UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

MAR 0 6 2000

S.C. Johnson Commercial Markets, Inc. 8310 16th Street Sturtevant, WI 531177-0902

Subject:

Virex II/128

EPA Registration No. 70627-21 Amendment Date: 8/26/99 EPA Receive Date: 9/08/99

Attention:

Ms. Lisa Amadio

The amendment referenced above, submitted in connection with registration under FIFRA, to add use dilution labeling is acceptable provided you address the following recommendations before you release this product for shipment.

Product Chemistry

The Confidential Statements of Formulas for alternate formulations #21877, #21881. #21884, #21885, #21886, #21887, #21888, #21889 dated 8/26/99 is acceptable, in compliance with PR Notice 91-2, and in agreement with the label. The fragrances, TCC73048 and PA51864, are cleared for use in pesticide formulations.

Please note: The Agency is no longer accepting the use of "commodity" as the descriptor for supplier name and address for inert ingredients. You will need to list a specific supplier in Column 11 on the Confidential Statement of Formula form or add an addendum to the form listing all the suppliers for your inert ingredient(s).

Acute Toxicology

The proposal for a regulatory distinction between the lethality due to corrosive effects and lethality due to systemic toxicity is unacceptable. The cited acute inhalation study represents controlled conditions far in excess of those normally experienced by product users. Similarly,

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such that the study was halted due to corrosion. However, Agency policy does not recognize the distinction between "systemic" and "corrosion" effects. Acute dermal and acute inhalation studies are conducted at high concentrations on purpose to test for lethality and to get an indication of what effects might result from emergency exposure incidents.

Your recommendation for Category III for acute inhalation toxicity based on an LC_{50} adjustment for dilution (2:1 aqueous only) is unacceptable. Also, your proposal to use the acute oral LC_{50} to determine the acute inhalation LC_{50} is unacceptable. Therefore, the labeling guidance for the "precautionary and first aid statements" in the Agency letter dated 7/09/99 need to be made to the product label. You will need to review PR Notice 98-9, Modification of Respirator Statements for Pesticide Product Labels, for appropriate respirator labeling.

Concentrate "Precautionary Statements" Revisions:

Corrosive. Concentrate causes irreversible eye damage and skin burns. Concentrate may be fatal if absorbed through the skin. Do not get in eyes, on skin, or on clothing. Wear chemical splash-proof goggles or face shield, rubber gloves, protective clothing, and protective footwear. Concentrate may be fatal if inhaled. Do not breathe spray mist. (See PR Notice 98-9 for accurate respirator guidance). Concentrate is harmful if swallowed. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

Use dilution Revisions:

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Precautionary Statements:

After product is diluted in accordance with the Directions For Use, causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, clothing. Harmful if inhaled. Avoid breathing spray mist. Protective eyewear, clothing, gloves, and respirator are not required. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

Statements of Practical Treatment:

If the diluted product gets: In Eyes, flush eyes with plenty of water. Call a physician, if irritation persists. If On Skin, wash with plenty of soap and water. Get medical attention.

Efficacy

- 1. The data submitted supports efficacy claims against the following organisms:
 - A. Micrococcus luteus (ATCC 14552)
 - B. Enterococcus faecalis (ATCC 19443)
 - C. Klebsiella oxytoca (ATCC 13182)
 - D. Proteus mirabilis (ATCC 9240)

- E. Shigella dysenteriae (ATCC 29026)
- F. Shigella flexneri (ATCC 25875)
- G. Shigella psittaci (VR-125)

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2. Your request to use the commonly used alternate names for an organism, specifically Streptococcus faecalis (ATCC 19433) and Serratia liquefaciens (ATCC 124460), is not acceptable. According to Subdivision H, section 101-1 p. 9, "Bacterial, fungal, and viral nomenclature used on product labels should appear in the last edition of the American Type Culture Collection (ATCC) catalogs." It is the responsibility of the manufacturers and consumers of these antimicrobial products to keep up to date with the current scientific nomenclature.

