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AUDIT REPORT

Validation of the removal performance of Hyginet based on EN 16615

Laboratory identification	<ul style="list-style-type: none"> LI-TH-021-027
Study content	<ul style="list-style-type: none"> Validation of the removal performance during the cleaning process with a water soaked wipe
Test method	<ul style="list-style-type: none"> based on the 4-field test with mechanical action (EN 16615:2015) on contaminated non-porous test surface (FOREX)
Client	<p>Flash B.V. Lichtstraat 8 5349 CA Oss Netherland</p>
Test products	<ul style="list-style-type: none"> Hyginet
Neutraliser	<p>Polysorbate 80, 30 g/l + lecithin, 3 g/l + saponin, 30 g/l.</p>
Reference documents	<ul style="list-style-type: none"> EN 16615:2015



Reference material	- not applicable -	
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Test equipment	Laboratory Prof. Dr. G. Enders MVZ GbR Dept. Technical Hygiene Rosenberg road 85 70193 Stuttgart	
	Test start:	2021-09-07
	End of test:	2021-09-10
Processor	Ena Obucic	

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1. Material, media and reagents

1.1. Abbreviations

BSA	Bovine serum albumin
CFU	Colony forming units
NaCl	Sodium chloride
RF	Reduction factor
TC	Transport control
TSA	Tryptone Soy Agar
TSB	Tryptone Soy Boullion
WSH	Water of standardized hardness

1.2. Apparatus

Incubator 36 ± 1 °C
Refrigerator 2 - 8 °C
Laminar Air Flow
Stirrer
McFarland meter
Vortexer
Thermometer
Cryobank TM System / Mast Diagnostica
Cryotube
Ceramic / glass beads
Pipetting aid (Pipet-Boy)
5 ml pipettes
Eppendorf pipette variable 0.5 µl - 10 µl
Eppendorf pipette variable 10 µl - 100 µl
Eppendorf pipette variable 100 µl - 1000 µl
sterile pipette tips (blue, yellow, white)
sterile disposable pipettes (1 ml, 5 ml, 10 ml)

1.3. Materials

Forex plates for 4-field test
Glucose Yeast Extract Agar
Neutralization medium
Tryptone sodium chloride solution
Tryptone agar

2. Test method

The tests were performed according to a modification of the EN 16615 procedure

Test method	Test organism	Material
4-field test	<i>Staphylococcus aureus</i> , ATCC 6538	Hyginet
	<i>Enterococcus hirae</i> , ATCC 10541	
	<i>Pseudomonas aeruginosa</i> , ATCC 15442	
	<i>Candida albicans</i> , ATCC 10231	

4-Field-Test

Test surface

The test surface FOREX® classic (20 cm x 50 cm) was marked with 4 squares of 5 x 5 cm, the “test fields” (each 25 cm²), in a row. The fields were at a distance of 7 cm from one another.

Assay run

Test field 1 was inoculated with 50 µl of the test organisms/interfering substance mixture (9 parts test organism, 1 part interfering substance). Test fields 2-4 were not contaminated. The glass spatula (Drigalski spatula) used to distribute the test suspension of field 1 was initially used on a blank sample to avoid contaminating field 1 with an insufficient amount of test suspension. The inoculum was allowed to dry at room temperature until visible dryness (maximum 60 min).

