

## A summary of the Bacterial Efficacy of Virkon S

Organism	Strain( where stated)	Ref. No	Country	Comments	Pass Dilution(s)/ Concentration(s)
<i>Actinobacillus pleuropneumoniae</i>	not specified	29	England	laboratory own	1:200
<i>Actinobacillus pleuropneumoniae</i>	ATCC 43336	144	USA	AOAC	1:100
<i>Actinobacillus pleuropneumoniae</i>	field isolate	35	Japan	laboratory own	1:1000
<i>Aeromonas hydrophila</i>	not specified	41	Finland	laboratory own	1:200
<i>Aeromonas salmonicida</i>	Subsp achromogenes	41	Finland	laboratory own	1:200
<i>Aeromonas salmonicida</i>	Subsp salmonicida	41	Finland	laboratory own	1:100
<i>Aeromonas salmonicida</i>	Subsp achromogenes	88	Sweden	laboratory own	1:100
<i>Aeromonas salmonicida</i>	Subsp salmonicida ATCC 14174	191	Norway	laboratory own	1:200
<i>Bacillus cereus</i>	ATCC 14579	122	USA	laboratory own	1:100
<i>Bacillus cereus</i>	ATCC 14579	157	USA	laboratory own	1:100
<i>Bacillus subtilis</i>	ATCC 19659	130	USA	laboratory own	1:100
<i>Bacillus subtilis</i>	NCIMB 8058	130	USA	laboratory own	1:100
<i>Bordetella avium</i>	not specified	70	USA	AOAC	1:100
<i>Bordetella bronchiseptica</i>	not specified	29	England	laboratory own	1:150
<i>Bordetella bronchiseptica</i>	not specified	70	USA	AOAC	1:100
<i>Brachyspira hyodysenteriae</i>	2 strains; ATCC 27164 + field strain	219	Czech Republic	laboratory own	>1:3333
<i>Brachyspira pilosicoli</i>	ATCC 51139	219	Czech Republic	laboratory own	>1:3333
<i>Brucella abortus</i>	ATCC 4315	126	USA	laboratory own	1:100
<i>Campylobacter coli</i>	Strain 169	23	Sweden	laboratory own	1:100
<i>Campylobacter jejuni</i>	Strain 167	23	Sweden	laboratory own	1:100
<i>Campylobacter jejuni</i>	ATCC 29428	145	USA	laboratory own	1:100
<i>Campylobacter jejuni</i>	type 365	227	Holland	EN1656	1:200
<i>Campylobacter pyloridis*</i>	GBL775	151	USA	laboratory own	1:100
<i>Chlamydia psittaci</i>	VR-125 (Strain 6BC)	133	USA	laboratory own	1:100
<i>Clavibacter michigonensis</i> /subsp. <i>Sepeclovicus</i>	subsp. michiganensis	167	Canada	laboratory own	1:500
<i>Clavibacter michigonensis</i>	subsp. sepedonicus	42	Finland	laboratory own	1:100
<i>Clostridium perfringens</i>	ATCC13124	129	USA	laboratory own	1:100
<i>Clostridium perfringens</i>	ATCC13124	169	USA	laboratory own	1:100
<i>Coxiella burnetii</i>	Nine mile strain RS493	241	Holland	EN1656	1:100 / 1:50
<i>Dermatophilus congolensis</i>	ATCC 14637	132	USA	AOAC	1:100
<i>Enterococcus faecium</i>	ATCC 10541	158	England	EST	1:100
<i>Enterococcus hirae</i>	CIP 58.55	148	France	laboratory own	1:200
<i>Enterococcus hirae</i>	CIP 58.55	149	France	laboratory own	1:100
<i>Enterococcus hirae</i>	ATCC 10541	220	Italy	EN1656	1:100
<i>Enterococcus hirae</i>	Eh/FH64/a	194	UK	EN1276	1:100
<i>Enterococcus hirae</i>	CIP 58.55	196	France	EN1276	1:200
<i>Erwinia amylovora</i>	ICMP 9148	77	New Zealand	laboratory own	1:250
<i>Erysipelothrix rhusiopathiae</i>	not specified	70	USA	laboratory own	1:100
<i>Erysipelothrix rhusiopathiae</i>	field isolate	35	Japan	laboratory own	1:1000
<i>Escherichia coli</i>	Strain NCTC 8196	45	Sweden	laboratory own	1:100
<i>Escherichia coli</i>	Strain ATCC 11229	78	England	laboratory own	1:200
<i>Escherichia coli</i>	ATCC 11229	117	USA	AOAC	1:100
<i>Escherichia coli</i>	ATCC 11229	118	USA	AOAC	1:200
