



Supplementary materials: Survival of microorganisms on nonwovens used for the construction of filtering facepiece respirators

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Table S1. Number of microorganisms on the nonwovens depending on the incubation time.

Time, h	Number of Microorganisms Depending on Incubation Time and Nonwoven Type, CFU/ml				
	A	B	C	D	E
<i>E. coli</i>					
0	6.2×10 ⁵ ±2.1×10 ⁵	6.7×10 ⁵ ±1.4×10 ⁵	6.3×10 ⁵ ±1.3×10 ⁵	5.1×10 ⁵ ±1.1×10 ⁵	6.4×10 ⁵ ±1.2×10 ⁵
4	3.4×10 ⁶ ±6.3×10 ⁵	2.8×10 ⁶ ±6.3×10 ⁵	2.6×10 ⁶ ±9.8×10 ⁵	2.5×10 ⁶ ±2.1×10 ⁵	2.6×10 ⁶ ±4.1×10 ⁵
8	6.2×10 ⁶ ±3.7×10 ⁵	6.4×10 ⁶ ±8.1×10 ⁵	5.3×10 ⁶ ±7.2×10 ⁵	5.2×10 ⁶ ±7.9×10 ⁵	5.3×10 ⁶ ±4.7×10 ⁵
24	7.0×10 ⁶ ±7.4×10 ⁵	7.5×10 ⁶ ±1.1×10 ⁶	5.9×10 ⁶ ±4.9×10 ⁵	6.18×10 ⁶ ±1.6×10 ⁶	5.8×10 ⁶ ±1.1×10 ⁶
48	4.7×10 ⁶ ±8.6×10 ⁵	4.8×10 ⁶ ±1.2×10 ⁶	3.9×10 ⁶ ±8.3×10 ⁵	3.6×10 ⁶ ±3.8×10 ⁵	3.9×10 ⁶ ±9.1×10 ⁵
72	4.8×10 ⁶ ±7.8×10 ⁵	4.5×10 ⁶ ±7.8×10 ⁵	3.6×10 ⁶ ±3.8×10 ⁵	2.9×10 ⁶ ±1.5×10 ⁶	2.5×10 ⁶ ±5.7×10 ⁵
96	3.4×10 ⁶ ±3.1×10 ⁵	3.6×10 ⁶ ±4.0×10 ⁵	3.6×10 ⁶ ±8.8×10 ⁵	2.8×10 ⁶ ±9.0×10 ⁵	2.5×10 ⁶ ±3.7×10 ⁵
<i>S. aureus</i>					
0	5.8×10 ⁵ ±2.2×10 ⁵	5.3×10 ⁵ ±1.5×10 ⁵	5.4×10 ⁵ ±1.4×10 ⁵	5.7×10 ⁵ ±1.4×10 ⁵	5.8×10 ⁵ ±1.8×10 ⁵
4	6.9×10 ⁵ ±2.0×10 ⁵	7.1×10 ⁵ ±2.6×10 ⁴	7.3×10 ⁵ ±1.7×10 ⁵	6.8×10 ⁵ ±1.7×10 ⁵	7.6×10 ⁵ ±1.8×10 ⁵
8	2.4×10 ⁶ ±1.3×10 ⁶	2.2×10 ⁶ ±6.2×10 ⁵	1.6×10 ⁶ ±5.0×10 ⁵	1.6×10 ⁶ ±3.2×10 ⁵	1.0×10 ⁶ ±7.1×10 ⁵
24	2.3×10 ⁶ ±2.8×10 ⁵	2.1×10 ⁶ ±3.9×10 ⁵	2.2×10 ⁶ ±2.1×10 ⁵	2.5×10 ⁶ ±6.3×10 ⁵	1.6×10 ⁶ ±2.9×10 ⁵
48	2.3×10 ⁶ ±6.1×10 ⁵	2.0×10 ⁶ ±3.6×10 ⁵	2.1×10 ⁶ ±2.6×10 ⁵	2.2×10 ⁶ ±2.6×10 ⁵	1.8×10 ⁶ ±5.0×10 ⁵
72	2.1×10 ⁶ ±4.47×10 ⁵	1.8×10 ⁶ ±4.1×10 ⁵	1.8×10 ⁶ ±4.5×10 ⁵	2.2×10 ⁶ ±5.4×10 ⁵	1.7×10 ⁶ ±3.9×10 ⁵