Label Recommendations

- 1. Page 2: Under J-Spray Dispensing System, the last statement should be revised to "Four concentrate cartridges makes a total of 16 refills to the 25.4 fl. oz. container," to prevent misinterpretation. (IE. thinking that x gallons can be made at once)
- 2. Pages 2-3: Under General Uses, Hospitals/Health Care Facilities, and Food Service, the phrase, "Do not use on glasses, dishes, and utensils" needs to be added as the last sentence in the second paragraph.
- 3. Pages 2-3: Under General Uses, Hospitals/Health Care Facilities, and Food Service, the phrase, "a variety of' needs to be replaced with "the following." Also, delete "typically" from the phrase "typically associated with."
- 4. Page 2: Under General Uses and Hospitals/Health Care Facilities, you will need to delete "whirlpools" from your list of sites. You will need to develop specific use directions on how to clean.
- 5. Page 4: Under J-Spray Dispensing system, revise the statement "Remove snap cap and insert J-Spray" to read "Remove snap cap *from cartridge* and insert J-Spray".
- 6. Page 5: The heading, "For Use as a Cleaner," needs state "For Use as a Cleaner and/or Deodorizer."
- 7. Page 5: Under One-Step Cleaner/Disinfectant Product, you will need to add an additional note for food processing plants/federally inspected meat and poultry establishments:
 - "Before using this product, food products and packaging materials must be removed from the room or carefully protected. After use, all surfaces in the area must be thoroughly rinsed with potable water."
- 8. Page 6: Under Treatment of Animal Housing Facilities, the seventh step should be

revised by stating, "To disinfect feed racks, troughs, automatic feeders, fountains, and watering appliances scrub with use solution, let stand for ten (10) minute. Then throughly scrub all treated surfaces with soap or a detergent and rinse with potable water." (See DSS/TSS 18, step 9)

A stamped label is enclosed for your records. Please submit one (1) copy of the final printed label to the Agency before you release this product for shipment. If you have any questions regarding this letter, please contact Jacqueline Campbell at (703) 308-6416.

Sincerely.

Velma Noble

Product Manager (31)

Regulatory Management Branch I Antimicrobials Division (7510C)

Enclosure:

Acute Toxicology Data Evaluation

Efficacy Data Evaluation

DSS/TSS 19

Whirlpool labeling guidance

ACCEPTED with COMMENTS in EPA Letter Dated:



MAR - 6 2000
Under the Federal Insecticide,
Pangicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 70627-21

VIREX™ II/ 128

One-Step Disinfectant Cleaner And Deodorant

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Bactericidal • *Virucidal • Fungicidal • Mildewcidal • (Mildewstatic) • Deodorizer (Odo • Non-Dulling To Floors (Floor Finishes)	r Counteractant) (Odor Neutralizer)
(Fragrance Free Formula), (Unscented), (Fresh [Lemon], [Pine], [Mint], [Spring Fresh],	, [Floral], [Citrus], [Powder] Scent)
)	
For (Hospital,) (Foodservice,) (Commercial,) Industrial & Institution (Suitable) For Use in Meat and Poultry Plants Keep From Freezing	nal Use (Only)
ACTIVE INGREDIENTS:	
Didecyl dimethyl ammonium chloride	4.352%
n-Alkyl (50% C ₁₄ , 40% C ₁₂ , 10% C ₁₆) dimethyl benzyl ammonium chloride	4.095%
INERT INGREDIENTS:	
TOTAL:	100.000%
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KEEP OUT OF REACH OF CHILDREN DANGER: PELIGRO: See additional precautionary statements on back (side) (left) (right) (panel) label (below).
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See reference sheet (enclosed in each case) for a complete list of pathogenic organism (this product).	s eliminated by VIREX™ II/ 128
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10/13/99 Page 1 of 11 EPA Reg. No. 70627-21 (MARKETING CLAIMS): (Note to EPA - This text will only appear on the appropriate container.)

ACCUMIX™ CONTAINERS (32 oz. container) - ACCUMIX™. (Remove [Loosen] cap). Squeeze. (Squeeze bottle.)

Measure. (Measure amount). Pour. (Pour contents). (Designed) For use with 5 gallon Buddy Jugs™ (the BIG BUDDY™ [ACCUTA!NER™] System). VIREX™ II/ 128 can also be diluted into pre-cleaned and properly labeled 5-gallon BUDDY JUG™ (ACCUTA!NERS™) (Dispensing Containers) for dispensing as needed.

