



**STERISAFE PRO:
Overview of 3rd-party efficacy tests**

Date: June 2020

Microorganism	Strain	Log reduction	Conditions (disinfection time, [O ₃], %RH)	Efficacy claimed	Report Reference	Date	NF T 72-281
Bacteria (≥ 5.0)							
<i>Staphylococcus aureus</i>	ATCC 6538	≥ 6.80 ±0.17	150 min, 80 ppm, 79 %RH	YES	DTI-789802.1	23/02/2018	YES ^{1,2,3}
<i>Pseudomonas aeruginosa</i>	ATCC 15442	6.99 ±0.21	60 min, 80 ppm, 79 %RH	YES	DTI-764771	25/09/2017	YES ^{1,2,3}
<i>Enterococcus hirae</i>	ATCC 10541	2.97	150 min, 80 ppm, 79 %RH	NO	DTI-789802.2	22/02/2018	YES ^{1,2,3}
		6.01 ±0.08	360 min, 80 ppm, 85 %RH	YES	DTI-915533.1	20/04/2020	
<i>Escherichia coli</i>	ATCC 10536	≥ 6.22	60 min, 80 ppm, 86 %RH	YES	DTI-638325	31/01/2015	YES ^{1,2,3}
<i>Listeria monocytogenes</i>	ATCC 15313	≥ 7.70	60 min, 80 ppm, 86 %RH	YES	DTI-638325	31/01/2015	
<i>Enterococcus faecium</i>	ATCC 6057	6.73 ±0.17	60 min, 80 ppm, 85 %RH	YES	DTI-764771	25/09/2017	
<i>Proteus mirabilis</i>	ATCC 14153	≥ 5.8	60 min, 80 ppm, 84 %RH	YES	DTI-764771	25/09/2017	
Vancomycin-resistant bacteria (VRE): mixture of <i>E. faecium</i> and <i>E. faecalis</i>	DSM 13590 (<i>E. faecium</i>); DSM 12956 (<i>E. faecalis</i>)	5.51 ±0.31	30 min, 80 ppm, 87% RH	INCONSISTENT RESULTS	DTI-673049	31/03/2016	
		3.48 ±0.29	60 min, 80 ppm, 89 %RH		DTI-673049	31/03/2016	
		4.81 ±0.29	90 min, 80 ppm, 78 %RH		DTI-694292	18/05/2016	
		2.80 ±0.47	90 min, 72 ppm, 89 %RH		DTI-694292	18/05/2016	
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	SCCmec I	4.66 ±0.79	30 min, 80 ppm, 87 %RH	YES	DTI-673049	31/03/2016	
		4.81 ±0.29	90 min, 80 ppm, 89 %RH	YES	DTI-694292	18/05/2016	
		2.80 ±0.47	90 min, 72 ppm, 78 %RH	NO	DTI-694292	18/05/2016	
Yeasts/fungi (≥ 4.0)							
<i>Candida albicans</i>	ATCC 10231	3.65	60 min, 80 ppm, 86 %RH	NO	DTI-638325	31/01/2015	YES ^{1,2,3} (for yeasticidal and fungicidal activities)
		4.17	150 min, 80 ppm, 86 %RH	YES			
<i>Aspergillus brasiliensis</i>	ATCC 16404	1.84 ±0.11 2.44	150 min, 80 ppm, 85%RH 360 min, 80 ppm, 85%RH	NO	DTI-764771 DTI-915533.2	25/09/2017 20/04/2020	YES ^{1,2,3} (for fungicidal activity only)
Bacterial spores (≥ 3.0)							
<i>Bacillus subtilis</i> (spores)	ATCC 6633	0.46 ±0.04	360 min, 80 ppm, 83 %RH	NO	DTI-917028.1	27/05/2020	YES ^{1,2,3}
<i>Clostridium difficile</i> (spores)	NCTC 13366	2.7	150 min, 77 ppm, 81 %RH	NO	BP-L17/0136.2	02/05/2017	
Viruses (≥ 4.0)							
Adenovirus, type 5	Strain 75	≥ 4.25	70 min, 62.5 ppm, 75%RH	YES	BP-I16L0395A	29/06/2016	YES ¹
Murine norovirus (MNV)	MNV	≥ 4.96	435 min, 79 ppm, 85 %RH	YES	BP-L18/0070M.1	05/03/2018	YES ^{1,3}
Modified Vaccinia virus Ankara (MVA)	MVA	1.97 ±0.18	31 min, 67.5 ppm, 64 %RH	YES	BP-I16L0395MV	29/06/2016	
		≥ 4.68	70 min, 62.5 ppm, 75 %RH				
Polyomavirus SV40	Strain 777	≥ 4.77	435 min, 79 ppm, 85 %RH	YES	BP-L18/0070S.1	05/03/2018	
Mycobacteria (≥ 4.0)							
<i>Mycobacterium terrae</i>	ATCC 15755	4.42 ±0.12	360 min, 80 ppm, 85 %RH	YES	DTI-917028.2	20/04/2020	YES ¹

NOTE: The exponents [1, 2 and 3] under the column "NF T 72-281" refer to the activity sector required. 1: human health; 2: Veterinary; 3: Agronomy, industry, others