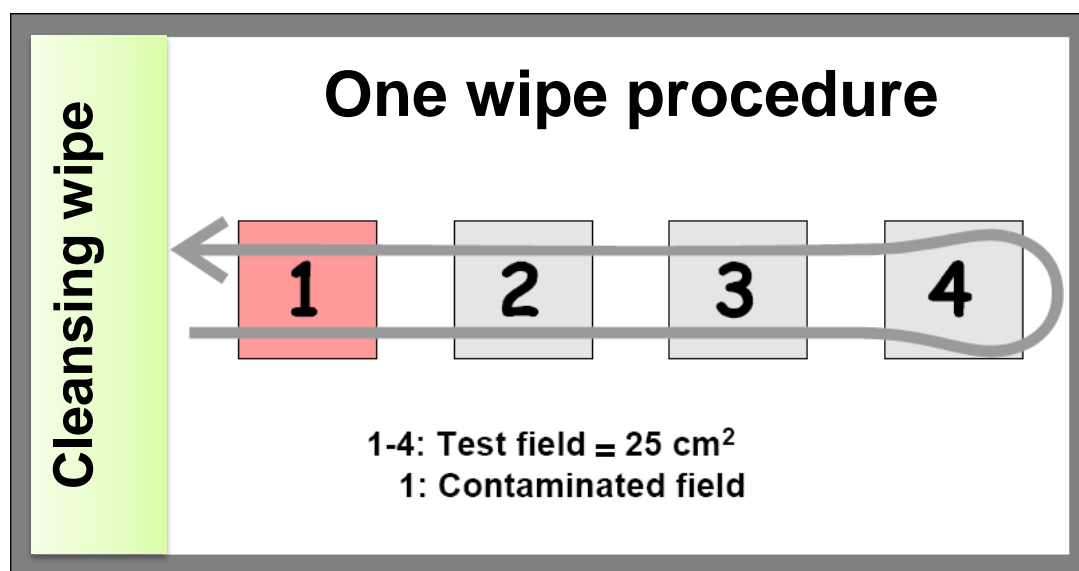


Fig. 1: 4-Field-Test

The arrow shows the cleaning sweep with the wipe over fields 1-4
 Test field 1 was inoculated with 50 µl test organism/interfering substance mixture;
 Test fields 2-4 were not contaminated

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The arrow shows the cleaning sweep with the wipe (fig. 1). The starting point is in front of test field 1, and the turn is immediately after test field 4. The endpoint of the wiping process is the starting point after passing test field 1 for the second time.

At the end of the contact time, the test organisms were recovered from each test field with moistened polyester cotton swabs. For total recovery, the swab was taken from 3 directions; the horizontal, vertical and diagonal directions were tested. Afterwards, the recovery procedure was repeated with a second (dry) swab until the test field was visually dry (fig. 2). The two swabs were both washed out in a tube containing 5 ml neutraliser.

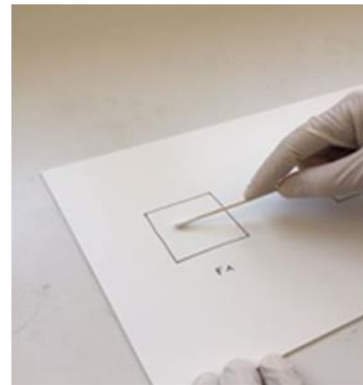
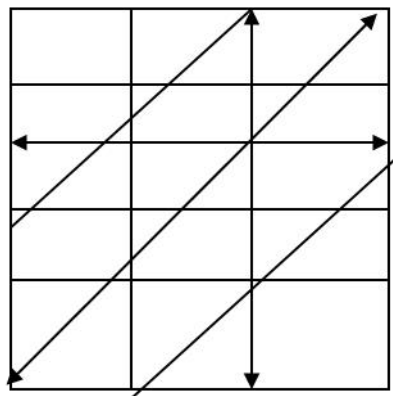


Fig. 2: 3- directional basis

Presentation of the horizontal, vertical and diagonal recovery procedure with the swab for determination of the numbers of surviving test organisms on the marked test fields

For the determination of colony forming units, a decadal dilution series was prepared. Subsequently, a sample of 4 x 0.5 ml was inoculated on TSA using the spread plate technique for counting. After the incubation, the colonies were counted and the CFU were determined for each field (25 cm²/field).

Drying control (control of recovery)

To determine the quantitative recovery per assay, a drying control was performed. For this, a separate test surface T_x was marked with a 25 cm² square (5 cm x 5 cm). The drying control T_x was prepared at the same time as the test field 1 of the assay. Before starting the assay, the recovery from T_x started immediately after the drying procedure of the test mixture with the interfering substance on the test surface. The recovery procedure was performed analogously to the other test fields. For total recovery, the horizontal, vertical and diagonal directions were tested with two swabs. The colony forming units were determined for each field (25 cm²/field).

Textile

Hyginet is a single-use professional cleaning wipe that can be used with water. It was impregnated with 16 ml water standardized hardness (WSH).