SOLUTIONS CENTER™ (64 oz. containers) - For use with (JOHNSON™) (PRISM™) (DRACKETT™) (SOLUTIONS CENTER™) Brand Dispensing Equipment. Eliminates Mixing. The Accurate Solution To Cleaner Dilution. Disinfectant Cleaning With The Convenience Of (SOLUTIONS CENTER™). (SOLUTIONS CENTER™) (This) packaging offers) Reduced Exposure To Concentrate Due To Closed Transfer System. Solutions To Go!

J-FILL™ DISPENSING SYSTEMS (84.5 oz. containers) - For use with (JOHNSON™) (PRISM™) (DRACKETT™) (J-FILL™) Brand Dispensing Equipment. Eliminates Mixing. The Accurate Solution To Cleaner Dilution. Disinfectant Cleaning With The Convenience Of J-FILL™. 3-FILL™ (This) packaging offers) Reduced Exposure To Concentrate Due To Closed Transfer System. Solutions To Go!

ACCUPACK™ CONTAINERS (Pre-measured packets) - Pre-Measured [Tear-Open] Packets.

[-SPRAY™ DISPENSING SYSTEM - For use with (JOHNSON™) (PRISM™) (DRACKETT™) (J-Spray™) (EASY PAKS 4
JHOT™) Brand Dispensing Equipment. Eliminates Mixing. The Accurate Solution To Cleaner Dilution. Disinfectant

Cleaning With The Convenience Of (J-Spray™) (EASY PAKS 4-SHOT™). (J-Spray™) (EASY PAKS 4-SHOT™) (This)

packaging offers) Reduced Exposure To Concentrate Due To Closed Transfer System. Solutions To Go! Concentrate.

Makes xx Bottles. Each compartment of a J-Spray™ cartridge produces xx oz. (xx mL) ready-to-use product. Use only with

the J-Spray™ Virex™ II/ 128 Use Solution Trigger Bottle. Read instructions before use. Four concentrate cartridges makes

xx gallons (xx L) of ready-to-use Virex™ II/ 128.

(FEATURES, CLAIMS & USES:)

(General Uses)

VIREX II/ 128 is a one-step (hospital-use) germicidal (disinfectant) cleaner and deodorant (odor-counteractant) (odor neutralizer) designed for general cleaning, (and) disinfecting, (deodorizing) (and controlling mold and mildew on) (of) a variety of hard, non-porous environmental surfaces. It cleans quickly by removing dirt, grime, mold, mildew, body oils and other common soils found in hospitals, nursing homes, schools and colleges, (day care centers), (medical) offices, funeral homes, veterinary clinics, pet shops, (equine farms), animal life science laboratories, hotels, motels, public areas and restrooms, foodservice establishments (restaurants) and federally inspected meat and poultry establishments (food processing] plants).

It is designed for use on (Use daily on) (a variety of) hard, non-porous environmental surfaces: vinyl, painted surfaces, plastic (surfaces), glazed ceramic, glazed porcelain, chrome, stainless steel, aluminum, laminated surfaces and baked enamel surfaces typically associated with floors, walls, ceilings, tables, chairs, countertops, telephones, fixtures, whirlpools, glazed tile, toilets, urinals, bowl brushes, (bowl mops), sinks, shower rooms and locker rooms areas - any washable (food and non-food contact) surface where disinfection is required. VIREX™ II/128's non-dulling formula eliminates the time and labor normally required for rinsing. A potable water rinse is required for food contact surfaces.

(Hospitals/Health Care Facilities:)

VIREX** II/ 128 is a one-step (hospital-use) germicidal (disinfectant) cleaner and deodorant (odor-counterectant) (odor neutralizer) designed for general cleaning, (and) disinfecting, (deodorizing) (and controlling mold and mildew on) (of) a variety of hard, non-porous environmental surfaces. VIREX** II/ 128 cleans quickly by removing dirt, grime, mold, mildew, food residue, body oils, dead skin, blood and other organic matter commonly found in hospitals*(in) health care facilities) (on medical surfaces). It (also) eliminates odors leaving (restroom) surfaces smelling clean and fresh. Use where odors are a problem.