<i>Escherichia coli</i>	ATCC 11229	130	USA	AOAC	1:100
<i>Escherichia coli</i>	NCIMB 9517	130	USA	AOAC	1:100
<i>Escherichia coli</i>	CIP 54.127	148	France	laboratory own	1:200
<i>Escherichia coli</i>	CIP 54.127	149	France	laboratory own	1:100
<i>Escherichia coli</i>	GBL 642	151	USA	AOAC	1:100
<i>Escherichia coli</i>	Strain O157	164	England	laboratory own	1:100
<i>Escherichia coli</i>	not specified	177	Canada	laboratory own	1:100
<i>Escherichia coli</i>	EcFH/64/a	194	UK	EN1276	1:100
<i>Escherichia coli</i>	strain O157	194	UK	EN1276	1:100
<i>Escherichia coli</i>	strain CIP 54.127	196	France	EN1276	1:200
<i>Escherichia coli</i>	Bacteriophage T2 with E coli B	198	France	laboratory own	1:1000
<i>Escherichia coli</i>	Bacteriophage MS 2 with E coli HfrH	198	France	laboratory own	1:500
<i>Escherichia coli</i>	Bacteriophage OX 174 with E coli ATCC	198	France	laboratory own	1:2000
<i>Escherichia coli</i>	ATCC 11229	202	USA	AOAC	1:100
<i>Escherichia coli</i>	field isolate	35	Japan	laboratory own	1:1000
<i>Haemophilus somnus</i>	not specified	70	USA	AOAC	1:100

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<i>Klebsiella pneumoniae</i>	GBL 132	151	USA	AOAC	1:100
<i>Klebsiella pneumoniae</i>	ATCC 4352	212	USA	AOAC	1:100
<i>Lawsonia intracellularis</i>	2 strains	163	Scotland	laboratory own	1:100
<i>Lawsonia intracellularis</i>	field isolate	245	Australia	laboratory own	1:100
<i>Legionella pneumophila</i>	NCTC 11192	32	England	laboratory own	1:5000
<i>Listeria monocytogenes</i>	not specified	70	USA	AOAC	1:100
<i>Listeria monocytogenes</i>	lux AD recombinant	120	England	laboratory own	1:100
<i>Listeria monocytogenes</i>	lux AD recombinant	120	England	laboratory own	1:1400
<i>Listeria monocytogenes</i>	ATCC 19117	190	USA	AOAC	1:100
<i>Listeria monocytogenes</i>	LmFH66/a	194	UK	laboratory own	1:100
<i>Moraxella bovis</i>		70	USA	AOAC	1:100
<i>Mycoplasma gallisepticum</i>	Strain 56	4	England	laboratory own	1:50
<i>Mycoplasma gallisepticum</i>	not specified	49	USA	laboratory own	1:100
<i>Mycoplasma hyorhinis</i>	not specified	29	England	laboratory own	1:800
<i>Mycoplasma mycoides</i>	3 strains B102 strain Afade and NCTC 10	186	UK	laboratory own	1:200
<i>Mycoplasma mycoides</i>	3 strains (Portugal B103) Africa (strain Afade) NCTC (10114)	189	UK	laboratory own	1:200
<i>Ornithobacterium rhinotracheale</i>	not specified	177	Canada	laboratory own	1:100
<i>Pasteurella haemolytica</i>	not specified	70	USA	AOAC	1:100
<i>Pasteurella multocida</i>	Strain CB169	24	England	laboratory own	1:150
<i>Pasteurella multocida</i>	ATCC 12947	125	USA	AOAC	1:100
<i>Pasteurella multocida</i>	not specified	177	Canada	laboratory own	1:100
<i>Pasteurella multocida</i>	field isolate	35	Japan	laboratory own	1:1000
<i>Proteus mirabilis</i>	ATCC 14153	158	England	laboratory own	1:100
<i>Proteus vulgaris</i>	ATCC 13315	220	Italy	EN1656	
<i>Proteus vulgaris</i>	Strain NCTC 4635	61	England	laboratory own	Powder
<i>Proteus vulgaris</i>	Strain NCTC 4635	67	England	laboratory own	Powder
<i>Providencia stuartii</i>	EMA1 source strain	246	Australia	laboratory own	1:200
<i>Pseudomonas aeruginosa</i>	Strain NCTC 6749	67	England	laboratory own	Powder
<i>Pseudomonas aeruginosa</i>	ATCC 15442	75	England	laboratory own	1:50
