



**Test report No. 161022sd**

EVALUATION OF SPORICIDAL ACTIVITY OF CHEMICAL DISINFECTANTS USED IN  
FOOD, INDUSTRIAL, DOMESTIC AND INSTITUTIONAL AREAS (EN 13704)

**Name of the product: STERISEPT WIPES**

Batch number: 14190822

Date of test report: 12.01.2023

Client, representative:  
Chemi-Pharm Ltd.  
Tänassilma tee 11  
Tänassilma küla, Saku vald  
Harjumaa 76406  
ESTONIA

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EVALUATION OF SPORICIDAL ACTIVITY OF CHEMICAL DISINFECTANTS USED IN FOOD, INDUSTRIAL, DOMESTIC AND INSTITUTIONAL AREAS (EN 13704)

Name of the product\*: STERISEPT WIPES

Batch number\*: 14190822

Order number: 20099

Manufacturer\*: Chemi-Pharm Ltd.

Client, representative\*: Chemi-Pharm Ltd., Tännassilma tee 11, Tännassilma küla, Saku vald, 76406, ESTONIA, Siimu Rom, +37253604748

Date of delivery: 05.09.2022

Test material conditions: No specific features, sample in the manufacturers tare

Storage conditions: At room temperature

Active substance – conc.\*: Didecyl-Dimethyl-Ammonium Chloride (DDAC) 3.45g/100g;  
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine 0.45g/100g

Appearance of the product: Transparent liquid

Test concentration: Ready to use

Contact time: 15 min

Interfering substance: 3.0 g/l bovine albumin (dirty conditions)

Neutralizer: -

Rinsing liquid: Tryptone 1g/l, NaCl 9g/l

Test organisms: *Clostridium difficile* NCTC 13366  
*Clostridium sporogenes* ATCC 19404

Testing method: EVS-EN 13704:2018  
Quantitative suspension test for the evaluation of sporicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas.

Testing period: 17.10.2022 – 21.12.2022

Results: Look appendix 1 - 2

Interpretation and conclusion: Look appendix 3



Allar Laaneleht  
Chief specialist  
Date of issue: 12.01.2023

\* - Data provided by the customer

## TEST RESULTS (suspension test)

EVS-EN 13704:2018; Phase 2, step 1;  
Membrane filtration method;  
Rinsing liquid: Tryptone 1g/l, NaCl 9g/l;  
Test organism: *Clostridium difficile* NCTC 13366;  
Test temperature: +20± 1° C; Incubation temperature: +37 ± 1° C  
Interfering substance: 3.0 g/L bovine albumin;  
Nordic Tersus Laboratory LLC.;  
Date of test: 14.12.2022  
Responsible person: Kerda Treksler

## Validation and controls

### Dirty conditions

Validation suspension $N_{vo}$			Experimental conditions (A)			Filtration control (B)			Method validation (C)		
$V_{C1}$	$V_{C2}$	$\bar{x}$	$V_{C1}$	$V_{C2}$	$\bar{x}$	$V_{C1}$	$V_{C2}$	$\bar{x}$	$V_{C1}$	$V_{C2}$	$\bar{x}$
30	30	30	103	40	71.5	104	90	97	15	18	16.5
$30 \leq \bar{x} N_{vo} \leq 160$ ? yes X; no <input type="checkbox"/>			$\bar{x} A \text{ is } \geq 0.5 \bar{x} N_{vo}$ ? yes X; no <input type="checkbox"/>			$\bar{x} B \text{ is } \geq 0.5 \bar{x} N_{vo}$ ? yes X; no <input type="checkbox"/>			$\bar{x} C \text{ is } \geq 0.5 \bar{x} N_{vo}$ ? yes X; no <input type="checkbox"/>		

## Test suspension and test

Testsuspension: $N$ and $N_0$	$N$	$V_{C1}$	$V_{C2}$	$\bar{x}_{wm} = 1.51 \times 10^6$ ; $\log N = 6.17$ $N_0 = N/10$ ; $\log N_0 = 5.17$ $5.17 \leq \log N_0 \leq 5.70$ ; yes X; no <input type="checkbox"/>
	$10^{-4}$	150	148	
	$10^{-5}$	20	15	

## Experimental results

Concentration of the product	Dilution step	$V_{C1}$	$V_{C2}$	$Na$ (= $\bar{x} \cdot 10$ )	$\lg Na$	$\lg R$	Contact time	Conditions
80.0%	-	<14	<14	<140	<2.15	>3.02	15 min	Dirty
50.0%	-	>165	>165	>1650	>3.22	<1.95	15 min	Dirty
10.0%	-	>165	>165	>1650	>3.22	<1.95	15 min	Dirty

