F10®
PRODUCTS

VETERINARY DISINFECTANT PRODUCTS

Includes the F10SC & F10SCXD Veterinary Disinfectant Range

F10®
PRODUCTS

GET THE BEST FOR YOUR BEST FRIENDS!

F10® Veterinary Disinfectant

PROPRIETARY NAME & SIZES

- **F10SC VETERINARY DISINFECTANT**
  (liquid, dilute as directed, in 25L, 5L, 1L, 200ml)
  (Reg No G 3070, Act 36/1947) (Reg No Act 29 GNR 529/29990/040/150)

- **F10SCXD VETERINARY DISINFECTANT/CLEANSER**
  (liquid, dilute as directed, in 25L, 5L, 1L, 200ml)
  (Reg No G 3073, Act 36/1947) (Reg No Act 29 GNR 529/29990/040/150)

- **F10 SKIN PREP SOLUTION**
  (liquid, use as is, in 5L)
  (Reg No G 3105, Act 36/1947)

- **F10 ODOUR ELIMINATOR**
  (liquid, use as is in 250ml and 500ml , dilute as directed in the 5 L)
  (Reg No Act 29 GNR 529/29990/040/150)

- **F10 DISINFECTANT AEROSOL & AEROSOL FOGGER**
  (500ml aerosol pressurised dispensing canister, use as is)
  (Reg No Act 29 GNR 529/29990/040/150)

- **F10 DISINFECTANT SURFACE SPRAY WITH INSECTICIDE**
  (liquid, use as is, in 25L, 5L and 1L)
  (Reg No Act 29 GNR 529/29990/040/150)

- **F10 WIPES**
  (100 impregnated cellulose tissues)
  (Reg No Act 29 GNR 529/29990/040/150)

COMPOSITION

The core actives of all the disinfectant products are quaternary ammonium and biguanide compound, with non toxic ampholytic surfactants and sequesterants.

LEVEL OF ACTIVES	OTHER	pH*
F10SC VETERINARY DISINFECTANT		
QAC and biguanide 5,8%	Ampholytic surfactants and sequesterants Water to balance	7.5
F10SCXD VETERINARY DISINFECTANT/CLEANSER		
QAC and biguanide 5,8%	Ampholytic surfactants, sequesterants/detergents Fragrance Water to balance	7.5
F10 SKIN PREP SOLUTION		
QAC and biguanide 0,05%	Ampholytic surfactants and sequesterants Alcohol 20% Water to balance	6.5
F10 ODOUR ELIMINATOR		
QAC and biguanide 0,12%	Ampholytic surfactants and sequesterants Fragrance Water to balance	5.9
F10 DISINFECTANT AEROSOL & AEROSOL FOGGER		
QAC and biguanide 0,072%	Ampholytic surfactants and sequesterants propellant	7.5
F10 DISINFECTANT SURFACE SPRAY WITH INSECTICIDE		
QAC and biguanide 0,116% Cypermethrin 0,25%	Ampholytic surfactants and sequesterants	7.5
F10 WIPES		
QAC and biguanide 0,05%	Ampholytic surfactants and sequesterants	7.5

** The pH value refers to the packed concentration*

INDICATIONS

A broad spectrum biocide effective against bacteria, fungi, viruses and bacterial and fungal spores is indicative of those shown below:-

BACTERIA (gram positive and gram negative (spp)		FUNGI, YEASTS and MOULDS (spp)	VIRUSES (enveloped and non-enveloped)	SPORES (bacterial and fungal) spp
Acinetobacter	Listeria	Aspergillus	Adenovirus	Aspergillus
Campylobacter	MRSA	Candida	Avian Influenza H5N2 HPA1	Bacillus
Chlamydophilia	Mycobacterium	Microsporum	Canine parvovirus	Microsporum
Clostridium	Mycoplasma	Penicillium	Circovirus	Penicillium
Cholera	Micrococcus	Trichophyton	Enterovirus	Trichophyton
Corynebacterium	Omitobacteriun Rhinotracheale		Foot and Mouth Disease*	
Citrobacter	Pasteurella		Feline Herpesvirus	
Entercoccus	Proteus vulgaris		Hepatitus B	
Enterobacter	Pseudomonas		HIV	
Eschericha coli	Salmonella		IBD	
Klebsiella	Staphylococcus		Newcastle Disease	
Leptospira	Streptococcus		Rabies	

** FMDV is effectively eliminated with the pH buffered product F10CL General Farm Disinfectant*

APPLICATIONS

The core product **F10SC VETERINARY DISINFECTANT** is a high performance surface acting biocidal compound and due to its inherently low toxicity and low irritation characteristics is widely used within the veterinary profession in companion and large animal practices, referral hospitals, zoo's, laboratories, and various other institutions. It is used in numerous applications, i.e. cold sterilisation of instruments and equipment including endoscopes, intravenous catheters, and endotracheal tubes; high level disinfection of hard surfaces and air spaces, water treatment, and as a sanitising rinse for solid food and fruit. Fogging with F10SC VETERINARY DISINFECTANT, (a spray of fine mist-like droplets) has been shown to be 100% effective in eliminating airborne micro-organisms.