<i>Pseudomonas aeruginosa</i>	ATCC 15442	113	USA	laboratory own	1:200
<i>Pseudomonas aeruginosa</i>	ATCC 15442	114	USA	laboratory own	1:100
<i>Pseudomonas aeruginosa</i>	ATCC 15442	130	USA	laboratory own	1:100
<i>Pseudomonas aeruginosa</i>	NCIMB 10421	130	USA	laboratory own	1:100
<i>Pseudomonas aeruginosa</i>	CIP A22	148	France	laboratory own	1:200
<i>Pseudomonas aeruginosa</i>	CIP A22	149	France	laboratory own	1:100
<i>Pseudomonas aeruginosa</i>	ATCC15442	150	USA	laboratory own	1:100
<i>Pseudomonas aeruginosa</i>	NCIMB 10421	157	USA	laboratory own	1:100
<i>Pseudomonas aeruginosa</i>	Pa FH 72/a	194	UK	EN1276	1:100
<i>Pseudomonas aeruginosa</i>	CIP103467	196	France	EN1276	1:200
<i>Pseudomonas aeruginosa</i>	ATCC 15442	158	England	laboratory own	1:100
<i>Pseudomonas aeruginosa</i>	ATCC 15442	220	Italy	EN1656	1:100
<i>Pseudomonas aeruginosa</i>	field isolate	35	Japan	laboratory own	1:1000
<i>Pseudomonas aeruginosa</i>	ATCC 15442	257	USA	Biofilm study	1:100
<i>Pseudomonas anguilliseptica</i>		88	Sweden	laboratory own	1:100
<i>Renibacterium salmoninarum</i>	not specified	88	Sweden	laboratory own	1:100
<i>Salmonella 4,12,b</i>	not specified	65	Denmark	laboratory own	1:100
<i>Salmonella arizona</i>	not specified	177	Canada	laboratory own	1:100
<i>Salmonella choleraesuis</i>	not specified	weblink	England	laboratory own	1:100
<i>Salmonella choleraesuis</i>	ATCC 10708	75	England	laboratory own	1:50
<i>Salmonella choleraesuis</i>	ATCC 23564	146	USA	laboratory own	1:100
<i>Salmonella choleraesuis</i>	ATCC 10708	150	USA	laboratory own	1:100
<i>Salmonella choleraesuis</i>	ATCC 23564(serotype typhimurium)	152	USA	laboratory own	1:100
<i>Salmonella enteritidis</i>	Phage type 4	28	England	laboratory own	1:100
<i>Salmonella enteritidis</i>	not specified	70	USA	laboratory own	1:50
<i>Salmonella serovar gallinarum-pullorum</i>	field isolate	35	Japan	laboratory own	1:1000
<i>Salmonella heidelberg</i>	not specified	65	Denmark	laboratory own	1:15
<i>Salmonella indiana</i>	not specified	65	Denmark	laboratory own	1:15
<i>Salmonella llandorf</i>	not specified	65	Denmark	laboratory own	1:15

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Salmonella montevideo	not specified	65	Denmark	laboratory own	1:15
Salmonella thomasville	not specified	65	Denmark	laboratory own	1:200
Salmonella typhimurium	Strain HT-2	35	Japan	laboratory own	1:500
Salmonella typhimurium	GBL 106	151	USA	laboratory own	1:100
Salmonella typhimurium	DT104	165	England	pr EN1656	1:200
Salmonella typhimurium	ATCC 23564	202	USA	laboratory own	1:100
Salmonella typhimurium	St FH 68/a	194	England	EN1276	1:100
Salmonella enteritidis	CVI-WUR-Lelystad strain	227	Holland	EN1656	1:200
Salmonella hadar	CVI-WUR-Lelystad strain	227	Holland	EN1656	1:200
Salmonella infantis	CVI-WUR-Lelystad strain	227	Holland	EN1656	1:200
Salmonella typhimurium	CVI-WUR-Lelystad strain	227	Holland	EN1656	1:200
Salmonella virchow	CVI-WUR-Lelystad strain	227	Holland	EN1656	1:200
Salmonella java	Salmonella paratyphi B biovar Java	195	Holland	EN1656	1:100
Serpulina hyodysenteriae *	Isolate P152	36	Scotland	laboratory own	1:400
Serpulina hyodysenteriae *	not specified	70	USA	laboratory own	1:100
* The Treponemas have changed their name to the Serpulinas.					