ACCEPTED with COMMENTS in EPA Letter Dated:

MAR - 6 2000

Under the Federal Insecticide,
Fangicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 10627-21

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VIREX 1/ 128 cleans, disinfects and deodorizes (hard, non-porous environmental hospital (medical) surfaces) in one step (with no rinsing required). Its non-abrasive formula is designed for use on (Use daily on) (a variety of hard, non-porous environmental surfaces): vinyl, painted surfaces, plastic (surfaces), glazed ceramic, glazed porcelain, chrome, stainless steel, laminated surfaces and baked enamel surfaces typically associated with floors, walls, ceilings, tables, chairs, countertops, telephones, fixtures, whirlpools, glazed tile, toilets, urinals, bowl brushes, (bowl mops,) sinks found in (health care facilities [hospitals],) patient rooms, operating rooms, ICU areas, shower rooms, and locker rooms. (It can also be used to pre-clean and disinfect hospital items: wheelchairs, [hospital] [patient] bed rails and linings, wash basins, bed pans, [and] [hospital] medical equipment [& devices,]) - any washable (food and non-food contact) surface (where disinfection is required). A potable water rinse is required when disinfecting food contact surfaces.

(Food Service:)

VIREX™ II/ 128 removes dirt, grime and food soils in food preparation and processing areas. Its non-abrasive formula will not harm (scratch) surfaces. It cleans, disinfects and eliminates odors leaving surfaces smelling clean and fresh. Use where odors are a problem.

Its non-abrasive formula is designed for use on (Use daily on) a variety of hard, non-porous environmental surfaces: vinyl, painted surfaces, plastic (surfaces), glazed ceramic, glazed porcelain, chrome, aluminum, stainless steel, brass, copper, laminated surfaces and baked enamel surfaces (typically associated with floors, walls, ceilings, tables, chairs, countertops, fixtures, glazed tile, toilets, (toilet bowls), urinals, sinks found in food establishments, (restaurants), (commercial kitchens) prestrooms. A potable water rinse is required for food contact surfaces.

(Animal Housing Facilities:)

VIREX[™] II/ 128 cleans by removing dirt, grime, mold, mildew, blood, urine, fecal matter and other common soils found in animal housing facilities, livestock, swine or poultry facilities, grooming facilities, farms, kennels, pet stores, veterinary clinics, laboratories or other small animal facilities. It (also) eliminates odors leaving surfaces smelling clean and fresh.

VIREX™ II/ 128 cleans, disinfects and deodorizes (hard, non-porous environmental surfaces) in one step. Its non-abrasive formula is designed for use on (Use daily on) (Use daily to clean and disinfect) hard, non-porous surfaces: plated or stainless steel, aluminum, chrome, glazed porcelain, glazed tile, laminated surfaces (typically associated with floors, walls, countertops, cages, kennels, animal equipment) found in (barns, pens and stalls) animal housing facilities.

(Public Restrooms:)

VIREX 1/ 128 is a one-step disinfectant cleaner and deodorant (odor-counteractant) (odor-neutralizer) designed for general cleaning, (and) (disinfecting) (deodorizing) (and controlling mold and mildew) on (of) a variety of hard, non-porous environmental surfaces.

REX™ II/ 128 cleans, disinfects and deodorizes surfaces by killing odor-causing germs and mold & mildew. Its non-abrasive formula is designed for use on (restroom surfaces): glazed ceramic (restroom) tile, glazed porcelain, chrome, stainless steel and plastic surfaces typically associated with floors, walls, fixtures, toilets, urinals, sinks, shower rooms and locker rooms.

(Non-Acid Bowl [& Bathroom] Disinfectant Cleaner:)

VIREX™ II/ 128 is a (concentrated) non-acid (bowl and) bathroom cleaner which cleans, disinfects and deodorizes in one easy step. It cleans, disinfects and deodorizes toilet bowls, urinals, bowl brushes (bowl mops), rims, sinks, sink basins, faucets, tubs, glazed tiles, glazed ceramic, glazed porcelain, chrome, stainless steel, and all hard non-porous, washable surfaces found in the bathroom (restroom) (in the presence of organic soil).

VIREX™ II/ 128 eliminates odors leaving bathrooms (restrooms) smelling clean and fresh. Use where odors are a problem. It cleans, disinfects and deodorizes surfaces by killing odor-causing microorganisms and mold & mildew, its non-abrasive formula is designed for use (Use it daily) on ([hard, non-porous environmental] restroom surfaces), glazed ceramic (restroom) tile, glazed porcelain, chrome, stainless steel and plastic surfaces typically associated with ficors, walls, fixtures, toilets, urinals, sinks, shower rooms and locker rooms.

