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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DEC 01 1994

Alan R. Wagner, D.V.M., M.S.
Agent for Antec International Ltd.
Regulatory Affairs and Technical Services
4302 S.W. 147th Place
Miami, FL 33185

SUBJECT: VIRKON S
EPA Registration No. 62432-1
Amendment Dated August 29, 1994

Dear Dr. Wagner:

This is in response to your amendment dated August 29, 1994 requesting to add Porcine Reproductive and Respiratory Syndrome (PRRS) viruses and the fungus *Aspergillus fumigatus* claims to your label. The amendment is acceptable and no further data is required since these claims are not related to human health.

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, is acceptable. Submit five copies of the finished label before you release the product for shipment bearing the amended labeling.

If you have any further questions, please contact Ms. Barbara Pringle at (703)305-6484.

Sincerely,



Ruth G. Douglas
Product Manager 32
Antimicrobial Program Branch
Registration Division(7505C)

CONCURRENCES							
SYMBOL	75852						
SURNAME	Pringle						
DATE	11-29						

EQUINE BACTERIA

Clostridial diarrhea
Salmonellosis
Enteric Colibacillosis
Fistulous Withers (Poll Evil)
Contagious Equine Metritis (CEM)
Strangles, Glanders

EQUINE VIRUSES

African Horse Sickness
Equine Viral Arteritis (Pink Eye)
Coital Exanthema
Myeloencephalopathy
Rhinopneumonitis

Equine Contagious Abortion
Equine Papillomatosis
Equine Infectious Anemia (Swamp Fever)
Adenovirus Pneumonia
Equine Influenza (The Cough)
Rhinitis

EQUINE FUNGUS

Dermatophytosis (Ringworm)
Dermatophytosis (Mud Fever)

**Antec
International**

**V
(Virkon logo)**

VIRKON® S BROAD SPECTRUM DISINFECTANT

For Use in Cleaning and Disinfecting Industrial
Animal and Agricultural Facilities

EFFECTIVE AGAINST:

BACTERIA

Streptococcus pyogenes
Campylobacter pyloridis
Klebsiella pneumoniae
Escherichia coli
Salmonella typhimurium
Salmonella choleraesuis
Pseudomonas aeruginosa
Staphylococcus aureus
Staphylococcus epidermidis
Mycoplasma gallisepticum
Clostridium spp

VIRUSES OF

Newcastle Disease
Infectious Bronchitis
Infectious Bursal Disease

Avian Laryngotracheitis
Avian Influenza

Marek's Disease
Egg Drop Syndrome

FUNGI

Aspergillus flavus
Aspergillus fumigatus
Candida albicans

ACTIVE INGREDIENTS

Potassium peroxymonosulfate..... 20.4%
Sodium Chloride..... 1.5%
INERT INGREDIENTS..... 78.1%
TOTAL..... 100.0%

Equivalent to 9.75% Available Chlorine

**KEEP OUT OF REACH OF CHILDREN
DANGER:**

See Back Panel for Additional Precautions

11 lbs (5Kg) Net Weight

ANTEC INTERNATIONAL LTD
Windham Road, Chilton Industrial Estates
Sudbury Suffolk CO10 6XD, England
Tel: (0787) 77305 Telex: 987495 Fax: (0787) 310846

SWINE BACTERIA

Bacteria: Bordetella bronchiseptica,
Pasteurella multocida, Campylobacter
spp, Erysipelothrix rhusiopathiae,
Leptospira spp, Actinobacillus
pleuropneumoniae, Treponema
hyodysenteriae.

SWINE VIRUSES: Hog cholera.
Swine influenza, TGE, Porcine
parvovirus, Rotaviral diarrhea,
Vesicular stomatitis, Pseudorabies.
Porcine Reproductive and
Respiratory Syndrome (PRRS).

ACCEPTED
with COMMENTS
in EPA Letter Date:

DEC 01 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended for the pesticide
registered under EPA Reg. No.

62432-1

VIRKON S is a registered trademark of and manufactured by Antec International Limited

U.S. Patent No. 4822512

SIDE PANEL

BROAD SPECTRUM DISINFECTANT

VIRKON S is effective against numerous microorganisms affecting animals: viruses, gram positive and gram negative bacteria, fungi (molds and yeasts), and mycoplasma. Efficacy was determined in the presence of hard water and organic material.

CONTROLS

Viruses of Newcastle Disease, Infectious Bronchitis, Infectious Bursal Disease, Avian Laryngotracheitis, and Avian Influenza. **Fungi** (molds and yeasts - *Aspergillus flavus*, *Aspergillus fumigatus* and *Candida albicans*. **Bacteria** - *Streptococcus pyogenes*, *Campylobacter pyloridis*, *Klebsiella pneumoniae*, *Escherichia coli*, *Salmonella typhimurium*, *Salmonella choleraesuis*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Mycoplasma gallisepticum*.