Serratia marcescens	not specified	64	Canada	laboratory own	1:100
Shigella sonnei	ATCC 25931	121	USA	laboratory own	1:100
Staphylococcus aureus	ATCC 6538	31	Holland	laboratory own	1:100
Staphylococcus aureus	not specified	49	USA	laboratory own	1:100
Staphylococcus aureus	ATCC 6538	75	England	laboratory own	1:50
Staphylococcus aureus	ATCC 6538	115	USA	laboratory own	1:100
Staphylococcus aureus	ATCC 6538	116	USA	laboratory own	1:200
Staphylococcus aureus	ATCC 6538	130	USA	laboratory own	1:100
Staphylococcus aureus	NCIMB 9518	130	USA	laboratory own	1:100
Staphylococcus aureus	ATCC 6538	139	USA	laboratory own	1:100
Staphylococcus aureus	NCIMB 9518	139	USA	laboratory own	1:100
Staphylococcus aureus	CIP 53.154	148	France	laboratory own	1:2000
Staphylococcus aureus	CIP 53.154	149	France	laboratory own	1:100
Staphylococcus aureus	ATCC 6538	150	USA	laboratory own	1:100
Staphylococcus aureus	ATCC 6538	158	UK	laboratory own	1:100
Staphylococcus aureus	Sa FH73/a	194	UK	EN1276	1:100
Staphylococcus aureus	CIP 4.83	196	France	EN1276	1:100
Staphylococcus aureus	not specified	177	Canada	laboratory own	1:100
Staphylococcus aureus	CIP 4.83	197	France	laboratory own	1:100
Staphylococcus aureus	ATCC 6538	220	Italy	EN1656	1:100
Staphylococcus aureus	pig MRSA isolate	227	Holland	EN1656	1:100
Staphylococcus aureus	ATCC 6538	212	USA	AOAC	1:100
Staphylococcus aureus	field isolate	35	Japan	laboratory own	1:1000
Staphylococcus epidermidis	ATCC 12228	202	USA	laboratory own	1:100
Staphylococcus epidermidis	ATCC 14990	106	Italy	laboratory own	1:100
Staphylococcus epidermidis	GBL 6	151	USA	AOAC	1:100
Staphylococcus intermedius	Noble 4060	147	UK	laboratory own	1:200
Streptococcus equi	not specified	39	Scotland	laboratory own	1:100
Streptococcus equi	not specified	70	USA	AOAC	1:100
Streptococcus lactis	lactic 66 Strep lactis bacteriophage	198	France	laboratory own	1:4000
Streptococcus pyogenes	GBL 7	151	USA	AOAC	1:100
Streptococcus pyogenes	ATCC 11229	202	USA	AOAC	1:100
Streptococcus suis	Strain CB194	24	England	laboratory own	1:150
Streptococcus suis	field isolate	35	Japan	laboratory own	1:1000
Streptococcus suis	ATCC 43765	124	USA	AOAC	1:100
Streptococcus suis	NCTC 10234	252	UK	EN1656	1:400
Streptococcus zooepidemicus	not specified	39	Scotland	laboratory own	1:100
Taylorella (Haemophilus) equigenitalis	CEM 1574/87	68	Sweden	laboratory own	1:400
Taylorella (Haemophilus) equigenitalis	CEM 769/87	68	Sweden	laboratory own	1:400
Taylorella (Haemophilus) equigenitalis	CEM 3336/88	68	Sweden	laboratory own	1:400
Taylorella (Haemophilus) equigenitalis	CEM 486/91	68	Sweden	laboratory own	1:100
Taylorella (Haemophilus) equigenitalis	taylorella CEM	70	USA	AOAC	1:100
Vibrio anguillarum	serotype 1	88	Sweden	laboratory own	1:100



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Family	Genera	Organism	Ref. No.	Strain (where stated)	Country	Comments	Pass Dilution(s)/ Concentration(s)	