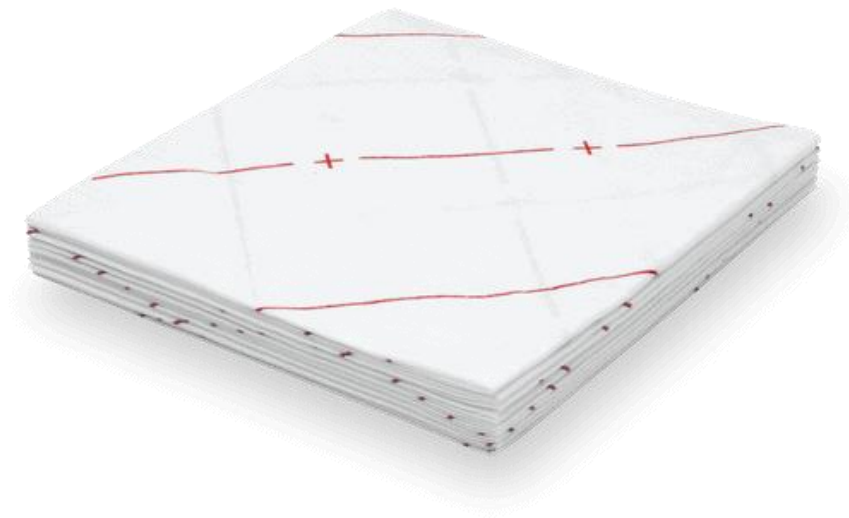


Fig. 3: Hyginet: professional cleaning wipe

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3. Results

Testmethode / test method:									EN 16615				
Laboridentifikationsnummer / identification number:									LI-TH-021-027				
Zeitraum der Prüfung / test period:									2021-09-08 - 2021-09-10				
Produktname / product name:									Hyginet				
Chargenbezeichnung / batch number:									N/A				
Einwirkzeit / contact time:									5 min				
Produktkonzentration / concentration:									WSH				
Tuch / tissue:									Hyginet				
Belastung / interfering substance:									clean conditions				
Prüftemperatur / test temperature:									20.0°C ± 2.0°C				
Antrocknungszeit / drying time:									36:26 min				
rel. Luftfeuchte / humidity:									68%				
Neutralisationsmittel / neutralizer:									Neutraliser 1				
Prüfkeim / teststrain:									Enterococcus hirae ATCC 10541				
Inkubationstemperatur / temperature of incubation:									36.0°C ± 2.0°C				
Inkubationszeit / time of Incubation:									2 days				
Product / field	dilution	CFU 1		CFU 2		V _{C1}	V _{C2}	log10 Na	log10 R	Validation			
Test N _a (concentrate)													
1	10 ⁰	330	330	330	330	660	660	5.87	2.00	not effective			
	10 ⁻¹	330	330	330	330	660	660						
	10 ⁻²	330	330	330	330	660	660						
	10 ⁻³	78	62	82	76	140	158						
	10 ⁻⁴	6	15	11	22	21	33						
2	10 ⁰	330	330	330	330	660	660	4.87	-	<input type="checkbox"/> cfu field 2 to 4 ≤ 50 ? 173550			
	10 ⁻¹	321	286	298	306	607	604						
	10 ⁻²	85	63	69	82	148	151						
3	10 ⁰	330	330	330	330	660	660	4.87					
	10 ⁻¹	330	330	330	330	660	660						
	10 ⁻²	53	90	81	72	143	153						
4	10 ⁰	330	330	330	330	660	660	4.39			not effective		
	10 ⁻¹	250	268	231	243	518	474						
	10 ⁻²	65	34	43	45	99	88						
Water control (N _w)													
1	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-			
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
2	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	N _w ≥ 10 cfu/25cm ² on fields 2 to 4			
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
3	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A			-	V _{NW} 2 to 4 #WERT!	
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
4	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A			-		Valid?
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A					
drying control (D _{C0} / D _{Ct})													
T _O	10 ⁻⁵	74	58	72	65	132	137	7.83	-	6.88 ≤ lg T _O ≤ 8.40 yes			
	10 ⁻⁶	6	10	9	9	16	18						
T _x	10 ⁻⁵	66	81	73	75	147	148	7.87	-	6.88 ≤ lg T _x ≤ 8.40 yes			
	10 ⁻⁶	5	7	5	8	12	13						
Verification of the test													
(N / N _v)													
(N)	10 ⁻⁷	157	136	166	128	293	294	9.47	-	9.17 ≤ lg N ≤ 9.70 yes			
	10 ⁻⁸	18	23	21	22	41	43						
N _v	10 ⁻¹	32	50	41	48	82	89	2.93	-	300 ≤ \bar{X} of N _{v0} ≤ 1600 yes			
B													
B	10 ⁰	42	38	53	44	80	97	1.95	-	\bar{X} of B is ≥ 0.5 x \bar{X} of N _{v0} yes			
C													
C	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	\bar{X} of C is ≥ 0.5 x \bar{X} of N _{v0} #WERT!			