DIRECTIONS FOR USE

Federal law prohibits use of this product in a manner inconsistent with its labeling.

This powder formula is easily diluted for use in manual or machine operations.

POULTRY PRODUCTION/RATITE PRODUCTION

VIRKON S is recommended for use in hatcheries, chicken houses, Ratite production and processing plants.

HATCHERIES: **VIRKON S** at 1% solution is generally suitable for cleaning and disinfecting hatchers, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes (use 2% solution for *Mycoplasma*, *Aspergillus flavus* and *Aspergillus fumigatus*). **VIRKON S** is recommended for use in fogging (wet misting) operations as an adjunct either preceding or following regular cleaning and disinfecting procedures. **VIRKON S** at 1-2% solution is suitable. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions.

BROILER/BREEDER HOUSES: Following removal of chickens, feed, and water troughs, remove manure and litter and spray floors and side walls with **VIRKON S** at 1% solution. Thoroughly wash waterers and feeders with a 1% solution of **VIRKON S** (use 2% solution for *Mycoplasma*, *Aspergillus flavus* and *Aspergillus fumigatus*). After contact for 10 minutes, rinse with potable water. Do not use to house poultry or employ equipment until treatment has dried.

FOR AIR SANITIZING: Use **VIRKON S** at 1-2% solution. Fog the atmosphere until surfaces are moist. Allow at least 2 hours before entering area that has been fogged.

PROCESSING PLANTS: For disinfecting and cleaning walls, ceilings, and floors spray at a dilution of 1%.

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SIDE PANEL CONTINUED

SWINE PRODUCTION

CONTROLS: Viruses of Hog Cholera, Porcine Parvo Disease, Vesicular Stomatitis, Pseudorabies, Porcine Reproductive and Respiratory Syndrome (PRRS) Rotoviral Diarrhea, Swine influenza, Foot and Mouth Disease and TGE. Bacteria of Arthritis, Meningitis, Atrophic Rhinitis, Pasteurellosis, Colibacillosis, Enteritis, Erysipelas, Leptospirosis, Mastitis, Necrotic Enteritis, Pleuropneumonia, Salmonellosis and Swine Dysentery. Fungi (molds and yeasts) *Aspergillus flavus*, *Aspergillus fumigatus* and *Candida albicans*.

VIRKON S is recommended for use in farrowing pens, weaner accommodation, grower accommodation and finisher accommodation and processing plants: VIRKON S at 1% solution is generally suitable for cleansing and disinfecting (use 2% solution for *Mycoplasma*, *Aspergillus flavus* and *Aspergillus fumigatus*).

VIRKON S is recommended for use in fogging (wet misting) operations or as an adjunct either preceding or following regular cleaning and disinfecting procedures. VIRKON S at 1-2% solution is suitable. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions.

EQUINE PRODUCTION

APPLICATIONS

For cleaning and disinfection of all surfaces, equipment, utensils and instruments in Veterinary practices, kennels, stables, catteries, etc.

DIRECTIONS FOR USE

Add the contents of one sachet to one gallon of warm water. In cases of parvovirus challenge, add the contents of two sachets to one gallon of water. Solutions are stable for 7 days. Do not soak metal objects for long periods - 10 minutes is maximum necessary contact time.

CONTROLS

Viruses of African Horse Sickness, Equine Viral Arteritis (Pink Eye), Coital Exanthema, Myeloencephalopathy, Rhinopneumonitis, Equine Contagious Abortion, Equine Papillomatosis, Equine Infectious Anaemia (Swamp Fever) Adenovirus Pneumonia, Equine Influenza (The Cough) and Rhinitis, Bacterial, Clostridial Diarrhea, Salmonellosis, Enteric Colibacillosis, Fistulous Withers (Poll Evil), Contagious Equine Metritis (CEM) Strangles and Glanders Fungi; Dermatophytosis (Ringworm) and Dermatophylosis (Mud Fever).

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BACK PANEL

VIRKON® S

DILUTION CHART

Quantity of Final Solution	1% Solution	2% Solution
American		
1 gallon	1.3 ounces	2.7 ounces
10 gallons	13.4 ounces	26.7 ounces
50 gallons	66.8 ounces	133.5 ounces
Metric		
10 liters	100 grams	200 grams
50 liters	500 grams	1000 grams
200 liters	2 kgs	4 kgs

125g	6oz
100g	5oz
75g	4 oz
50g	3oz
	2oz
	1oz

Brim full - contains
200g or 7 ounces

The measure cap holds when
filled level 500g or 17.5 ounces.