### Explanations:

$V_C$  = count per ml (one plate or more)  
 $\bar{x}$  = average of  $V_{C1}$  and  $V_{C2}$  (1. + 2. duplicate)  
 $N$  = cfu/ml microbes in testsuspension  
 $N_0$  = cfu/ml at the start of the contact time (t=0)  
 $N_{vo}$  = cfu/ml in the validation suspension (t=0)  
 $Na$  = surviving microbes after the test  
 $R$  = reduction factor ( $R = N_0 / Na$ ;  $\log R = \log N_0 - \log Na$ )

Appendix 2

**TEST RESULTS (suspension test)**

EVS-EN 13704:2018; Phase 2, step 1;  
Membrane filtration method;  
Rinsing liquid: Tryptone 1g/l, NaCl 9g/l;  
Test organism: *Clostridium sporogenes* ATCC 19404;  
Test temperature: +20± 1° C; Incubation temperature: +37 ± 1° C  
Interfering substance: 3.0 g/L bovine albumin;  
Nordic Tersus Laboratory LLC.;  
Date of test: 14.12.2022  
Responsible person: Allar Laaneleht

**Validation and controls**

**Dirty conditions**

Validation suspension $N_{vo}$			Experimental conditions (A)			Filtration control (B)			Method validation (C)		
$V_{C1}$	$V_{C2}$	$\bar{x}$	$V_{C1}$	$V_{C2}$	$\bar{x}$	$V_{C1}$	$V_{C2}$	$\bar{x}$	$V_{C1}$	$V_{C2}$	$\bar{x}$
74	81	77.5	42	49	45.5	53	37	45	63	55	59
$30 \leq \bar{x} N_{vo} \leq 160$ ? yes X; no <input type="checkbox"/>			$\bar{x} A \geq 0.5 \bar{x} N_{vo}$ ? yes X; no <input type="checkbox"/>			$\bar{x} B \geq 0.5 \bar{x} N_{vo}$ ? yes X; no <input type="checkbox"/>			$\bar{x} C \geq 0.5 \bar{x} N_{vo}$ ? yes X; no <input type="checkbox"/>		

**Test suspension and test**

Testsuspension:  $N$ and $N_0$	$N$	$V_{C1}$	$V_{C2}$	$\bar{x}_{wm} = 1.63 \times 10^6$ ; $\log N = 6.21$ $N_0 = N/10$ ; $\log N_0 = 5.21$ $5.17 \leq \log N_0 \leq 5.70$ ; yes X; no <input type="checkbox"/>
	$10^{-4}$	<b>180</b>	<b>148</b>	
	$10^{-5}$	<b>14</b>	<b>16</b>	

**Experimental results**

Concentration of the product	Dilution step	$V_{C1}$	$V_{C2}$	$Na$ ( $=\bar{x} \cdot 10$ )	$\lg Na$	$\lg R$	Contact time	Conditions
80.0%	-	14	16	150	2.18	3.03	15 min	Dirty
50.0%	-	>165	>165	>1650	>3.22	<1.99	15 min	Dirty
10.0%	-	>165	>165	>1650	>3.22	<1.99	15 min	Dirty

**Explanations:**

$V_C$  = count per ml (one plate or more)  
 $\bar{x}$  = average of  $V_{C1}$  and  $V_{C2}$  (1. + 2. duplicate)  
 $N$  = cfu/ml microbes in testsuspension  
 $N_0$  = cfu/ml at the start of the contact time (t=0)  
 $N_{vo}$  = cfu/ml in the validation suspension (t=0)  
 $Na$  = surviving microbes after the test  
 $R$  = reduction factor ( $R = N_0 / Na$ ;  $\log R = \log N_0 - \log Na$ )

The test results apply to the tested sample only.

All the components of this test report are recognized as a portion of a complete report. The test report shall not be reproduced except in full, without approval of the laboratory

N-7/29-V9

Appendix 3

Interpretation:

The sample of ready to use surface disinfection product **STERISEPT WIPES** (batch no 14190822) was tested according to the test method EVS-EN 13704:2018. The test was performed at  $20\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ , under dirty conditions during the contact time of 15 min. The membrane filtration method was used for testing the product's effectiveness against the reference strains *Clostridium difficile* NCTC 13366 and *Clostridium sporogenes* ATCC 19404. Under dirty conditions the 80.0% solution of the tested product was effective against the reference strains within the contact time tested.

Conclusion:

The surviving count of the reference strain showed at least 3 lg reduction meaning that according to EVS-EN 13704:2018 under dirty conditions the sample of the ready to use surface disinfection product **STERISEPT WIPES** is effective against *C.difficile* NCTC 13366 and *C. sporogenes* ATCC 19404 within 15 minutes.

This is the end of the test report.



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Allar Laaneleht  
Chief specialist

Date of issue: 12.01.2023