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MAR - 6 COOC Under the Federal Insecticide, Fangicide, and Rocernicide Act as amended, for the pesticide, registered under EPA Reg. No. 70627-24 10/13/99 Page 3 of 11 EPA Reg. No. 70627-21 [NOTE TO AGENCY: All unbolded italicized phrases, which appear in the Directions for Use, are explanatory and are not to be considered label text. They are included for clarity to the agency only.]

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

VIREX[™] II/ 128 can be applied by mop, sponge, cloth, paper towel, (hand pump) trigger sprayer, tank sprayer, (mechanical spray device,) auto-scrubber or (broadcast) foam gun (device). Change cloth, sponges or towels frequently to avoid redeposition of soil. For disinfection, all surfaces must remain wet for 10 minutes.

To Prepare Use Solution:

Add the product at 1 oz. per gallon of water (8mL/L) (1:128).

(Note to EPA: The directions that appear for specific container sizes will be substitued for the sentence above only on that container size.)

ACCUMIX™ CONTAINERS (32 oz. container) - Add the product at 1 oz. per gallon of water (8 mL/L) (1:128).

SOLUTIONS CENTER™ (64 oz. containers) - Remove cap and insert cartridge into dispenser. Note: See dispenser instructions for proper cartridge placement. Once cartridge is in place, squeeze the handle or press the button to dispense a 1:128 solution into a bucket, bottle, scrubber or other container.

J-FILL™ DISPENSING SYSTEMS (84.5 oz. containers) - Remove cap and insert cartridge into dispenser. Note: See dispenser instructions for proper cartridge placement. Once cartridge is in place, squeeze the handle or press the button to dispense a 1:128 solution into a bucket, bottle, scrubber or other container.

ACCUPACK™ CONTAINERS (Pre-measured packets) - (Simply) open and pour contents into xx gallons of water (for a 1:128 dilution). Keep packets in box until ready to use. (Pour contents of packet into xx gallons of water for a 1:128 dilution.)

(Special Instructions for ACCUPACK CONTAINERS.)

For Use as a Non-Acid Bowl Cleaner/Disinfectant in Toilet Bowls from Concentrate:

- 1. Pre-clean heavily soiled areas.
- 2. Pour packet contents into toilet bowl.
- 3. Swab entire surface area especially under the rim.
- 4. Allow entire surface to remain wet for ten (10) minutes.
- 5. Flush toilet and rinse swab applicator thoroughly.

J-SPRAY™ DISPENSING SYSTEM

(Cartridge Placement Instructions:)

- 1. Remove side cap, and fill bottle with water to line. Replace cap.
- 2. Open bottle top by removing (black) (gray) neck ring. Remove snap cap and insert J-Spray Virex II/ 128 concentrate cartridge into neck of bottle. Replace (black) (gray) neck ring.
- 3. Insert trigger spray dip tube into center cartridge hole, and gently push plastic plunger down through one of the sealed foil compartments. Push until top and bottom seals are broken. DO NOT PIERCE MORE THAN ONE COMPARTMENT AT A TIME.
- 4. Screw trigger sprayer down tightly, and gently agitate to mix solution.
- 5. Affix label provided.

(Refili Instructions:)

When trigger spray bottle is empty, refill with water. Leaving (black) (gray) neck ring on, lift trigger sprayer and pierce next cartridge section following steps 3 & 4. Replace cartridge when all four sections have been used., Use only in bottles labeled: J-Spray Virex II/ 128 Use Solution.

ACCEPTED with COMMENTS in EPA Letter Dated:

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Under the Federal Insecticide,
Fangicide, and Rodenticide Act as
amended, for the pesticide,
registered under EPA Reg. No. 10637-21

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For Use as a One-Step Cleaner/Disinfectant Product:

- 1. Pre-clean heavily soiled areas.
- 2. Apply Use Solution to hard, non-porous environmental surfaces.
- 3. All surfaces must remain wet for ten (10) minutes.
- 4. Wipe surfaces (and let air dry).

Note - Rinsing is not necessary unless floors are to be coated with finish or restorer. All food contact surfaces such as appliances and kitchen countertops must be rinsed with potable water. Do not use on glassware, utensils, or dishes.

For Use as a Cleaner:

Apply Use Solution to surfaces. Wipe surfaces (and let air dry).

