

	Test norm	Test type	Organism	Log reduction required	Log reduction achieved	Laboratory	Clean or dirty	Contact time	LC Std 400-200 PPM	LC Pluss 650-400 PPM
Sporicidal	EN 13697:2001 (Phase 2, Step 2)	Quantitative surface test	<i>Bacillus subtilis</i> ATCC 6633	4 log <sub>10</sub>	>4 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	2 min		✓
	EN 13697:2001 (Phase 2, Step 2)	Quantitative surface test	<i>Clostridium difficile</i> <sup>1</sup> UK 027	>3 log <sub>10</sub>	>3 log <sub>10</sub>		Clean	2 min		✓
	EN 13704:2002 (Phase 2, Step 1)	Quantitative suspension test	<i>Clostridium difficile</i> <sup>1</sup> UK 027	3 log <sub>10</sub>	>3 log <sub>10</sub>		Clean	5 min	✓	✓
			<i>Clostridium difficile</i> <sup>2</sup> UK 027		>3.3 log <sub>10</sub>		Dirty	5 min	✓	✓
			<i>Clostridium difficile</i> <sup>3,4</sup> UK 023		>6.1-7.5 log <sub>10</sub>	Clean	5-10 min	✓	✓	
	EN 17126:2018 (Phase 2, Step 1)	Quantitative suspension test	<i>Bacillus subtilis</i> <i>Bacillus cereus</i> <i>Clostridium difficile</i>	>4 log <sub>10</sub>	>5.02 log <sub>10</sub> >5.21 log <sub>10</sub> >5.21 log <sub>10</sub>	MSL Solution, UK	Clean	2-5 min <sup>6</sup>	✓	✓
	EN 17126:2018 (Phase 2, Step 1)	Quantitative suspension test	<i>Bacillus subtilis</i>	>4 log <sub>10</sub>	>4.08 log <sub>10</sub>	MSL Solution, UK	Dirty	2 min	✓ <sup>6</sup>	✓
<i>Bacillus cereus</i>			>5.36 log <sub>10</sub>		2 min			✓ <sup>6</sup>	✓	
<i>Clostridium difficile</i>			>5.43 log <sub>10</sub>		2 min			✓ <sup>6</sup>	✓	
Mycobactericidal	EN 14348:2005 (Phase 2, Step 1)	Quantitative suspension test	<i>Mycobacterium terrae</i> ATCC 15755	4 log <sub>10</sub>	>4 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
			<i>Mycobacterium avium</i> ATCC 15769						✓	✓
EN 14563:2009 (Phase 2, Step 2)	Quantitative Carrier test	<i>Mycobacterium terrae</i> ATCC 15755	4 log <sub>10</sub>	>4 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓	
		<i>Mycobacterium avium</i> ATCC 15769						✓	✓	
Virucidal	EN 14476:2013 (Phase 2, Step 1)	Quantitative suspension test	<i>Poliovirus</i> Type 1, LSc-2aba	4 log <sub>10</sub>	>5 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
			<i>Adenovirus</i> Type 5, strain Adenoid 75, ATCC VR-5		>6 log <sub>10</sub>				✓	✓
			<i>Murine Norovirus</i> Strain S99		>5 log <sub>10</sub>				✓	✓
	EN 14675:2015 (Phase 2, Step 1)	Quantitative suspension test	<b>IPN 107TClD50</b> Salmonid fish viral infection	4 log <sub>10</sub>	>4 log <sub>10</sub>	Norwegian Veterinary Institute, Norway	Clean	5 min	✓	✓