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Testmethode / test method:										EN 16615									
Laboridentifikationsnummer / identification number:										LI-TH-021-027									
Zeitraum der Prüfung / test period:										2021-09-08 - 2021-09-10									
Produktname / product name:										Hyginet									
Chargenbezeichnung / batch number:										N/A									
Einwirkzeit / contact time:										5 min									
Produktkonzentration / concentration:										WSH									
Tuch / tissue:										Hyginet									
Belastung / interfering substance:										clean conditions									
Prüftemperatur / test temperature:										20.0°C ± 2.0°C									
Antrocknungszeit / drying time:										25:21 min									
rel. Luftfeuchte / humidity:										68%									
Neutralisationsmittel / neutralizer:										Neutraliser 1									
Prüfkeim / teststrain:										<i>Pseudomonas aeruginosa</i> ATCC 15442									
Inkubationstemperatur / temperature of incubation:										36.0°C ± 2.0°C									
Inkubationszeit / time of incubation:										2 days									
Product / field	dilution	CFU 1			CFU 2			V _{C1}	V _{C2}	log10 Na	log10 R	Validation							
Test N _a (concentrate)																			
1	10 ⁰	330	330	330	330	660	660	4.79	2.59	not effective									
	10 ⁻¹	330	330	330	330	660	660												
	10 ⁻²	69	48	61	66	117	127												
	10 ⁻³	2	6	6	7	8	13												
	10 ⁻⁴	0	0	0	0	0	0												
2	10 ⁰	330	330	330	330	660	660	3.86		☐ cfu field 2 to 4 ≤ 50 ?									
	10 ⁻¹	82	66	67	72	148	139												
	10 ⁻²	5	8	5	5	13	10												
3	10 ⁰	272	243	260	258	515	518	3.48	-	12950									
	10 ⁻¹	53	30	37	34	83	71												
	10 ⁻²	0	5	3	4	5	7												
4	10 ⁰	240	181	198	201	421	399	3.44		not effective									
	10 ⁻¹	30	25	28	28	55	56												
	10 ⁻²	1	4	2	4	5	6												
Water control (N _W)																			
1	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		-								
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
2	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N _W ≥ 10 cfu/25cm ² on fields 2 to 4								
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
3	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-		V _{NW} 2 to 4 #WERT!								
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
4	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A			Valid?								
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A											
drying control (D _{C0} / D _{Ct})																			
T _O	10 ⁻⁵	24	31	25	26	55	51	7.42	-	6.88 ≤ lg T _O ≤ 8.40									
	10 ⁻⁶	2	5	3	4	7	7												
T _X	10 ⁻⁵	28	19	21	27	47	48	7.38	-	6.88 ≤ lg T _X ≤ 8.40									
	10 ⁻⁶	4	1	2	1	5	3												
Verification of the test																			
(N / N _V)																			
(N)	10 ⁻⁷	201	194	185	189	395	374	9.58	-	9.17 ≤ lg N ≤ 9.70									
	10 ⁻⁸	16	22	25	28	38	53												
N _V	10 ⁻¹	53	42	38	45	95	83	2.95	-	300 ≤ \bar{X} of N _{V0} ≤ 1600									
										yes									
B																			
B	10 ⁰	36	51	32	44	87	76	1.91	-	\bar{X} of B is ≥ 0.5 x \bar{X} of N _{V0}									
										yes									
C																			
C	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	\bar{X} of C is ≥ 0.5 x \bar{X} of N _{V0}									
										#WERT!									