96	1.9×10 ⁶ ±3.4×10 ⁵	1.7×10 ⁶ ±3.3×10 ⁵	1.6×10 ⁶ ±2.3×10 ⁵	1.6×10 ⁶ ±2.8×10 ⁵	1.5×10 ⁶ ±1.7×10 ⁵
<i>B. subtilis</i>					
0	2.0×10 ⁴ ±6.3×10 ³	1.5×10 ⁴ ±5.8×10 ³	1.5×10 ⁴ ±4.6×10 ³	1.7×10 ⁴ ±3.7×10 ³	1.5×10 ⁴ ±2.2×10 ³
4	2.0×10 ⁴ ±3.77×10 ³	1.8×10 ⁴ ±4.0×10 ³	1.9×10 ⁴ ±5.8×10 ³	1.8×10 ⁴ ±5.7×10 ³	1.9×10 ⁴ ±5.0×10 ³
8	2.9×10 ⁴ ±4.1×10 ³	2.9×10 ⁴ ±9.0×10 ³	2.9×10 ⁴ ±1.8×10 ⁴	2.9×10 ⁴ ±3.6×10 ³	2.9×10 ⁴ ±6.2×10 ³
24	7.0×10 ⁵ ±6.7×10 ⁴	6.8×10 ⁵ ±5.1×10 ⁴	6.6×10 ⁵ ±5.5×10 ⁴	6.5×10 ⁵ ±7.5×10 ⁴	6.6×10 ⁵ ±7.4×10 ⁴
48	1.3×10 ⁶ ±1.5×10 ⁵	1.1×10 ⁶ ±1.7×10 ⁵	1.2×10 ⁶ ±1.0×10 ⁵	1.3×10 ⁶ ±1.7×10 ⁵	1.3×10 ⁶ ±3.8×10 ⁵
72	1.3×10 ⁶ ±2.6×10 ⁵	8.0×10 ⁵ ±8.7×10 ⁴	1.4×10 ⁶ ±4.3×10 ⁵	1.4×10 ⁶ ±6.7×10 ⁴	1.4×10 ⁶ ±3.8×10 ⁵
96	7.8×10 ⁵ ±1.6×10 ⁵	5.9×10 ⁵ ±9.5×10 ⁴	7.5×10 ⁵ ±1.1×10 ⁵	7.9×10 ⁵ ±7.6×10 ⁴	7.1×10 ⁵ ±2.2×10 ⁵
<i>C. albicans</i>					
0	3.7×10 ⁴ ±4.8×10 ³	3.4×10 ⁴ ±8.2×10 ³	3.9×10 ⁴ ±8.8×10 ³	3.6×10 ⁴ ±5.9×10 ³	3.0×10 ⁴ ±8.3×10 ³
4	4.3×10 ⁴ ±7.3×10 ³	3.6×10 ⁴ ±6.7×10 ³	4.2×10 ⁴ ±1.1×10 ⁴	3.7×10 ⁴ ±1.8×10 ⁴	3.2×10 ⁴ ±6.4×10 ³
8	4.3×10 ⁴ ±4.3×10 ³	3.5×10 ⁴ ±1.1×10 ⁴	4.3×10 ⁴ ±1.2×10 ⁴	3.8×10 ⁴ ±1.6×10 ⁴	3.4×10 ⁴ ±5.4×10 ³
24	4.6×10 ⁴ ±5.5×10 ³	3.4×10 ⁴ ±5.8×10 ³	4.5×10 ⁴ ±9.1×10 ³	4.0×10 ⁴ ±7.3×10 ³	4.0×10 ⁴ ±9.9×10 ³
48	4.9×10 ⁴ ±3.7×10 ³	2.8×10 ⁴ ±5.9×10 ³	4.8×10 ⁴ ±1.1×10 ⁴	4.3×10 ⁴ ±7.3×10 ³	4.2×10 ⁴ ±8.2×10 ³
72	5.5×10 ⁴ ±3.0×10 ³	2.0×10 ⁴ ±3.0×10 ³	5.5×10 ⁴ ±7.9×10 ³	4.9×10 ⁴ ±6.5×10 ³	4.9×10 ⁴ ±5.1×10 ³
96	5.4×10 ⁴ ±6.4×10 ³	1.4×10 ⁴ ±4.0×10 ³	5.3×10 ⁴ ±7.4×10 ³	4.74×10 ⁴ ±7.3×10 ³	4.5×10 ⁴ ±2.0×10 ⁴
<i>A. niger</i>					
0	1.8×10 ⁴ ±4.8×10 ³	1.8×10 ⁴ ±6.4×10 ³	1.8×10 ⁴ ±5.5×10 ³	1.7×10 ⁴ ±9.1×10 ³	1.8×10 ⁴ ±6.8×10 ³