Adenoviridae	Aviadenovirus	Adenovirus	89	h5	France	AFNOR T 72 - 180	1:100	
	Aviadenovirus	Adenovirus ana1	12	Strain EDS 127	England	VLA	1:100	
	Aviadenovirus	Adenovirus ana2	71	ATCC VR-921 (Duck)	USA	EPA DIS/TSS-7	1:100	
	Mastadenovirus	ICH virus	49	Purdue strain	USA		1:100	
	Mastadenovirus	Bovine adenovirus type 4	143	ATCC VR-640	USA	EPA	1:100	
	Mastadenovirus	ICH virus	171	ATCC VR800	USA	EPA	1:100	
Arenaviridae	Arenavirus	Lassa fever virus	19	VLA	England	VLA	1:200	
Arteriviridae	Arterivirus	Lelystad virus	81	VLA	England	UK Yeast Method	1:700	
	Arterivirus	Equine arteritis virus	10	Bucyrus strain	England	VLA	1:350	
	Arterivirus	Equine arteritis virus	71	ATCC VR-796	USA	DIS/TSS-7	1:100	
	Arterivirus	Reproductive Syndrome virus	208	NVSL strain	USA	EPA	1:250	
	Arterivirus	Reproductive Syndrome virus	208	NVSL strain	USA	EPA	1:500	
	Arterivirus	Reproductive Syndrome virus	251	NVSL strain	USA	EPA	1:600	
Astroviridae	Astrovirus	PEMS associated astrovirus	184	not specified	USA	University of Georgia own method	1:67	
Baculoviridae	Baculovirus	White spotted red baculovirus	181	White spotted red virus	Thailand	Prince of Songkla University, own method	9ppm	
Birnaviridae	Birnavirus	IBD virus	44	Strain DV86	England		1:250	
		IBD virus	111	Solvay strain	USA	Inanimate surface assay	1:100	
		IBD virus	154	not specified	USA	5% blood serum	1:100	
		IBD virus	177	not specified	Canada	contaminated wood surface	1:100	
		IBD virus	193	K strain	Japan	5% FCS	1:1000	
		Infectious pancreatic necrosis	66		Norway	Clean & Dirty Conditions	1:100	
		Infectious pancreatic necrosis	217	prEN14675	UK	30mins 4 C	1:200	
		IBD virus	253	Solvay strain	USA	EPA	1:200	
Bunyaviridae	Phlebovirus	Rift valley fever virus	18	not specified	England	VLA	1:400	
Caliciviridae	Calicivirus	Feline calici virus	138	ATCC VR782	USA	USA EPA Approval	1:100	
Circoviridae	Circovirus	Chicken anaemia virus	134	Cux 1	England	DEFRA test method	1:250	
		Porcine circovirus Type 2	185	ISU 31	USA	own method	1:100	
		Porcine circovirus Type 2	200	not specified	USA	USA EPA Approval	1:200	
Coronaviridae	Coronavirus	Infectious Bronchitis Virus	131	AOAC standard	USA	Virucidal Spray Test	1:100	
		TGE Virus	8	Strain FS216/63	England		1:450	
		TGE Virus	71	ATCC VR-763	USA	USA EPA Approval	1:100	
		Feline infectious Peritonitis	172	ATCC VR2202	USA	USA EPA Approval	1:100	
		Canine Coronavirus	175	ATCC VR-809	USA	USA EPA Approval	1:100	
		Infectious bronchitis	248	Solvay AH strain Beaudette	USA	EPA method	1:100	
		Porcine enteric diarrhoea virus	255	Colorado 2013 isolate	USA	EPA method	1:600	
Flaviviridae	Hepacivirus	Hepatitis C virus	203	(BVDV) (MDBK) ATCC CC	USA	USA EPA Approval	1:100	
		Hepatitis C virus	204	(BVDV) (MDBK) ATCC CC	USA	USA EPA Approval	1:100	
		Bovine viral diarrhoea virus	71	ATCC VR 534	USA	EPA DIS/TSS-7	1:100	
		Bovine viral diarrhoea virus	193	Nose strain	Japan	5% FCS	1:500	