For DISINFECTING use a rate of 7.5 gallons/1000 sq. ft.
For CLEANING AND DISINFECTING use a rate of 15 gallons/1000 sq. ft.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive. Causes skin burns and irreversible eye damage. Harmful if swallowed, absorbed through skin, or inhaled. Do not get in eyes, on skin, or on clothing. Wear protective clothing and rubber gloves. Avoid breathing dust. Wear goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PRACTICAL TREATMENT

IF IN EYES: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get prompt medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention if irritation persists.

IF INHALED or symptoms of coughing, choking, or wheezing are troublesome, remove to fresh air and seek medical attention.

IF SWALLOWED: Drink promptly a large quantity of water. Avoid alcohol. Get immediate medical attention.

NOTICE OF PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

STORAGE AND DISPOSAL - Store in a cool, dry place in tightly closed container away from children. Always replace lid after use. Wash empty container thoroughly and dispose of in trash.

ANTEC INTERNATIONAL LTD
Windham Road, Chilton Industrial Estates
Sudbury Suffolk CO10 0XD, England
Tel: (0787) 77305 Telex: 987495 Fax: (0787) 310846

EPA Reg. No. 62432-1

EPA Est. No. 62432-EN-001

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durvet

ACCEPTED
with COMMENTS
in EPA Letter Dated:

DEC 01 1994

Under the Federal Insecticide,
Fungicide, and Rodenticide Act
as amended for the pesticide
registered under EPA Reg. No.

62432-1



VirKon® S

BROAD SPECTRUM DISINFECTANT

For Use in Cleaning and Disinfecting Industrial
Animal and Agricultural Facilities

EFFECTIVE AGAINST

BACTERIA	VIRUSES OF	FUNGI
<i>Streptococcus pyogenes</i> <i>Campylobacter pyloridis</i> <i>Klebsiella pneumoniae</i> <i>Escherichia coli</i> <i>Salmonella typhimurium</i> <i>Salmonella choleraesuis</i> <i>Pseudomonas aeruginosa</i> <i>Staphylococcus aureus</i> <i>Staphylococcus epidermidis</i> <i>Mycoplasma gallisepticum</i> <i>Clostridium</i> spp.	Newcastle Disease Infectious Bronchitis Infectious Bursal Disease Avian Laryngotracheitis Avian Influenza Marek's Disease Egg Drop Syndrome	<i>Aspergillus flavus</i> <i>Candida albicans</i> <i>Aspergillus fumigatus</i>

ACTIVE INGREDIENTS

Potassium peroxymonosulfate	20.4%
Sodium Chloride	1.5%
INERT INGREDIENTS	78.1%
TOTAL	100.0%

Equivalent to 9.75% Available Chlorine

**KEEP OUT OF REACH OF CHILDREN
DANGER:**

See Back Panel for Additional Precautions

10lbs Net Weight

Distributed By:



301 Baybrook Street, Thomasville, GA 31792

Made in England by Antec International Limited

VirKon S is a registered trademark of and manufactured by
Antec International Limited U.S. Patent No. 4,822,512

BROAD SPECTRUM DISINFECTANT

VIRKON S is effective against numerous microorganisms affecting animals: viruses, Gram positive and Gram negative bacteria, fungi (molds and yeasts), and Mycoplasma. Efficacy was determined in the presence of hard water and organic material.

DIRECTION FOR USE

Federal law prohibits use of this product in a manner inconsistent with its labeling.

This powder formula is easily diluted for use in manual or machine operations.

POULTRY PRODUCTION/RATITE PRODUCTION

VIRKON S is recommended for use in hatcheries, in chicken houses and in Ratite production.

CONTROLS: Viruses of Newcastle Disease, Infectious Bronchitis, Infectious Bursal Disease, Laryngotracheitis, Avian Influenza, Marek's Disease and Egg Drop Syndrome. Fungi: *Aspergillus flavus* and *Candida albicans*. Bacteria: *Streptococcus pyogenes*, *Campylobacter pyloridis*, *Infectious Bronchitis*, *Klebsiella pneumoniae*, *Escherichia coli*, *Salmonella typhimurium*, *Salmonella choleraesuis*, *Pseudomonas aeruginosa*, *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Mycoplasma gallisepticum*, *Necrotic enteritis*.

HATCHERIES: VIRKON S at 1% solution is generally suitable for cleaning and disinfecting hatchery, setters, evaporative coolers, humidifying systems, ceiling fans, chicken houses, transfer trucks, trays, and plastic chick boxes (use 2% solution for *Mycoplasma* and *Aspergillus* levels).

VIRKON S is recommended for use in fogging (wet misting) operations as an adjunct either preceding or following regular cleaning and disinfecting procedures. VIRKON S at 1-2% solution is suitable. Fog (wet mist) until the area is moist using automatic wet foggers according to manufacturer's use directions.