F10SCXD VETERINARY DISINFECTANT/CLEANSER is used for hard surface disinfection and cleaning of lightly soiled areas such as kennels and cages.

F10SC VETERINARY DISINFECTANT has been successfully used in aerosol fogging applications in the presence of animals as well as a number of clinical applications including nebulising in respiratory tract *Aspergillosis* infections, wound irrigation, and nasal flushing.

F10 SKIN PREP SOLUTION is a pre-op skin decontaminant.

F10 ODOUR ELIMINATOR is a hard surface and aerosol high level disinfectant with a masking pine fragrance.

F10 DISINFECTANT AEROSOL & AEROSOL FOGGER is available with on/off and total evacuation actuators for use as a hard surface and air space disinfectant. Tests have shown that aerosol disinfection is an effective method of carrying out high level disinfection of air spaces.

F10 DISINFECTANT SURFACE SPRAY WITH INSECTICIDE is a hard surface disinfectant for animal housing, effective against flying and crawling insects such as blow flies, biting flies, fleas, midges, mites, mosquitoes and ticks.

F10 WIPES are a disinfectant impregnated surface wipe for use on equipment such as thermometers, and for hand decontamination when washing facilities are unavailable.

ANTIMICROBIAL ACTION

The antimicrobial action mechanism of the F10 branded disinfectants is taken from each component separately but in addition is due to the additive synergistic action of all components combined.

Bactericidal tests have been carried out in accordance with SANS 636-2001 - Standard (South African) having a performance pass criteria of $>\log^3$ reduction in microbial counts, the AFNOR Standard (French) which is a $>\log^4$ reduction in microbial counts, the European Union EN Standard which is a $>\log^5$ reduction in microbial counts, and the AOAC Standard (USA) which is a $>\log^6$ (1,000,000 times) reduction in microbial counts. MIC in-vitro tests have shown significant depth of performance as indicated. Generally testing was carried out at ambient temperatures with the exception of EN Standard tests where some were carried out at low temperatures 10^0C and some DEFRA tests at 4^0C. The EN Standard for low temperatures is 10^0C and at this temperatures bactericidal performance was equal to that at ambient temperatures , however there was a significant fall off in performance at 4^0C. Other tests carried out at elevated temperatures of 45^0C showed a significant increase in performance.

FIGURE A: THE F10SC MIC VALUES

Test organism	*Concentration of F10SC (dilution) that resulted in complete visual inhibition of the Test organism = MIC value*
Pseudomonas aeruginosa - ATCC 27853	A dilution of 1/1000 or 0,1 % F10SC
Escherichia coli - ATCC 25922	A dilution of 1/4000 or 0,025 % F10SC
Staphylococcus aureus - ATCC 25923	A dilution of 1/16000 or 0,00625 % F10SC
Klebsiella pneumoniae - ATCC 10031	A dilution of 1/4000 or 0,025 % F10SC
Staphylococcus aureus - *MRSA* Local isolate	A dilution of 1/16000 or 0,00625 % F10SC
Pasteurella multocida - Local isolate	A dilution of 1/16000 or 0,00625 % F10SC
Enterococcus faecalis - ATCC 29212	A dilution of 1/16000 or 0,00625 % F10SC
Salmonella choleraesuis, *Serotype* typhimurium - *ATCC 13311*	A dilution of 1/8000 or 0,0125 % F10SC

Fungicidal tests have been carried out in accordance with SANS 636-2001,AFNOR and EN Standards which require a $\log^3$ and $\log^4$ reduction in microbial counts respectively.

Virucidal tests have been carried out in accordance with various internationally accepted protocols by the UP Faculty of Veterinary Science's Department of Poultry Diseases, and the Department of Veterinary Tropical Diseases; the ARC - Onderstepoort Veterinary Institute. The FMDV test was carried in accordance with the DEFRA (UK) Standard (F10CL General Farm Disinfectant only). Test requirements called for $\log^4$ and $\log^5$ reduction in microbial counts.

Sporicidal tests have been carried out in accordance with EN 13704-2002, 13697-2001, and 1650-1997 Standards which required a $\log^5$ reduction in microbial counts.

