

Reference Test Certificate Register for F10 Disinfectant

Test ref no.	Test certificate no. /date	Test description - testing body - test standard and (pass criteria) - micro organisms tested	F10 CL	F10 SC (super concentrate)	Contact Time
THHa1	n/a	South African Inst Medical Research (SAIMR) SABS 636 (1971) (99,9% kill) Mycobacterium terrae	1:25	1:125	30 minutes
THHa2	n/a	Medical and Pharmaceutical Services (MPS) AFNOR NF T 72-170 (1988) (4 log reduction) Spectrum 5 bactericidal activity with interfering substances: P.aeruginosa, E.coli, S.aureus, Enterococcus faecium, Mycobacterium smegmatis	1:40	1:200	5 minutes
THHa3	n/a	MPS AFNOR NF T 72-151 (1987) (4 log reduction) Spectrum 5 bactericidal activity P.aeruginosa, E.coli, S.aureus, Enterococcus faecium, Mycobacterium smegmatis:	1:100	1:500	5 minutes
THHa4	n/a	MPS AFNOR NF T 72-150 (1987) (4 log reduction) Spectrum 5 bactericidal activity P.aeruginosa, E.coli, S.aureus, Enterococcus faecium, Mycobacterium smegmatis	1:100	1:500	5 minutes
THHa5	n/a	MPS AFNOR NF T 72-200 (1987) (4 log reduction) Fungicidal activity: Penicillium verrucosum, Cladosporium cladosporoides, Absidia corymbifera, Candida albicans	1:100	1:500	15 minutes
THHa6	n/a	MPS AFNOR NF T 72-180 (1986) (4 log reduction) Virucidal activity: Enterovirus, Orthopoxvirus, Adenovirus, HIV	1:40	1:200	30 minutes
THHa7	1994/03/01 531/82355/L0376	South African Bureau of Standards (SABS) SABS 636 (1971) (99,9%) E.coli, P.aeruginosa, S.aureus	1:100	1:500	5 minutes
THHa8	1994/04/13	Veterinary Institute, Onderstepoort: Canine parvovirus (>log 3 reduction)	1:25	1:125	30 minutes
THHa9	1994/04/19	MPS Frosner, Jentsch and Ultheman (1982) Biocidal activity: Hepatitis B	1:25	1:125	15 minutes
THHa10	1994/04/19	MPS AFNOR NF T 72-151 (1987) (4 log reduction) Leptospira, Campylobacter, Legionella	1:100	1:500	5 minutes
THHa11	1994/04/20	MPS Summary of results plus toxicity, corrosion and biodegradability tests.			
THHa12	1994/05/06	Veterinary Institute, Onderstepoort Newcastle Disease Virus, Feline Herpes Virus (inactivation = Chlorox)	1:100	1:500	30 minutes

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THHa13	1994/06/30 531/82533/L1574	SABS SABS 636 (1971) (99,9%) Acinetobacter anitratus	1:100	1:500	5 minutes
THHa14	1994/11/11	Eurostar Technology EU requirements Ecological impact	zero hazard	zero hazard	continuous dosing
THHa15	1994/12/09	Univ of Pretoria, Faculty Vet Science Dept Poultry Diseases IBD virus (complete inactivation)	1:50	1:250	20 minutes
THHa16	1995/02/13	Eurostar Technology Toxicity results: Oral and dermal LD ₅₀ , Ocular irritation, Draize test	1:25 nil 4 & 2	1:125	2700mg/kg 1 & 24 hrs
THHa16.a	1994-12-15	Eurostar Technology Acute Oral Toxicity Tests	1:25	1:125	LD50 2700- 3500mg/kg
THHa16.b	1994-12-15	Eurostar Technology Acute Dermal Toxicity Tests	1:50	1:250	LD50>4000mg/ kg
THHa16.c	1995-01-11	Eurostar Technology Ocular Irritation Tests (Draize Test)	1:50	1:250	Score 4 at 1hr; 2 at 24hrs
THHa17	1995/04/10 531/82879/M0620a	SABS SABS 636 (1971) (99,9%) S.aureus (methicillin resistant)	1:100	1:500	5 minutes
THHa18	1995/06/13 531/82946/M1026a	SABS SABS 636 (1971) (99,9%) E.coli (HO157)	1:100	1:500	5 minutes
THHa19	1995/12/13	Univ of Pretoria, Faculty Vet Science Dept Poultry Diseases Ornithobacterium rhinotracheale (av 96,3%)	1: 100	1:500	20 minutes
THHa20	1996/01/08 531/83218/M2778e	SABS Kelsey Sykes Modified (5 clear tubes) Bacillus subtilus spores	1:30	1:150	30 minutes
THHa21	1996/04/15 1995/11/22 531/83218/M2778a	SABS SABS 636 (1971) (99,9%) Aspergillus niger	1:50	1:250	30 minutes
THHa22	1997/07/07	South African Vaccine Producers (SAIMR) SABS 671 (1975) Primary Skin Irritation Test	1: 50 0 score	1:250 0 score	24 & 48 hrs on intact and abraded skin
THHa23	1997/07/11 2388/764861/P1806a	SABS SABS 636 (1971) "speed trials" (99,9%) P.aeruginosa S.aureus	1:100	1:500	60 seconds 30 seconds
THHa24	1998/01/03	Eurostar Technology Inhalation toxicity - acute and chronic	nil	nil	
THHa25	1998/01/04	Eurostar Technology Residuals on fruit and vegetables	from <0.1 to	<0.5	ppm / cm ²
THHa26	1998/04/01 2388/953611/Q907	SABS SABS 636 (1971) (99,9%) Trichophyton mentogrophytes	1:100	1:500	15 minutes
THHa27	1998/10/08	Eurostar Technology Residual properties F10 and Chlorhexidene	=	=	
THHa28	1998/11/19 5447/1066950/Q2542	SABS SABS 509 Kelsey-Sykes (5 clear tubes) P.aeruginosa - dirty conditions (5% yeast)	1:40	1:200	8 + 10 min