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Testmethode / test method:										EN 16615										
Laboridentifikationsnummer / identification number:										LI-TH-021-027										
Zeitraum der Prüfung / test period:										2021-09-07 - 2021-09-09										
Produktname / product name:										Hyginet										
Chargenbezeichnung / batch number:										N/A										
Einwirkzeit / contact time:										5 min										
Produktkonzentration / concentration:										WSH										
Tuch / tissue:										Hyginet										
Belastung / interfering substance:										clean conditions										
Prüftemperatur / test temperature:										20.0°C ± 2.0°C										
Antrocknungszeit / drying time:										43:16 min										
rel. Luftfeuchte / humidity:										68%										
Neutralisationsmittel / neutralizer:										Neutraliser 1										
Prüfkeim / teststrain:										Staphylococcus aureus ATCC 6538										
Inkubationstemperatur / temperature of incubation:										36.0°C ± 2.0°C										
Inkubationszeit / time of Incubation:										2 days										
Product / field		dilution	CFU 1		CFU 2		V _{C1}		V _{C2}		log10 Na	log10 R	Validation							
Test N _a (concentrate)																				
1	10 ⁰	330	330	330	330	660	660	5.82	2.01	not effective										
	10 ⁻¹	330	330	330	330	660	660													
	10 ⁻²	330	330	330	330	660	660													
	10 ⁻³	74	63	58	72	137	130													
	10 ⁻⁴	16	8	9	10	24	19													
2	10 ⁰	330	330	330	330	660	660	4.90		□ cfu field 2 to 4 ≤ 50 ?										
	10 ⁻¹	330	330	330	330	660	660													
	10 ⁻²	72	81	70	93	153	163													
3	10 ⁰	330	330	330	330	660	660	4.73	-	193250										
	10 ⁻¹	263	241	245	251	504	496													
	10 ⁻²	44	60	57	53	104	110													
4	10 ⁰	330	330	330	330	660	660	4.78		not effective										
	10 ⁻¹	330	330	330	330	660	660													
	10 ⁻²	67	54	60	62	121	122													
Water control (N _w)																				
1	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-										
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A												
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A												
2	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N _w ≥ 10 cfu/25cm ² on fields 2 to 4									
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A												
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A												
3	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-		V _{NW} 2 to 4 #WERT!									
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A												
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A												
4	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A			Valid?									
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A												
	10 ⁻²	N/A	N/A	N/A	N/A	N/A	N/A	N/A												
drying control (D _{C0} / D _{Ct})																				
T _O	10 ⁻⁵	68	53	64	67	121	131	7.80	-	6.88 ≤ lg T _O ≤ 8.40										
	10 ⁻⁶	9	2	3	6	11	9													
T _x	10 ⁻⁵	72	63	67	69	135	136	7.83	-	6.88 ≤ lg T _x ≤ 8.40										
	10 ⁻⁶	8	3	6	7	11	13													
Verification of the test																				
(N / N _v)																				
(N)	10 ⁻⁷	111	103	101	119	214	220	9.34	-	9.17 ≤ lg N ≤ 9.70										
	10 ⁻⁸	8	12	10	11	20	21													
N _v	10 ⁻¹	45	36	48	33	81	81	2.91	-	300 ≤ \bar{X} of N _{v0} ≤ 1600										
										yes										
B																				
B	10 ⁰	51	31	37	42	82	79	1.91	-	\bar{X} of B is ≥ 0.5 x \bar{X} of N _{v0}										
										yes										
C																				
C	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	\bar{X} of C is ≥ 0.5 x \bar{X} of N _{v0}										
										#WERT!										