	EN 14675:2015 (Phase 2, Step 1)	Quantitative Carrier test	<i>Avian influenza virus</i> , (H10N7)	4 log <sub>10</sub>	>4.2 log <sub>10</sub>	SVA	clean	1 min		✓
	EN 14349:2007 (Phase 2, Step 2)	Quantitative Carrier test	<b>PPV</b> , strain 893/76	4 log <sub>10</sub>	>5.3 log <sub>10</sub>	SVA	Clean	5 min	✓	✓
	EN 14476:2015	Suspension test	<i>Bovine coronavirus</i> (BCoV)	4 log <sub>10</sub>	>5.5 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	30 sec	50 ppm	
EN 14476:2013+A2:2019	Suspension test	<i>Feline coronavirus</i> , Strain Munich	4 log <sub>10</sub>	>4.25 log <sub>10</sub>	MSL Solution, UK	Clean	1 min	✓		
Fungicidal	EN 13624:2013 (Phase 2, Step 1)	Quantitative suspension test	<i>Candida albicans</i> ATCC 10231	4 log <sub>10</sub>	>4 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
			<i>Aspergillus brasiliensis</i> ATCC 16404						✓	✓
	EN 14562:2006 (Phase 2, Step 2)	Quantitative Carrier test	<i>Aspergillus brasiliensis</i> (niger) / black mold ATCC 16404	4 log <sub>10</sub>	>4 log <sub>10</sub>	Mikrolab Stockholm AB	Clean/Dirty	5 min	✓	✓
	EN 14562:2006 (Phase 2, Step 2)	Quantitative Carrier test	<i>Candida albicans</i> ATCC 10231	4 log <sub>10</sub>	>4 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
			<i>Aspergillus brasiliensis</i> (niger) / black mold ATCC 16404						4 log <sub>10</sub>	>4 log <sub>10</sub>
EN 16615:2015 (Phase 2, step 2)	4-Field test	<i>Candida albicans</i> ATCC 10231	>4 log <sub>10</sub>	>5 log <sub>10</sub>	RISE Research Institutes of Sweden	Clean	2 min	✓	✓	
Gram-Negative Bacteria	EN 13727:2014 (Phase 2, Step 1)	Quantitative suspension test	<i>Pseudomonas aeruginosa</i> ATCC 15442	5 log <sub>10</sub>	>5.11 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
	EN 14561:2006 (Phase 2, Step 2)	Carrier test	<i>Pseudomonas aeruginosa</i> ATCC 15442	5 log <sub>10</sub>	>5.11 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
	EN 13727:2015 (Phase 2, Step 2)	Quantitative suspension test	<i>Pseudomonas aeruginosa</i> ATCC 15442	5 log <sub>10</sub>	>5 log <sub>10</sub>	Food Safety Laboratory, Chung-Ang University, Seoul, South Korea	Dirty	2 min	✓	✓
	EN 13727:2015 (Phase 2, Step 2)	Quantitative suspension test <sup>5</sup>	<i>Escherichia coli</i> ATCC 25922	5 log <sub>10</sub>	>5.76 log <sub>10</sub>	Internal test at Örebro University Hospital, Sweden	Clean/Dirty	2 min	✓	✓
	EN 13727:2015 (Phase 2, Step 2)	Quantitative suspension test	<i>Campylobacter jejuni</i> ATCC 33560	5 log <sub>10</sub>	>5.76 log <sub>10</sub>	Internal test at Örebro University Hospital, Sweden	Clean/Dirty	2 min	✓	✓