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THHa29	1999/02/04 1066950/S155	SABS Biocidal test (bacteriastatic test) E.coli, P.aeruginosa, Klebsiella sp.	5 ppm	1 ppm	5 minutes
THHa30	1999/02/24 5447/1066950/R3632a	SABS SABS 636 (1971) (99,9%) Proteus vulgaris	1:100	1:500	5 minutes
THHa31	1999/03/02 5538/1192518/S5	SABS SABS1221 (no discolouration, pitting or etching) Aluminium corrosion test	1: 6,6	1:33	24+24 hrs 24+120 hrs
THHa32	1999/03/16 5447/1066950/S846	SABS BS EN standard 1276 (1997) (10 ⁵ log) P.aeruginosa, E.coli, S. aureus, Enterococcus hirae	1:100	1:500	5 minutes
THHa33	1999/03/20 5447/1066950/S1183a	SABS pr EN standard 1276 (1997) (10 ⁵ log) Clean and dirty conditions @ 10°C and 20°C P.aeruginosa, E.coli, S. aureus, Enterococcus hirae	Clean 1:100 Dirty 1:100 Clean 1:100 Dirty 1:100	1:500 1:500 1:500 1:500	5 minute @ 20°C 5 minutes @ 10°C <5
THHa34	1999/03/16 5447/1066950/S779	SABS BS EN standard 1040 (1997) (10 ⁵ log) P. aeruginosus, S. aureus	1:100	1:500	5 minutes
THHa35	1999/03/18 5447/1066950/S779a	SABS: pr EN standard 1657 (1994) (10 ⁴ log) Candida albicans	1: 100	1:500	30 minutes
THHa36	1999/05/18 EEF000028D	SAIMR SABS 636 (1971) (99,9%) Salmonella typhi, Vancomycin resistant Enterococcus faecalis, Streptococcus pyogenes, Vibrio cholera	1:100 1:200 1:200 1:200	1:500 1:100 1:1000 1:1000	60 seconds 60 seconds 60 seconds 60 seconds
THHa37		See THHf1			
THHa38		See THHf2			
THHa39		See THHf3			
THHa40		See THHf4			
THHa41		See THHf5			
THHa42	1999/07/22 EEF00027X	SAIMR SABS 636 (1971) (99,9%) Listeria monocytogenes	1:100 1:200	1:500 1:1000	30 seconds 60 seconds
THHa43a	1997/12/18	Glaxowelcome SABS S. epidermidis, P. cepacia, Microoccus luteus, Salmonella abony, Klebsiella pneumoniae, Corynebacterium xerosis, C. albicans, Bacillus subtilis spores	1:25	1:125	Spores 1 hour