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Testmethode / test method:										EN 16615																						
Laboridentifikationsnummer / identification number:										LI-TH-021-027																						
Zeitraum der Prüfung / test period:										2021-09-07 - 2021-09-09																						
Produktname / product name:										Hyginet																						
Chargenbezeichnung / batch number:										N/A																						
Einwirkzeit / contact time:										5 min																						
Produktkonzentration / concentration:										WSH																						
Tuch / tissue:										Hyginet																						
Belastung / interfering substance:										clean conditions																						
Prüftemperatur / test temperature:										20.0°C ± 2.0°C																						
Antrocknungszeit / drying time:										25:04 min																						
rel. Luftfeuchte / humidity:										68%																						
Neutralisationsmittel / neutralizer:										Neutraliser 1																						
Prüfkeim / teststrain:										Candida albicans ATCC 10231																						
Inkubationstemperatur / temperature of incubation:										36.0°C ± 2.0°C																						
Inkubationszeit / time of Incubation:										2 days																						
Product / field		dilution	CFU 1		CFU 2		V _{C1}	V _{C2}	log10 Na	log10 R	Validation																					
Test N _a																																
1	10 ⁰	188	141	162	147	329	309	3.20	2.98	not effective																						
	10 ⁻¹	11	21	20	20	32	40																									
	10 ⁻²	2	0	2	1	2	3																									
	10 ⁻³	0	0	0	0	0	0																									
	10 ⁻⁴	0	0	0	0	0	0																									
2	10 ⁰	10	5	9	7	15	16	1.89	-	☐ cfu field 2 to 4 ≤ 50 ?																						
	10 ⁻¹	0	2	0	4	2	4																									
	10 ⁻²	0	0	0	0	0	0																									
3	10 ⁰	10	4	5	7	14	12	1.81																								
	10 ⁻¹	1	0	0	0	1	0																									
	10 ⁻²	0	0	0	0	0	0																									
4	10 ⁰	11	7	10	7	18	17	1.94																								
	10 ⁻¹	0	1	1	2	1	3																									
	10 ⁻²	0	0	0	0	0	0																									
Water control (N _W)																																
1	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-																						
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A																								
2	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	N _W ≥ 10 cfu/25cm ² on fields 2 to 4 V _{NW} 2 to 4 #WERT! Valid? #WERT!																						
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A																								
3	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A																								
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A																								
4	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A																								
	10 ⁻¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A																								
drying control (D _{C0} / D _{Ct})																																
T _O	10 ⁻⁴	18	16	14	10	34	24	6.16												-	5.88 ≤ lg T _O ≤ 7.40											
	10 ⁻⁵	2	0	1	0	2	1		yes																							
T _X	10 ⁻⁴	19	12	16	14	31	30	6.18	-	5.88 ≤ lg T _X ≤ 7.40																						
	10 ⁻⁵	2	0	0	0	2	0			yes																						
Verification of the test																																
(N / N _V)																																
(N)	10 ⁻⁶	85	76	82	84	161	166	8.21	-	8.17 ≤ lg N ≤ 8.70																						
	10 ⁻⁷	14	4	7	10	18	17			yes																						
N _V	10 ⁻¹	25	31	26	28	56	54	2.74	-	300 ≤ \bar{X} of N _{V0} ≤ 1600																						
										yes																						
B																																
B	10 ⁰	18	29	23	25	47	48	1.68	-	\bar{X} of B is ≥ 0.5 x \bar{X} of N _{V0}																						
										yes																						
C																																
C	10 ⁰	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	\bar{X} of C is ≥ 0.5 x \bar{X} of N _{V0}																						
										#WERT!																						

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Summary of the 4-field test results

Test strain	Con- centra- tion	Con- tact time [min]	Interfering substance	T _x decimal log (lg)	Field 1 RC-1 decimal log (lg)	Field 1 RF-1 decimal log (lg)	Field 2 AF-2 decimal log (lg)	Field 3 AF-3 decimal log (lg)	Field 4 AF-4 decimal log (lg)	AF-2-4 ± SD decimal log (lg)
<i>S. aureus</i> , ATCC 6538	WSH	5	clean conditions	7.83	5.82	2.01 (99.02%)	4.90	4.73	4.45	4.80 ± 0.09 193.250 bacteria
<i>E. hirae</i> , ATCC 10541	WSH	5	clean conditions	7.87	5.87	2.00 (99.00%)	4.87	4.87	4.39	4.71 ± 0.28 173.550 bacteria
<i>P. aeruginosa</i> , ATCC 15442	WSH	5	clean conditions	7.38	4.79	2.59 (99.74%)	3.76	3.48	3.44	3.59 ± 0.23 12.950 bacteria
<i>C.albicans</i> , ATCC 10231	WSH	5	clean conditions	6.18	3.20	2.98 (99.90%)	1.89	1.81	1.94	1.88 ± 0.07 230 yeasts

T_x CFU/25 cm²
 RC residual contaminants in decimal log (lg)
 RF reduction factor in decimal log (lg)
 AF accumulation factor in decimal log (lg)
 SD standard deviation

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Summary of cleaning performance in percentage (%)

Modified 4-field test	Test strain	Reduction in %
Bacteria	<i>Enterococcus hirae</i> , ATCC 10541	99.00%
	<i>Staphylococcus aureus</i> , ATCC 6538	99.02%
	<i>Pseudomonas aeruginosa</i> , ATCC 15442	99.74%
Yeasts	<i>Candida albicans</i> , ATCC 10231	99.90%

Conclusion:

After the cleaning procedure with the tested cleaning wipe soaked with water standardized hardness (WSH), a removal of >99% microorganisms could be achieved.

16.09.2021

Date



PD Dr. rer. nat. Maren Eggers
Management applied and technical hygiene

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Archiving: One copy of the report is archived together with the raw data in the contractor's archive.

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