

**Final report submitted to**

**CHEMI – PHARM AS**

Põllu 132

10917 Tallinn

(<http://www.chemi-pharm.com>)

**Evaluation of the  
effectiveness of**

**CHEMISEPT G**

**against**

**human rotavirus strain Wa**

Test method according to guideline of BGA and DVV

**Dr. Jochen Steinmann**

MikroLab GmbH

Norderoog 2

D-28259 Bremen

phone: +49 (0) 421-27819102

fax: +49 (0) 421-2760283

e-mail: [Mikrolab.GmbH@t-online.de](mailto:Mikrolab.GmbH@t-online.de)

<http://www.mikrolab-gmbh.de>

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## 6. Results

In parallel with inactivation tests, cytotoxicity of CHEMISEPT G (80.0%) was measured. Examinations showed that the hand disinfectant tested undiluted exhibited a cytotoxic effect at the dilution of 1:10. This means a  $\log_{10} \text{CD}_{50}/\text{mL}$  value (analogous to the  $\log_{10} \text{TCID}_{50}$  value) of 2.50 (Table 1).

These tests to measure the cytotoxicity are imperative, because in this way the lower detection threshold for non-inactivated rotavirus is determined.

Results of inactivation tests are found in table 2. CHEMISEPT G was tested undiluted. Due to the addition of virus suspension and interfering substances a test concentration of 80.0% resulted. Exposure times were 30, 60 and 120 seconds.

The hand disinfectant CHEMISEPT G tested undiluted exhibited strong virus-inactivating properties against the test virus. After an exposure time of 30 s no rotavirus virus could be detected any longer. The virus titre reduction was  $\geq 4.38 \log_{10}$ -steps. This reduction corresponds to an inactivation of  $\geq 99.99\%$  and demonstrates a rotavirus efficacy. According to the guideline of BGA and DVV and also to EN 14476:2005 (5), a disinfectant is considered as having virucidal efficacy if within the recommended exposure time the titre is reduced by four  $\log_{10}$ -steps.

Due to the lack of guidelines simulating practical conditions, results of the quantitative suspension test lead to the recommendation to use the hand disinfectant CHEMISEPT G for inactivation of rotavirus as follows:

undiluted    30 s

Bremen, 2006-01-15



- Dr. J. Steinmann -