BROILER/BREEDER HOUSES: Following removal of chickens, lead and water troughs, remove manure and litter and spray floors and side walls with VIRKON S at 1%. Thoroughly wash waterers and feeders with a 1% solution of VIRKON S (use 2% solution for *Mycoplasma* and *Aspergillus* levels). Do not use to house poultry or employ equipment until the treatment has dried.

SWINE PRODUCTION

CONTROLS: Viruses of Hog Cholera, Porcine Parv Disease, Vesicular Stomatitis (PRRS), Pseudorabies, Rotaviral Diarrhea, Swine Influenza, Foot and Mouth Disease and TGE. Bacteria of Arthritis, Meningitis, *Albicans*, Rhinitis, Pasteurellosis, Colibacillosis, Enteritis, *Erysipelas*, Leptospirosis, Mastitis, Necrotic Enteritis, Pleuropneumonia, *Salmonellosis* and Swine Dysentery. Fungi (molds and yeasts) *Aspergillus flavus* and *Candida albicans*.

VIRKON is recommended for use in Farming pens, weather accommodation grower accommodation and finisher accommodation and processing plants. VIRKON S at 1% solution is generally suitable for cleaning and disinfecting (use 2% solution for *Mycoplasma* and *Aspergillus* levels).

VIRKON S is recommended for use in fogging (wet misting) operations as an adjunct either preceding or following regular cleaning and disinfecting procedures. VIRKON S at 1-2% solution is suitable. Fog (wet mist) until the area is moist using automatic foggers according to manufacturer's use directions.

FOR AIR SANITIZING: Use VIRKON S at 1-2% solution. Fog the atmosphere until surfaces are moist. Allow at least 2 hours before entering area that has been fogged.

STORAGE & DISPOSAL: Store in a cool, dry place in tightly closed container. Always replace lid after use. Wash empty container thoroughly and dispose of in trash.

Ratite

Aspergillus fumigatus

and
Aspergillus fumigatus

and
Aspergillus fumigatus

After contact
time of 10
minutes, rinse
with potable
water.

Porcine
Respiratory
and Repro-
ductive
Syndrome

Atrophic

Erysipelas

and
Aspergillus fumigatus

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durvet



VirKon® S

BROAD SPECTRUM DISINFECTANT

For Use in Cleaning and Disinfecting Industrial
Animal and Agricultural Facilities

EFFECTIVE AGAINST

BACTERIA	VIRUSES OF	FUNGI
<i>Streptococcus pyogenes</i> <i>Staphylococcus aureus</i> <i>Klebsiella pneumoniae</i> <i>Escherichia coli</i> <i>Salmonella typhimurium</i> <i>Salmonella choleraesuis</i> <i>Pseudomonas aeruginosa</i> <i>Staphylococcus epidermidis</i> <i>Mycoplasma</i> spp <i>Bordetella bronchiseptica</i> <i>P. steurella multocida</i> <i>Campylobacter</i> spp <i>Erysipelothrix rhusiopathiae</i> <i>Leptospira</i> spp <i>Clostridium</i> spp <i>Actinobacillus pleuropneumoniae</i> <i>Treponema hyodysenteriae</i>	Hog cholera Swine influenza TGE Blue-eye Porcine parvovirus Rotaviral diarrhoea Vesicular stomatitis Pseudorabies PRRS (Porcine Reproductive and Respiratory Syndrome)	<i>Aspergillus flavus</i> <i>Candida albicans</i> <i>Aspergillus fumigatus</i>

**KEEP OUT OF REACH OF CHILDREN
DANGER:**

See Back Panel for Additional Precautions

10lbs Net Weight

Distributed By



301 Baybrook Street, Thomasville, GA 31792

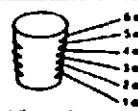
Made in England by Antec International Limited

VIRKON S is a registered trademark of and manufactured by
Antec International Limited U.S. Patent No. 4822512

VirKon® S

DILUTION CHART

Quantity of Final Solution	1% Solution	2% Solution
American 1 gallon	1.3 ounces	2.7 ounces
10 gallons	13.4 ounces	26.7 ounces
50 gallons	66.8 ounces	133.5 ounces



Drum full — contains
7 ounces



The measuring cup holds when
filled level 17.5 ounces

For DISINFECTING use a rate of 7.5 gallons/1000 sq. ft.
For CLEANING AND DISINFECTING use a rate of 15 gallons/1000 sq. ft.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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IF INHALED or symptoms of coughing, choking, or wheezing are troublesome, remove to fresh air and seek medical attention.

IF SWALLOWED: Drink promptly a large quantity of water. Avoid alcohol. Get immediate medical attention.

NOTICE OF PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

durvet

Manufactured for

Durvet Inc., Blue Springs, Missouri, 64015-1-800-821-5570
EPA Reg. No. 62432-1-12281. EPA Est. No. 62432-EN-001

Made in England by Antec International Limited

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