

Adolf Würth GmbH & Co. KG
D 74653 Künzelsau/Gaisbach

Lörrach, 14. April 2004

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Report-nr. 56308 Klimaanlage desinfektionsmittel engl
Examination of the bacteriostatic effect of an air conditioning-desinfectand

Description of sample: air conditioning-desinfectand, Art.-Nr.: 89376410
Arrival of sample: 12.03.2004
Start of analysis: 16.03.2004
Sampling: customer

Sample Name:: Product: air conditioning-desinfectand 250ml, lot 355

Examination of the bacteriostatic effect against Pseudomonas aeruginosa, E.Coli, Candida albicans

Referring to the DIN EN 1040 10 ml of sample was inoculated with 1 ml inoculum in the concentrations listed below; after the listed reaction times, Ringersolution - containing L-Histidin, Monohydrochloride; L-Cystein-Hydrochloride, Natriumthiosulfate and Tween 80- was added for disinhibition and the preparation was incubated.

	germ number of the inoculums [cfu/ml]	germ number of the suspension sample/inoculum after incubating and mixing (calc.) [cfu/ml]	germ number of the incubated preparation after 5 min of reaction time [cfu/ml]	germ number of the incubated preparation after 10 min of reaction time [cfu/ml]	germ number of the incubated preparation after 30 min of reaction time [cfu/ml]
Pseudomonas aeruginosa (ATCC9027)	3×10^8	3×10^7	0	0	0
E.Coli (ATCC8739)	4×10^8	4×10^7	0	0	0
Candida albicans (ATCC10231)	6×10^7	6×10^6	0	0	0
Legionella pneumophila (ATCC33152)	1×10^6	1×10^5	0	0	0

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Examination of the bacteriostatic effect against *Legionella pneumophila* in four different concentration levels:

10 ml of sample was inoculated with 1 ml inoculum of *Legionella pneumophila* ATCC 33152 in the concentrations listed below; after the listed reaction times Ringersolution -containing L-Histidin, Monohydrochloride, L-Cystein-Hydrochloride, Natriumthiosulfate und Tween 80 - was added for disinhibition and the suspension was incubated for 7 days at 36°C.

	germ number of the inoculums [cfu/ml]	germ number of the suspension sample/inoculum after incubating and mixing (calc.) [cfu/ml]	germ number of the incubated preparation after 5 min of reaction time [cfu/ml]	germ number of the incubated preparation after 10 min of reaction time [cfu/ml]	germ number of the incubated preparation after 15 min of reaction time [cfu/ml]
Concentration level 1	1×10^6	1×10^5	0	0	0
Concentration level 2	1×10^5	1×10^4	0	0	0
Concentration level 3	1×10^4	1×10^3	0	0	0
Concentration level 4	1×10^3	1×10^2	0	0	0

Assessment:

In accordance to the DIN EN 1040 the air conditioning-desinfectand lot 355 was inoculated with a germsuspension of *Pseudomonas aeruginosa*, *E.Coli*, *Candida albicans* and *Legionella pneumophila*.

To fulfill the demands of the DIN EN 1040, the number of vital germs must decrease more than 10^5 . For all tested germs and fungus a complete disinfection was determined already after 5 minutes of reaction time. The decrease of the number of germs was bigger than 10^5 .

For the effectiveness of the disinfectant against *Legionella pneumophila* a concentration depending effectiveness-control should be verified in addition. Already in the highest concentration level with a contamination of 1×10^6 cfu/ml a complete disinfection was obtained after 5 minutes of reaction time.

Felix Heppeler
 Dipl. Chemiker

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