



Evans Vanodine International plc
GLOBAL HYGIENE SOLUTIONS

SAFE ZONE PLUS



MICROBIOLOGICAL PROFILE

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INTRODUCTION

SAFE ZONE PLUS is an unperfumed liquid virucidal disinfectant.

SAFE ZONE PLUS is available as a ready-to-use solution.

SAFE ZONE PLUS has been tested using European Standard methods to meet specific classification/regulatory demands.

SAFE ZONE PLUS passes EN 14476 and can claim full virucidal activity. It is also bactericidal and yeasticidal. Additional organisms have been tested e.g. MRSA *Listeria* and *Salmonella* species.

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Staphylococcus aureus

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Activity against bacteria

BACTERIA	DISEASE / INFECTION	Suspension Test methods			Surface Test methods		
		Reference	Contact time (mins)		Reference	Contact time (mins)	
			C	D		C	D
<i>Enterococcus hirae</i>	Urinary tract infections	EN 1276		5	EN 13697		5
		EN 13727		5	EN 14561	15	
					EN 16615		1
<i>Escherichia coli</i>	Food poisoning	EN 1276		5	EN 13697		5
<i>Leptospira interrogans</i>	Leptospirosis (Weils disease)	EN 1276	5				
<i>Mycobacterium terrae</i>	Severe skin infections	EN 14348	5				
<i>Pseudomonas aeruginosa</i>	Opportunistic pathogen, wound, burn infections	EN 1276		5	EN 13697		5
		EN 13727		5	EN 14561	15	
					EN 16615		1
<i>Listeria monocytogenes</i>	Food poisoning	EN 1276		5	EN 13697		5
<i>Methicillin resistant Staphylococcus aureus</i>	Skin, bone and wound infections	EN 1276		5			
<i>Salmonella typhimurium</i>	Food poisoning	EN 1276		5	EN 13697		5
<i>Staphylococcus aureus</i>	Skin, bone and wound infections	EN 1276		5	EN 13697		5
		EN 13727		5	EN 14561	15	
					EN 16615		1

C = CLEAN

D = DIRTY

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Activity against Yeast

YEAST	DISEASE / INFECTION	Suspension Test methods			Surface Test methods		
		Reference	Contact time (mins)		Reference	Contact time (mins)	
			C	D		C	D
<i>Candida albicans</i>	Oral and genital infections, candidiasis	EN 1650		15	EN 13697	10	15
		EN 13624		5	EN 14562	15	
					EN 16615		1
<i>Candida auris</i>	Bloodstream, wound and ear infections. Antifungal resistant yeast.	EN 13624	1				

Activity against viruses

VIRUS	DISEASE / INFECTION	Contact time (mins)		Suspension Test method reference
		C	D	
Adenovirus	Respiratory infections	15	15	EN 14476
Influenza A H1N1	Common cause of human influenza		5	EN 14476
Influenza A H7N9	Influenza		5	EN 14476
Murine Norovirus	Diarrhoea and vomiting, gastroenteritis	5	15	EN 14476
Poliovirus	Polio	30	60	EN14476
Vaccinia virus*	Used as a surrogate for enveloped viruses		5	EN 14476

C = CLEAN **D = DIRTY**

*Vaccinia virus is used to assess virucidal activity against enveloped viruses. Annex A of EN 14476 includes Coronavirus in the examples of enveloped viruses. (See page 5 for other examples).

A pass in EN 14476 against vaccinia virus allows a claim for effectiveness against Coronavirus COVID-19. Therefore, **SAFE ZONE PLUS undiluted with a 5 minute contact time, used in the test, can be considered effective.**

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TEST METHOD REFERENCES

EN 1276

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic, and institutional areas

Test Parameters: 5 minutes contact time, 20°C, dirty and clean conditions.
Bactericidal Criteria: ≥ 5 log reduction \equiv 99.999% reduction.

EN 1650

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in food, industrial, domestic, and institutional areas.

Test parameters: 15 minutes contact time, 20°C, dirty conditions.
Yeasticidal criteria: ≥ 4 log reduction \equiv 99.99% reduction.

EN 13624

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of fungicidal or yeasticidal activity of chemical disinfectants and antiseptics used in the medical area.

Test parameters: 1 and 5 minutes contact time, 20°C, low and high level soiling.
Yeasticidal criteria: ≥ 4 log reduction \equiv 99.99% reduction.

EN 13697

Chemical disinfectants and antiseptics – Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas. Without mechanical action.

Test Parameters: 5 minute contact time, 20°C, dirty conditions.
Bactericidal Criteria: ≥ 5 log reduction \equiv 99.999% reduction.

Test parameters: 10 and 15 minute contact time, 20°C, dirty and clean conditions.
Yeasticidal criteria: ≥ 4 log reduction \equiv 99.99% reduction.

EN 13727

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of bactericidal activity of chemical disinfectants and antiseptics used in the medical area

Test Parameters: 5 minute contact time, 20°C, dirty conditions.
Bactericidal Criteria: ≥ 5 log reduction \equiv 99.999% reduction.

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TEST METHOD REFERENCES

EN 14348

Chemical disinfectants and antiseptics - Quantitative suspension test for the evaluation of mycobactericidal activity of chemical disinfectants used in the medical area including instrument disinfectants.

Test parameters: 5 minute contact time, 20°C, low level soiling.
Mycobactericidal criteria: ≥ 4 log reduction \equiv 99.99% reduction.

EN 14476

Chemical disinfectants and antiseptics – Virucidal quantitative suspension test for chemical disinfectants and antiseptics used in the medical area.

Test parameters: 5 to 60 minutes contact time, 20°C, low and high level soiling.
Virucidal criteria: ≥ 4 log reduction \equiv 99.99% reduction.

Information taken from EN 14476: Annex A.

The following examples of human enveloped viruses may contaminate hands, instruments, other surfaces and textiles. The list is not exhaustive.

Coronavirus	Human T Cell Leukemia Virus (HTLV)
Filoviridae	Influenza virus
Flavivirus	Measles virus
Hepatitis B virus (HBV)	Paramyxoviridae
Hepatitis C virus (HCV)	Poxviridae
Hepatitis delta virus (HDV)	Rabies Virus
Herpesviridae	Rubella Virus
Human Immunodeficiency virus (HIV)	

EN 14561

Chemical disinfectants and antiseptics – Quantitative carrier test for evaluation of bactericidal activity for instruments used in the medical area.

Test parameters: 15 minute contact time, 20°C, low level soiling.
Bactericidal criteria: ≥ 5 log reduction \equiv 99.999% reduction.

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TEST METHOD REFERENCES

EN 14562

Chemical disinfectants and antiseptics – Quantitative carrier test for evaluation of fungicidal or yeasticidal activity for instruments used in the medical area.

Test parameters: 15 minute contact time, 20°C, low level soiling.
Yeasticidal criteria: ≥ 4 log reduction \equiv 99.99% reduction.

EN 16615

Chemical disinfectants and antiseptics Quantitative test method for the evaluation of bactericidal and yeasticidal activity on non-porous surfaces with mechanical action employing wipes, in the medical area (4-field test)

Test Parameters: 1 minute contact time, 20°C, dirty conditions.
Bactericidal Criteria: ≥ 5 log reduction \equiv 99.999% reduction.

Test parameters: 1 minute contact time, 20°C, dirty conditions.
Yeasticidal criteria: ≥ 4 log reduction \equiv 99.99% reduction.