To Kill Mold and Mildew:

Pre-clean heavily soiled areas. Apply Use Solution to hard, non-porous environmental surfaces. Allow surfaces to remain wet for ten (10) minutes. Wipe surfaces (and let air dry).

To Control Mold and Mildew:

Apply Use Solution to hard, non-porous environmental surfaces. Allow to air dry. Repeat application weekly or when growth reappears.

าง Kill Fungi:

Pre-clean heavily soiled areas. Apply Use Solution to hard, non-porous environmental surfaces. Allow surface to remain wet for ten (10) minutes. Wipe surfaces (and let air dry).

For Use To Clean and Disinfect Barber and Beauty/Manicure Instruments and Tools:

- 1. Pre-clean heavily soiled items.
- 2. Completely immerse pre-cleaned combs, brushes, scissors, clipper blades, razors, manicure implements and other non-porous instruments in the Use Solution so that surfaces remain wet for ten (10) minutes.
- 3. Rinse surfaces thoroughly and let air dry before reuse.
- 4. Change solution daily or when visibly dirty.

NOTE: Plastics may remain immersed until ready to use. Stainless steel shears and other metal instruments must be removed after 10 minutes, rinsed, dried and kept in a clean, non-contaminated receptacle. Prolonged soaking may cause damage to metal instruments.

For Use as a Non-Acid Bowl Cleaner/Disinfectant in Toilet Bowls from Concentrate:

- Pre-clean heavily soiled areas.
- Add 3/4 oz. into toilet bowl.
- 3. Swab entire surface area especially under the rim.
- 4. Allow entire surface to remain wet for ten (10) minutes.
- 5. Flush toilet and rinse swab applicator thoroughly.

For Use as a Non-Acid Bowl Cleaner/Disinfectant in Toilet Bowls [and Urinals] from Use-Dilution:

- 1. Pre-clean heavily soiled areas.
- 2. Empty toilet bowls by forcing water through the trap. Apply Use Solution to exposed surfaces in toilet bowls and urinals.
- 3. Swab entire surface area especially under the rim.
- 4. Allow entire surface to remain wet for ten (10) minutes.
- 5. Flush toilet or urinal and rinse swab applicator thoroughly.

ACCEPTED with COMMENTS in EPA Letter Dated:

MAR - 6 2000

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 10627-21 10/13/99 Page 5 of 11 EPA Reg. No. 70627-21

For Use To Clean and Disinfect Shower Rooms, Locker Rooms and Other Large, Open Areas with Floor Drains:

- 1. Pre-clean heavily soiled areas.
- 2. Apply Use Solution to floors, walls and ceilings making sure not to over spray. To disinfect, all surfaces must remain wet for ten (10) minutes.

Special instructions for foam guns: Pour concentrate into foam gun bottle and attach bottle to spray nozzle and ensure gun is attached to hose. Note: See foam gun instructions for more information. Make sure setting is set for a 1:128 dilution. Once in place, squeeze the handle to dispense foam solution. To disinfect, all surfaces must remain wet for ten (10) minutes.

- 3. Scrub using a deck brush or other coarse material as necessary.
- 4. Rinse surfaces thoroughly and let air dry.

For Use For Treatment of Animal Housing Facilities:

- 1. Remove all animals and feed from areas being treated.
- 2. Remove all litter and manure from floors, walls and surfaces of barns, pens, stalls, chutes, and other facilities occupied or traversed by animals.
- 3 Empty or cover all troughs, racks and other feeding and watering appliances.
- Thoroughly clean all surfaces with soap and rinse with water.
- Apply fresh use solution to floors, walls, cages and other washable hard, non-porous environmental surfaces. For smaller surfaces, use a trigger spray bottle to spray all surfaces with solution until wet. To disinfect, all surfaces must remain wet for ten (10) minutes.
- 5. Do not house animals or employ equipment until product has dried.
- 7. To clean and disinfect feed racks, troughs, automatic feeders, fountains and watering appliances scrub with use-solution, let stand ten (10) minutes and rinse with potable water before reuse.

*VIREX™ II/ 128 kills HIV-1 on pre-cleaned environmental surfaces/objects previously soiled with blood/body fluids in health care settings (Hospitals, Nursing Homes) and other settings in which there is an expected likelihood of soiling of inanimate surfaces/objects with blood or body fluids, and in which the surfaces/objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 (HIV-1) (associated with AIDS).