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THHa43b	1999-12	Glaxowellcome SABS S. epidermidis, P. aeruginosa, P. (Burkholderia) cepacia, Micrococcus luteus, Salmonella abony, Citrobacter freundii, entrobacter sakazakii, Klebsiella pneumoniae, E. coli, Corynebacterium xerosis, C. albicans, Bacillus subtilis spores, Entrobacter cloacae, A. niger	1:25	1:125	Spores 60 minutes
THHa44	2000-02-15 5447/1066950/ S4314a	SABS SABS 1593 (1954) Corrosiveness (6.10) Rinsing properties (6.11) Water insoluble matter content (6.12) Storage stability (6.13)	1:20 1:20	1:5 1:5	passes passes 0,3g/l passes passes
THHa45	2000-03-27 5447/1066950/T5323	SABS Minimum Inhibitory Concentration (MIC) S. aureus P. aeruginosa	between 1:6553/ 13,107 1: 102/ 204	between 1:32768/6 5,536 1:512/ 1024	22° for 48 hrs
THHa46	2000-04-13	Clover SA Inhibitory Substances Screening Test B.stearothermophilus	1:50	1:250	3 hrs @ 63° Dilutions with milk of 1:20 upwards are negative
THHa47	2000-02-01 5447/1066950/T879	SABS Giescke, WH. Van Den Heever, LW. (1971) Udder disinfectant P. aeruginosa, S. aureus	1:50	1:250	0.5, 1, and 2.5 minutes
THHa48	1997-11-27 cross ref THHa2	SAIMR SABS 671 (1975) Primary Skin Irritation Test	1:25 0 score	1:125 0 score	24 & 48 hrs on intact and abraded skin
THHa49	2000-03-06 5447/1066950/T3081-2	SABS SABS 636 (1971) (99,9%) P.aeruginosa	1:100	1:500	1 year stability test
THHa50	2000-03-06 5447/1066950/T3081-2	SABS SABS 636 (1971) (99,9%) P.aeruginosa	1:100	1:500	2 year stability test
THHa51	2000-02-24 DT/fm HH09/00 cross ref THHa16	Eurostar Technology Oral and topical toxicity (LD50)	>5000 mg/kg	>5000 mg/kg	as sold product concentrate
THHa52	1994-11-16	Rainbow Farms, Hammersdale Lab Malthus 2000 Analyser E.coli strain of avian origin	1:300	1:1500	15 minute contact
THHa53	1995-03-23 531/82881/M0634	SABS Effect of irradiation on bactericidal activity P.aeruginosa	1:100	1:500	No dimunit-ion of perfor-mance at levels from 4kGy to 25kGy
THHa54	2000-05-30 558/2000	Poultry Reference Laboratory Newcastle Disease Virus	1:100	1:500	Complete in- activation in 20 minutes

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THHa55	2000-06-08 624/2000	Poultry Reference Laboratory Newcastle Disease Virus	1:100	1:500	Complete in-activation in 10 minutes
THHa56	2000-05-04	ARC- Onderstepoort Veterinary Institute Rabies Unit - Rabies Virus	Between 1:150 - 1:300 Between 1:100 - 1:150	Between 1:750 - 1:1500 Between 1:500 - 1:750	Complete in-activation @ 20°C Complete in-activation @ 10°C
THHa57a	2000-07-18	ARC - Animal Improvement Institute Skin sensitivity trial-Highveld winter conditions,using F10 SC as an udder wash	1: 50	1:250	No sensitivity - zero score
THHa57b	2000-07-18	See THHaa5			
THHa58	2000-10-10	Poultry Reference Laboratory Infectious Bursal Disease Virus (IBD)	1: 50	1:250	Complete in-activation in 20 minutes
THHa59		See THHf6			
THHa60	2001-01-08	Keymed – Compatibility of F10 Disinfectant Solution with Olympus Flexible Endoscopes	-	-	Use in UK Market
THHa61	2001-01	See THHf7			
THHa62	2001-01-10	See THHg1 – F10 SC FMD Disinfectant			
THHa63	2000-05-08 5447/1066950/926 /T5930	SABS SABS 1593 (1994): Disinfectants based on Gluteraldehyde for use on medical instruments - Kelsey Sykes (modified) test using B.subtilis spores	1:20	1:100	Clean test: 5 clear tubes in 1 hour
THHa64	2001-03-23	See THHf9 - Fitosan			
THHa65		See THHg2 – F10 SC FMD Disinfectant			
THHa66		See THHg3 – F10 SC FMD Corrosion			
THHa67		See THHg4 – F10 SC FMD Corrosion			
THHa68	1733791/00-1316/U8139 2001-06-06	SABS SABS 636(1971) (99.9%) S aureus	1:50	1:250	> 99.9% kill of S.aureus within 15 sec
THHa69		See THHf10 - Fitosan			
THHa70		See THHg5 – F10 SC FMD Corrosion			
THHa71	2001-09-28	Univ. of Pretoria – Faculty of Biological & Agricultural Science. F10 SC as a mist spray at 125ppm Aspergillus fumigatus	1:1600	1:8000	No spore germination on plate, even after 5 days
THHa72	2002-01-28 1733791/02-00211/V1391	SABS SABS 636 (1971) (99,9%) Pasteurella multocida	1:100	1:500	5 min Passed
THHa73	2001-07-01	Dr I.M. Petzer (U.P Faculty of Veterinary Science) Field Trial Pseudo-cowpox (See also THHh3)	1:50	1:250	27 day Supervised trial 1.2% re-infection