	Test norm	Test type	Organism	Log reduction required	Log reduction achieved	Laboratory	Clean or dirty	Contact time	LC Std 400-200 PPM	LC Plus 650-400 PPM
Gram-Negative Bacteria	EN 13727:2015 (Phase 2, Step 2)	Quantitative suspension test	Salmonella typhimurium ATCC 14028	5 log <sub>10</sub>	>5.76 log <sub>10</sub>	Internal test at Örebro University Hospital, Sweden	Clean	2 min	✓	✓
			Dirty	2 min	✓		✓			
			Legionella pneumophila ATCC 33152	5 log <sub>10</sub>	>5.76 log <sub>10</sub>		Clean	2 min	✓	✓
			Dirty	2 min	✓		✓			
	EN 14349:2012 (Phase 2, Step 2)	Quantitative suspension test	Aeromonas salmonicida ATCC 14174	5 log <sub>10</sub>	>5.76 log <sub>10</sub>	Internal test at Örebro University Hospital, Sweden	Clean	2 min	✓	✓
			Dirty		2 min		✓	✓		
			Yersinia ruckeri ATCC 29473		>5.76 log <sub>10</sub>		Clean	2 min	✓	✓
			Dirty		2 min		✓	✓		
	EN 13727:2015 (Phase 2, Step 2)	Quantitative suspension test	Klebsiella pneumoniae (ESBL) CCUG 54718	5 log <sub>10</sub>	> 5.76 log <sub>10</sub>	Internal test at Örebro University Hospital	Clean/Dirty	2 min	✓	✓
			Acinetobacter baumannii (Clinical strain)						✓	✓
EN 16615:2015 (Phase 2, step 2)	4-Field test	Pseudomonas aeruginosa ATCC 15442	>5 log <sub>10</sub>	>5 log <sub>10</sub>	RISE Research Institutes of Sweden	Clean	2 min	✓	✓	
Gram-Positive Bacteria	EN 13727:2014 (Phase 2, Step 1)	Suspension test	Staphylococcus aureus ATCC 6538	5 log <sub>10</sub>	>5 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
	EN 13727:2015 (Phase 2, Step 2)	Suspension test	Staphylococcus aureus ATCC 6538	5 log <sub>10</sub>	>5 log <sub>10</sub>	Food Safety Laboratory, Chung-Ang University, Seoul, South Korea	Dirty	2 min	✓	✓
	EN 14561:2006 (Phase 2, Step 2)	Carrier t test	Staphylococcus aureus ATCC 6538	5 log <sub>10</sub>	>5 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
	EN 13727:2014 (Phase 2, Step 1)	Quantitative suspension test	Enterococcus hirae ATCC 10541	5 log <sub>10</sub>	>5.11 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
	EN 14561:2006 (Phase 2, Step 2)	Quantitative Carrier test	Enterococcus hirae ATCC 10541	5 log <sub>10</sub>	>5.11 log <sub>10</sub>	Dr. Brill + Partner GMBH Laboratory, Germany	Clean	1 min	✓	✓
	EN 13727: 2015 (Phase 2, Step 2)	Quantitative suspension test	Enterococcus hirae ATCC 10541	5 log <sub>10</sub>	>5 log <sub>10</sub>	Food Safety Laboratory, Chung-Ang University, Seoul, South Korea	Dirty	2 min	✓	✓
	EN 13727:2015 (Phase 2, Step 2)	Quantitative suspension test	Listeria monocytogenes CCUG 51681	5 log <sub>10</sub>	>5.76 log <sub>10</sub>	Internal test at Örebro University Hospital	Clean/dirty	2 min	✓	✓
			Streptococcus equi CCUG 37782				5 log <sub>10</sub>	>5 log <sub>10</sub>	Internal test at Örebro University Hospital	Clean
	EN 14349:2012 (Phase 2, Step 2)	Quantitative suspension test	Carnobacterium piscicola ATCC 3586	4 log <sub>10</sub>	>5 log <sub>10</sub>	Internal test at Örebro University Hospital	Clean	2 min	✓	✓
							Dirty	2 min	✓	✓
	EN 16615:2015 (Phase 2, step 2)	4-Field test	Staphylococcus aureus ATCC 6538	>5 log <sub>10</sub>	>5 log <sub>10</sub>	RISE Research Institutes of Sweden	Clean	2 min	✓	✓
			Enterococcus hirae ATCC 10541							
	EN 13727:2015 (Phase 2, Step 2)	Quantitative suspension test	Enterococcus faecium (VRE) CCUG 56431	5 log <sub>10</sub>	> 5.76 log <sub>10</sub>	Internal test at Örebro University Hospital	Clean/Dirty	2 min	✓	✓
Parasites	N/A	In vitro sporulation method for Coccidia	Coccidia spp		N/A	VidiLab, Sweden	Dirty	N/A		✓
	Salmon lice	In vitro	Lepeophtheirus salmonis	N/A	N/A	ILAB, Norway	N/A	1 min	100 ppm	✓
	N/A	In Vitro	Gyrodactylus salaris	N/A	N/A	Norwegian Veterinary Institute, Norway	N/A	10 sec / 1 min	200 / 100 ppm	✓
	N/A	In Vitro	Pinworms	N/A	N/A	VidiLab, Sweden	N/A	N/A		1000 ppm

<sup>1</sup>Initial bacterial spores 10<sup>6</sup>

<sup>2</sup>Initial bacterial spores 10<sup>8</sup>

<sup>3</sup>Initial bacterial spores 10<sup>8</sup> and different bacteria strain

<sup>4</sup>Initial bacterial spores 10<sup>8</sup> and 200 PPM

<sup>5</sup>Bactericidal effect (Clean condition for 2 minutes and Dirty condition for 5 minutes).

<sup>6</sup>These bacteria: Bacillus subtilis, Bacillus cereus and Clostridium difficile were tested for 400 PPM for 2 minutes.

### Third party test partners



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