SPECIAL INSTRUCTIONS FOR CLEANING AND DECONTAMINATION AGAINST HIV-1 ON SURFACES/OBJECTS SOILED WITH BLOOD/BODY FLUIDS.

Personal Protection: Disposable latex or vinyl gloves, gowns, face masks, or eye coverings as appropriate, must be worn during all cleaning of body fluids, blood, and decontamination procedures.

Cleaning Procedures: Blood and body fluids must be thoroughly cleaned from surfaces and objects before application of VIREX™ II/ 128.

Contact Time: Allow surface to remain wet for 1 minute to kill HIV-1 and for 10 minutes to kill all other organisms cited on the label.

Disposal of Infectious Material: Blood and other body fluids should be autoclaved and disposed of according to Federal, State, and local regulations for infectious waste disposal.

This product is not to be used as a terminal sterilant/high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the blood stream or normally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier, or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

ACCEPTED with COMMENTS in EPA Letter Dated:

MAR - 6 2000

Charles with the Contract

Under the Federal Insecticide, Fangicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 70627-21 10/13/99 Page 6 of 11 EPA Reg. No. 70627-21 (CLAIMS:)

When used as directed at a 1:128 dilution (1oz. per gallon of water) (8mL/L), VIREX™ II/ 128 contains 660 ppm of active quaternary germicide making it highly effective against a wide variety (broad-spectrum) of pathogenic microorganisms.

Using approved AOAC test methods (under Good Laboratory Practices, [GLP's]), in the presence of 400 ppm hard water, 5% serum load and 10 minutes contact time VIREX™ II/ 128 kills the following:

Viruses (*Virucidal Activity) – kills on hard non-porous inanimate surfaces.

Adenovirus Type 2, (VR-2)

Fungi/Yeast (Fungicidal and Yeast Activity) - kills on hard non-porous inanimate surfaces.

Fungi:

Aspergillus niger, (ATCC 6275)

Trichophyton mentagrophytes (athlete's foot fungus). (ATCC 9533)

Yeast:

Candida albicans, (ATCC 10231)

Mold/Mildew (Mildewcidal Activity) - kills the growth of mold and mildew: Aspergillus niger (ATCC 6275) (and the odors caused by them when applied to hard, non-porous environmental surfaces).

Using approved AOAC test methods (under Good Laboratory Practices, [GLP's]), in the presence of 400 ppm hard water, 10% serum load and 10 minutes contact time VIREX™ II/ 128 kills the following:

Legionella pneumophila, (ATCC 33153)

Bacteria (Bactericidal Activity) - kills on hard non-porous inanimate surfaces:

Pseudomonas aeruginosa, (ATCC 15442) Staphylococcus aureus, (ATCC 6538) Salmonella choleraesuis, (ATCC 10708) Acinetobacter calcoaceticus, (ATCC 9957) Bordetella bronchiseptica, (ATCC 10580) Burkholderia cepacia, (ATCC 25416) Campylobacter fetus, (ATCC 27374) Citrobacter freundii, (ATCC 8090) Enterobacter agglomerans, (ATCC 27155) Enterobacter cloacae, (ATCC 23355) Enterobacter liquefaciens, (ATCC 14460) Enterococcus faecais, (ATCC 19433) Enterococcus hirae (ATCC 10541) Escherichia coli, (ATCC 11229) Escherichia coli 0157:H7, (ATCC 43890) Flavobacterium meningosepticum, (ATCC 13253) Haemophilus influenza, (ATCC 10211) Hafnia alvei, (ATCC 13337)

Listeria monocytogenes, (ATCC 15313) Micrococcus luteus, (ATCC 4698) Micrococcus sedentarius, (ATCC 27573) Neissena gonorrhae, (ATCC 43069) Pasteurella multocida, (ATCC 43137) Proteus mirabilis, (ATCC 9240) Proteus vulgaris, (ATCC 13315) Pseudomonas cepacia, (ATCC 25416) Pseudomonas diminuta, (ATCC 11568) Pseudomonas fluorescens, (ATCC 13525) Pseudomonas putida, (ATCC 12633) Pseudomonas stutzeri, (ATCC 17588) Salmonella choleraesuis puliorum, (ATCC 19945) Salmonella enteritidis, (ATCC 13076) Salmonella gallinarum, (ATCC 9184) Salmonella schottmuelleri, (ATCC 10719) Salmonella typhi, (ATCC 6539) Salmonella typhimurium, (ATCC 13311) Serratia grimesii, (ATCC 14460)