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THHa74	2002-12-17 1733791/02/V16507-12a	SABS Clostridium sporogenes SATCC C1 29	1:50	1:250	% kill: 10 min - 94.4% 20 min – 98%
THHa75	2003-09-03 1733791/03- 04526/W11421-26	SABS SABS 636 (1971) (99.9%) Pseudomonas Aeruginosa	1:50	1:250	Ready to use solution tested over a 6 month period without fall in efficiency performance.
THHa76	2003-09-01	Eurostar Technology Limited Chemical incompatibility between aldehyde products and F10 solutions.	-	-	F10 Solution is incompatible with any aldehyde based products and will result in reddish brown deposits on instruments / surfaces.
THHa77	2003-03-03 1733791/03-00352/ W1643-45A	SABS SABS 636 (1971) (99.9%) Pseudomonas Aeruginosa	1:100	1:500	Stability tests on batches from 2001, 2002, 2003 – all comply.
THHa78	2003-10-21 7316/1954332/W4204 A	SABS 636 Corrosion test for Mark Scheme	1:100	1:500	F10SC Passes
THHa79	2003-10-21 7316/1954332/W4203 A	SABS 636/639 Efficacy and corrosion test for Mark Scheme	1:100	1:500	F10SCXD Passes
THHa80	2004-02-16 1733791/04-273 /X20316	SABS SANS 636-2001 Salmonella choleraesuis typhimurium ATCC 13311 Sal 12	1:100	1:500	> 99.9 % kill in 2 minutes
THHa81a	2004-03-26 1733791/03-04526 /W11421-26	SABS SANS 1615-1994 Pseudomonas aeruginosa SATCC Psc 16	1:50	1:250	> 99.9 % kill in 2 min and 5 min Tested every month over a 24 month period. Samples stored at 37°C throughout.
THHa81b	1733791/05-0234 /X50945	SABS SANS 1615-1994 Pseudomonas aeruginosa SATCC Psc 16	1:50	1:250	99.9% kill in 2 min and 5 min of 2 year old retention sample.
THHa82	2004-11-02 1212/04	Micro Laboratorie, Karachi, Pakistan Cocktail of gram positive and gram negative bacteria.	1:200	1:1000	Log 7 reduction in 5 minutes.

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THHa83	2004-06-16 Lab Ref. No. 607	K & Ns Poultry Disease Diagnostic & Research Institute FDA/BAM Bactericidal Activity Poultry pathogenic strain of E.Coli Staphylococci Pseudomonas C. albicans	1:100	1:500	Complete inhibition
THHa84	2004-11-05 1733791/04-472 /X21367	SABS SANS 636-2001 Trichophyton mentagrophytes	1:50	1:250	99.9% kill in 10 minutes.
THHa85	2005-02-04 1733791/04-2186 /X31628a	SABS EN 13704-2002 Bacillus subtilis spores	1:20	1:100	99.9% kill in 5 minutes.
THHa86	2005-02-04 1733791/04-2186 /X31628b	SABS EN 1650-1997 Aspergillus niger spores	1:20	1:100	99.9% kill in 5 minutes.
THHa87	2005-02-04 1733791/04-2186 /X31628c	SABS EN 13697-2001 Aspergillus niger spores	1:20	1:100	99.99% kill in 5 minutes.
THHa88	2005-02-04 1733791/04-3294 /X38022-3	SABS EN 13704-2002 Bacillus subtilis spores	1:20	1:100	99.99% kill in 5 minutes.
THHa89a	2005-03-24 1733791/ 04-5 /X18434	SABS Simulating cleaning and disinfection cycles a) utilising an ultrasonic bath in the cleaning cycle. Bacillus subtilis spores	1:20	1:100	99.999% kill in in total elapse time of 12 minutes (Refer THHa85).
THHa89b	2005-03-24 1733791/ 04-6307 /W 18008 / 9a	SABS Simulating cleaning and disinfection cycles b) utilising a mechanical agitator in the cleaning cycle. Bacillus subtilis spores	1:20	1:100	99.999% kill in in total elapse time of 12 minutes (Refer THHa85).
THHa90	2004-12-30 1733791/04-2747 /X34736/40	Staphylococcus epidermidis using a commercial pressurised aerosol can (average droplet size, 26 microns)	1:20	1:100	99.999% kill in 10 minutes (no survivors)
THHa91	2005-03-09	University of Pretoria Department of Veterinary Tropical Diseases, Onderstepoort. Use of F10SC on superficial tissues (fibroblas-like cells) oaskin and open wounds. Borine dermis cells	1:400	1:2000	30 seconds – cells unaffected. 5 minutes – 50% cells remain viable. NB: After 24hrs results unchanged.
THHa92	2005-02-14	Onderstepoort Veterinary Institute Avian Influenza Virus (H5N2 HPAI)	1:100	1:500	10 minutes complete inactivation