		Bovine viral diarrhoea virus	193	Nose strain	Japan	0.5% FCS	1:1000	
		Classical Swine Fever Virus	170	Not specified	England	UK yeast method	1:150	
Hepadnaviridae	Hepadnavirus	Hepatitis B virus	206	(DHBV) Hepadna Virus tes	USA	USA EPA Approval	1:100	
		Hepatitis B virus	207	(DHBV) Hepadna Virus tes	USA	USA EPA Approval	1:100	
Herpesviridae	alpha	Equid herpes virus 3	112	Type 3 (alpha)	USA	Inanimate Surface Assay	1:100	
		Equid herpes virus 1	123	Type 1 (alpha)	USA		1:100	
		Bovid herpesvirus 1	9	Oxford strain	England		1:600	
		Bovid herpesvirus 2	71	ATCC VR-188	USA	EPA DIS/TSS-7	1:100	
		Suid herpes virus 1	34	field strain no.86/7756	N Zealand	Aujeszký's disease	1:200	
		Suid herpes virus 2	71	ATCC VR-135	USA	EPA DIS/TSS-8	1:100	
		Felid herpes virus 1	137	ATCC VR636	USA	USA EPA Approval	1:100	
		Gallid herpes virus 2	71	ATCC VR-584 C (TRT)	USA	EPA DIS/TSS-7	1:100	
		Gallid herpes virus 2	69	Not specified	England	MAFF method, 5% yeast	1:200	
		Gallid herpes virus 1	155	not specified	USA	EPA	1:100	
Gallid herpes virus 1	243	Strain LT-IVAX	USA	EPA	1:200			
Iridoviridae	species specific	ASF virus	183	ASF virus isolate LIL	England	UK DEFRA method	1:800	
Orthomyxoviridae	type A	Avian influenza virus	11	H7N1	England	VLA	1:320	

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	type A	Avian influenza virus*	weblink	* claims made vs AI virus are only valid within the scope of the DEFRA Diseases of Poultry Order and the Avian Influenza and Influenza of Avian Origin in Mammals Order	England	UK DEFRA Approval	1:280
	type A	Avian influenza virus	156	not specified	USA	5% blood serum	1:100
	type A	Equine influenza virus	128	ATCC VR-2070	USA	EPA DIS/TSS-7	1:100
	type A	Avian influenza virus	218	Poose/Guangdong/1/96 (H5N1)	China	H5N1 strain	1:800
	type A	Avian influenza virus	218	Turkey/Wisconsin/1/66 (H9N2)	China	H9N2 strain	1:1000
	ISA virus	Infectious salmon anemia virus	187	not specified	Canada	EPA	1:200
	ISA virus	Infectious salmon anemia virus	188	not specified	Canada	laboratory own	1:100
	type A	avian influenza virus	226	H5N1	Thailand	laboratory own	1:500
	type A	swine influenza A	225	H1N1 strain ATCC VR-333	USA	EPA	1:100
	type A	avian influenza virus	254	H7N9	USA	EPA	1:600
Papovaviridae	Papilloma viruses	Bovine polyoma virus	2	not specified	England	VLA	1:100
	Papilloma viruses	SV40 Virus (simian)	110	ATCC VR-305	USA	Inanimate surface assay	1:100
Paramyxoviridae	Avian paramyxovirus	Avian paramyxovirus 1	weblink	Herts. 1933	England	UK DEFRA Approval	1:280
	Avian paramyxovirus	Avian paramyxovirus 1	153	not specified	USA	5% horse serum	1:100
	Avian paramyxovirus	Avian paramyxovirus 1	177	not specified	Canada	contaminated wood	1:100
		Parainfluenza virus	71	ATCC VR-281	USA	EPA DIS/TSS-7	1:100
	Paramyxovirus	canine parainfluenza	173	ATCC VR666	USA	USA EPA Approval	1:100
	Paramyxovirus	Newcastle Disease Virus	193	B1 strain	Japan	5% FCS	1:500