	$2.2 \times 10^{4a} \pm 8.3 \times 10^3$	$1.9 \times 10^{4a} \pm 1.8 \times 10^3$	$1.9 \times 10^{4a} \pm 5.2 \times 10^3$	$1.9 \times 10^{4a} \pm 7.0 \times 10^3$	$1.9 \times 10^{4a} \pm 1.3 \times 10^4$
4	$2.6 \times 10^{4\#a} \pm 9.6 \times 10^3$	$2.2 \times 10^{4a} \pm 6.6 \times 10^3$	$1.9 \times 10^{4a} \pm 3.0 \times 10^3$	$2.1 \times 10^{4a} \pm 5.7 \times 10^3$	$1.9 \times 10^{4a} \pm 2.7 \times 10^3$
8	$9.0 \times 10^{3\#a} \pm 8.3 \times 10^3$	$5.6 \times 10^{3\#a} \pm 4.8 \times 10^3$	$6.7 \times 10^{3\#a} \pm 2.8 \times 10^3$	$5.4 \times 10^{3\#a} \pm 3.6 \times 10^3$	$5.0 \times 10^{3\#a} \pm 4.1 \times 10^3$
24	$3.1 \times 10^{4\#a} \pm 5.6 \times 10^3$	$2.4 \times 10^{4\#a} \pm 8.6 \times 10^3$	$2.6 \times 10^{4\#a} \pm 6.5 \times 10^3$	$2.9 \times 10^{4\#a} \pm 6.4 \times 10^3$	$2.6 \times 10^{4\#a} \pm 8.7 \times 10^3$
48	$5.8 \times 10^{4\#a} \pm 1.1 \times 10^4$	$5.8 \times 10^{4\#a} \pm 8.0 \times 10^3$	$5.4 \times 10^{4\#a} \pm 1.7 \times 10^4$	$5.5 \times 10^{4\#a} \pm 6.2 \times 10^3$	$5.8 \times 10^{4\#a} \pm 6.3 \times 10^3$
72	$6.4 \times 10^{4\#a} \pm 1.4 \times 10^4$	$6.3 \times 10^{4\#a} \pm 1.0 \times 10^4$	$6.3 \times 10^{4\#a} \pm 1.4 \times 10^4$	$6.6 \times 10^{4\#a} \pm 9.8 \times 10^3$	$6.6 \times 10^{4\#a} \pm 1.7 \times 10^4$
96					

* - statistically significant differences between microorganism number after subsequent incubation times (ANOVA, $\alpha=0.05$, Tukey, $\alpha=0.05$); # - statistically significant differences between microorganism number after a given incubation time and after $t = 0$ h (ANOVA, $\alpha=0.05$, Tukey, $\alpha=0.05$); ^a, ^b, ^c, ^d - statistically significant differences between microorganism number on different nonwovens (ANOVA, $\alpha = 0.05$, Tukey, $\alpha = 0.05$). ANOVA: one-way analysis of variance.