the test laboratory HygCen Germany GmbH using germ carriers (see test report PB2021-1487, SN 31357 of June 15, 2021 from HygCen Germany GmbH).

The effectiveness was tested against *Murine Parvovirus*, the temperature-stable test virus of the EN standards for measuring the virucidal effectiveness of disinfectants and the following test design based on EN 17111 and ISO/TS 15883 was used:

Germ carriers made of stainless steel X5CrNi1810 with two fastening ends and a contamination surface of 100mm x 10mm were taken. The germ carriers were soiled in accordance with ISO/TS 15883-5 with a load of bovine serum albumin, mucin, corn starch (RAMS) mixed with *Murine Parvovirus*. For the investigation, 7 germ carriers per run were attached to the bedpan, the bedpan lid, inside and outside the urine bottle and in the machine chamber. Then three independent test runs were carried out in accordance with the cleaning

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and disinfection program 08 intensive. This program comprises a total of 5 reprocessing steps and the final disinfection step A0 3000.

At the end of the process, the germ carriers were removed, eluted and the elution fluid was titrated for residual virus. In addition, the last rinse water from the pump sump was examined for residual virus.

## Summary and evaluation

Based on the experimental investigation documented above, and done with *Murine Parvovirus* in the Washer-Disinfector Meiko TopLine 20 type M2, a comprehensive decontamination and disinfection effect against human pathogenic viruses in the sense of fully virucidal effectiveness (with a titer reduction of at least 4 lg) can be certified when the processing program 08 intensive (A0 3000) is carried out.

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## References

DIN EN 17111:2018-12: Chemical disinfectants and antiseptics - Quantitative carrier test for the evaluation of virucidal activity for instruments used in the medical area - Test method and requirements (phase 2, step 2); German version EN 17111:2018

DIN EN ISO 15883-3: Washer-disinfectors - Part 3: Requirements and tests for washer-disinfectors employing thermal disinfection for human waste containers (ISO 15883-3:2006); German version EN ISO 15883-3:2009

DIN ISO/TS 15883-5: Washer-disinfectors - Part 5: Test soils and methods for demonstrating cleaning efficacy (ISO/TS 15883-5:2005)