	Paramyxovirus	Newcastle Disease Virus	218	F48E9 strain	China	laboratory own	1:1500
	Pneumovirus	TRT virus	15	Strain CVL14/1/CEF(4)	England	VLA	1:200
	Avian paramyxovirus	Newcastle Disease Virus	256	ATCC VR-108	USA	EPA	1:200
Parvoviridae	Parvovirus	Canine parvovirus	34	attenuated strain	N Zealand	laboratory own	1:50
		Canine parvovirus	49	Cornell strain	USA	EPA DIS/TSS-7	1:100
		Parvovirus	71	ATCC VR-742	USA	EPA DIS/TSS-7	1:100
		Feline parvovirus	136	ATCC VR648	USA	EPA DIS/TSS-8	1:100
		Canine parvovirus	174	ATCC VR2017	USA	USA EPA Approval	1:100
		Aleutian Disease Virus	178	Utah	Holland	Immune complex formation	1:50
		Mouse parvovirus	199	ATCC VR-1346	USA	Strain prototype	1:100
Picornaviridae	Aphthovirus	Foot and mouth disease virus	weblink	FMDV strain OBFS 1860	England	UK DEFRA approval	1:1300
	Enterovirus	Swine enterovirus	weblink	not specified	England	UK DEFRA approval	1:100
	Enterovirus	Polio virus	89	Sabin strain	France	AFNOR T 72 - 180	1:100
	Aphthovirus	Foot and mouth disease virus	193	0/JPN/2000 strain	Japan		1:2000
	Enterovirus	ECBO virus	223	ATCC VR-248	Germany	EN14675	1:100 / 1:33
	Enterovirus	Hepatitis A virus	205	(HAV) FRhK-4 cells	USA	USA EPA Approval	1:100
	Aphthovirus	Foot and mouth disease virus	240	01 BFS 1860/ 67	UK	with 1% FBS	1:1800
	Aphthovirus	Foot and mouth disease virus	231	British field strain)	UK	5% FBS	1:200
Poxviridae	Parapox virus	Bovine pseudocowpox virus	3	not specified	England	VLA	1:300
	Avipox	Avian Poxvirus	177	not specified	Canada	Contaminated wood	1:100
	Orthopox virus	orthopox virus, Vaccinia	89	vaccine strain	France	AFNOR T72 - 180	1:100
Reoviridae	Reovirus	Avian reovirus	20	not specified	England		1:200
	Reovirus	Avian reovirus	177	not specified	Canada	contaminated wood surface	1:100
	Rotavirus	Rotavirus	87	Monkey strain SA-II	Russia	laboratory own	1:250
	Rotavirus	Rotavirus	87	Human strain	Russia	laboratory own	1:200
	Rotavirus	Calf rotavirus	71	ATCC VR 452	USA	EPA DIS/TSS-7	1:100
	Orthoreovirus	Avian reovirus	250	ATCC VR-2449	USA	EPA DIS/TSS-7	1:100
Retroviridae	Lentivirus	HIV	127	Type 1	USA	Inanimate Surface Assay	1:100
	Lentivirus	Maedi and visna virus	6	K184 strain	England		1:1400
	Oncovirus	Avian leucosis virus	176	Strain J	England	UK Yeast Method	1:200
Rhabdoviridae	lyssavirus	Rabies virus	16	CBS Strain	England	VLA	1:600
	novirhabdovirus	Snakehead rhabdovirus	80	Strain 19	Scotland	laboratory own	1:500 & 1:1000
	novirhabdovirus	Snakehead rhabdovirus	80	Ban Pako strain	Scotland	laboratory own	1:500 & 1:1000
Roniviridae	Okavirus	Yellow head virus	181		Thailand	Prince of Songkla University, own method	3ppm
Note: weblink where stated refers to UK DEFRA Disinfectants list of approved products							

### A summary of the Fungal Efficacy of Virkon S

Organism	Strain( where stated)	Ref. No	Country	Comments	Concentration(s)
<i>Absidia corymbifera</i>	Strain M#917	21	Japan	laboratory own	1:25