CONCENTRATIONS AND CONTACT TIMES

Concentrations and contact times are indicated on each product label. It should be noted that additional tests were carried out to determine various speed of kill rates to meet varying application demands.

Bactericidal test standard contact times are generally 5 minutes. However it was found that a $\log^3$ reduction in gram positive bacteria was achieved in 30 seconds and similarly 60 seconds for gram negative bacteria all at a concentration of 1:500 of the F10SC Veterinary Disinfectant. In the AOAC test a $\log^5$ reduction was achieved in both gram positive and gram negative bacteria in a 10 minutes contact time.

Fungi in the vegetative state, yeasts and moulds were eliminated in 30 seconds at a concentration of 1:500 of F10SC Veterinary Disinfectant.

Enveloped viruses were inactivated at 1:500 in 10 minutes whereas the more resistant non-enveloped viruses required a concentration of up to 1:125 with a contact time of 20 minutes to achieve the same reduction. The F10CL General Farm Disinfectant is also used against Foot and Mouth Disease Viruses.

Bacterial and fungal spores $\log^5$ reduction could be achieved in 5 minutes at a concentration of 1:100 or using 1:250 in 15 minutes with F10SC Veterinary Disinfectant.

DOSAGE AND DIRECTIONS FOR USE

For F10SC VETERINARY DISINFECTANTS clear away debris and rinse surfaces, then apply as below:

- Environmental general disinfection dilute 1:500
- High level disinfection (including fungal spores) dilute 1:250
- Resistant viruses (e.g. parvovirus) dilute 1:125
- Sterilisation of instruments/equipment dilute 1:100

Additional information is available in application user guidelines. Other products refer to each specific product label.

TOXICOLOGY

Studies were carried out by a GLP laboratory in accordance with OECD and EPA guidelines.

Acute oral and dermal toxicity

PRODUCT	CONCENTRATION	ORAL	DERMAL
F10SC and F10CL products	2% solution	>5000mg/kg	>5000mg/kg
F10 Disinfectant with Insecticide	As is	>2000mg/kg	>2000mg/kg

Acute eye and dermal irritation

PRODUCT	CONCENTRATION	OCULAR	DERMAL
F10SC and F10CL products	2% solution	score 0 at 24 hrs	score 0 at 24 hrs
F10 Disinfectant with Insecticide	As is	score 0 at 24 hrs	score 0 at 24 hrs

Acute inhalation toxicity

After taking account of the relative volatility, acute oral toxicity, dosage form and direction for use the inhalation toxicity of F10 disinfectant products will not be greater than the values shown for acute oral toxicity

Residual toxicity

Five-week supervised trial using day-old broiler chicks restricted to 1:1000 and 1:250 solutions of F10SC in drinking water showed no F10 residual build-up in muscle meat, liver or kidneys.

CORROSION

The F10 Veterinary Disinfectants are non-corrosive.at the recommended dilutions (complies with SABS test 1615 on polished aluminium strip after 30 days).

FREE RINSING

All F10SC Veterinary Disinfectants are free rinsing at recommended dilutions (complies with SABS test 1593 6.11)

WATER INSOLUBLE MATTER CONTENT

The water insoluble matter content of F10SC Veterinary Disinfectants and F10 Skin Prep Solution is 0,3g/litre (complies with SABS 1593 6.12)

BIODEGRADABLE

The F10SC Veterinary Disinfectants when used at recommended dilutions have a zero rating in terms EU standards.

PRECAUTIONS

Ingestion: Do not induce vomiting, give milk or water to drink. *Eye contact:* Rinse eyes with water, seek medical advice if necessary. In spraying and aerosol applications it is advisable to wear a disposable mask over mouth, nose and eye protection.

WARNINGS

Do not mix with soap or other chemicals. Avoid contact with eyes. Keep out of reach of children, uninformed persons and pets (F10 Aerosol Disinfectant is a highly flammable aerosol) (Avoid contact with felines when using F10 Disinfectant Surface Spray with Insecticide).

PRESENTATION

HPE bottles of varying sizes except for the F10 Aerosols which are in pressurized metal canisters and the F10 Wipes which are packed into a sealed plastic bag.

STORAGE INSTRUCTION

Store below 30^{0}C in dry conditions, out of direct sunlight.

REGISTRATION HOLDER

Health and Hygiene (Pty) Ltd. PO Box 906, Florida Hills, 1716, South Africa

MANUFACTURED BY

Health and Hygiene (Pty) Ltd in accordance with GMP (Good Manufacturing Practice) license reference M-7586 issued by APVMA and SABS 636 Permit 6656/9863.

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