<i>Alternaria solani</i>	not specified	167	Canada	laboratory own	1:100
<i>Aspergillus fumigatus</i>	Strain M#917	21	Japan	laboratory own	1:50
<i>Aspergillus fumigatus</i>	not specified	49	USA	AOAC, EPA, DIS/TSS	1:100
<i>Aspergillus fumigatus</i>	ATCC 10894	72	USA	AOAC, EPA, DIS/TSS	1:33
<i>Aspergillus niger</i>	ANFH74/a	222	England	EN1650 40C	1:33
<i>Aspergillus niger</i>	ATCC 16404	221	Italy	EN1657 10C	1:25
<i>Aspergillus niger</i>	ATCC 16404	221	Italy	EN1657 30C	1:25
<i>Botrytis cinerea</i>	not specified	167	Canada	laboratory own	1:100
<i>Candida albicans</i>	Strain IFO 1594	21	Japan	laboratory own	1:1600
<i>Candida albicans</i>	Strain NCTC 3179	22	England	laboratory own	1:100
<i>Candida albicans</i>	LMFL 985	97	Portugal	AFNOR NF T 72-201	1:100
<i>Candida albicans</i>	gbl 648	151	USA	AOAC protocol	1:100
<i>Candida albicans</i>	ATCC 10231	158	England	European Suspension	1:33
<i>Candida albicans</i>	CaFH69/a	222	England	EN1650 20C	1:40
<i>Candida albicans</i>	ATCC 10231	221	Italy	EN1657 10C	1:33
<i>Candida albicans</i>	ATCC 10231	221	Italy	EN1657 30C	1:33
<i>Colletotrichum coccodes</i>	not specified	167	Canada	laboratory own	1:100
<i>Didymella bryoniae</i>	not specified	167	Canada	laboratory own	1:100
<i>Epicoccum nigrum</i>	not specified	91	New Zealand	laboratory own	1:100
<i>Fusarium moniliforme</i>	ATCC 10052	73	USA	AOAC protocol	1:50
<i>Fusarium oxysporum</i>	not specified	167	Canada	laboratory own	1:100
<i>Fusarium solani</i>	Strain F889	21	Japan	laboratory own	1:400
<i>Fusarium solani</i>	not specified	167	Canada	laboratory own	1:100
<i>Geotrichum cutaneum</i>	Strain M#49-11	21	Japan	laboratory own	1:25
<i>Malassezia pachydermatis</i>	NCPF 3667	166	England	pr EN1657	1:100
<i>Microsporium canis</i>	Strain S294A	21	Japan	laboratory own	1:6400
<i>Penicillium oxalicum</i>	not specified	167	Canada	laboratory own	1:100
<i>Phomopsis sclerotoides</i>	not specified	167	Canada	laboratory own	1:100
<i>Pithomyces chartarum</i>	not specified	91	New Zealand	laboratory own	1:400
<i>Pyrenochaeta lycopersici</i>	not specified	167	Canada	laboratory own	1:100
<i>Pythium aphanidermatum</i>	not specified	167	Canada	laboratory own	1:100
<i>Rhizoctonia solani</i>	not specified	167	Canada	laboratory own	1:100
<i>Saccharomyces cerevisiae</i>	ScFH68/a	222	UK	EN1650	1:40
<i>Sclerotinia sclerotiorum</i>	not specified	167	Canada	laboratory own	1:100
<i>Thielaviopsis basicola</i>	Isolate #294 / #295	160	Canada	poison agar test	1:500
<i>Trichophyton mentagrophytes</i>	Strain NCPF 335	75	England	AOAC fungicidal protot	1:300
<i>Trichophyton mentagrophytes</i>	ATCC 9533	119	USA	AOAC fungicidal protot	1:50
<i>Trichophyton verrucosum</i>	Strain M#912-12	21	Japan	laboratory own	1:6400
<i>Trichosporon cutaneum</i>	M#819	21	Japan	laboratory own	1:50
<i>Verticillium dahliae</i>	not specified	167	Canada	laboratory own	1:100