Serratia liquefaciens, (ATCC 14460) Serratia marcescens, (ATCC 9103) Shigella dysenteriae, (ATCC 29026) Shigella flexneri, (ATCC 25875) Shigella sonnei, (ATCC 25931) Staphylococcus aureus, (ATCC 25923) Staphylococcus aureus (Toxic Shock), (ATCC 33586) Staphylococcus epidermidis, (ATCC 14990) Staphylococcus haemolyticus, (ATCC 29970) Streptospecus agalactiae, (ATCC 13813) Streptococcus faecalis, (ATCC 19433) Streptococcus mutans, (ATCC 25175) Streptococcus pyogenes, (ATCC 19615) Streptocccus pyogenes ("Strep A" -Flesh Eating Strain), (clinical isolate) Vibrio cholera, (ATCC 11623) Yersinia enterocolitica, (ATCC 9610)

Antibiotic-Resistant (Strains of) Bacteria (Antibiotic-Resistant Bactericidal Activity) - kills on hard non-porous inanimate surfaces:

E. coli, (ATCC 55244); (resistant to Kanamycin) E. coli 0157:H7, (ATCC 47041); (resistant to Tetracycline)

Klebsiella oxytoca, (ATCC 13182)

Klebsiella pneumoniae, (ATCC 13883)

Enterococcus faecalis, (ATCC 51299); (resistant to Vancomycin [VRE])

Klebsiella oxytoca, (ATCC 15764); (resistent to Ampicillin, Dihydrostreptomycin) Micrococcus luteus, (ATCC 14452). (resistant to Dihydrostreptomycin,

Neomycin, Streptomycin)

Micrococcus sedentarius, (ATCC 2757)

Micrococcus sedentarius, (ATCC 27573); (resistant to Methicillin)

Staphylococcus aureus (MRSA, GRSA, VRSA and others), (ATCC 33592 & 14151, CDC HIP 5836); (resistant to Methicillin [MRSA], Gentamicin [GRSA], Vancomycin (VRSA), Penicillin, Erythromycin, Streptomycin, Tetracycline)

Streptococcus pneumoniae, (ATCC 51915) resistant to Penicillin [PRSP]

ACCEPTED with COMMENTS in EPA Letter Dated:

MAR - 6 2000

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide. registered under EPA Reg. No. 10627-24 10/13/99 Page 7 of 11 EPA Reg. No. 70627-21

Viruses (*Virucidal Activity) - kills on hard non-porous inanimate surfaces:

HIV-1 (AIDS virus)**, (HTLV-III₈) Cytomegalovirus, (VR-538) Herpes simplex Type 1, (VR-733) (Veterinary viruses:) Avian Infectious bronchitis (IBV), (VR-22) Avian Influenza, (VR-2072) Canine distemper, (VR-128)

Herpes simplex Type 2, (VR-734) Influenza Type A₂ (Hong Kong), (VR-544) Parainfluenza Type 3, (VR-93)

Chlamydia psittaci, (VR-125) Feline virual rhinotracheitis, (VR-636) Infectious bovine rhinotracheitis, (VR-188) Respiratory syncytial virus, (VR-26) Vaccinia virus, (VR-119)

New Castle disease, (VR-108) Pseudorabies, (VR-135) Transmissible gastroenteritis virus (TGE), (U of Minn. Strain)

Fungi/Yeast (Fungicidal and Yeast Activity) - kills on hard non-porous inanimate surfaces:

Geotrichum candidum, (ATCC 18301)

Saccharomyces cerevisiae, (ATCC 2601)

Mold/Mildew Mildewstatic Activity - controls and prevents (inhibits) the growth of mold and mildew: Aspergillus niger (ATCC 6275) (and the odors caused by them when applied to hard, non-porous environmental surfaces).

**Tests performed using 1 minute contact time.

Malodor(s) (Activity) (Counteractancy) – eliminates (destroys) odors and odor-causing bacteria in restroom areas, hind and under sinks and counters, and storage areas (and other places where bacterial growth can cause malodors).

Bactericidal Stability of Use-Dilution - Tests show VIREX™ II/ 128, when diluted in 400 ppm hard water and in the presence of 5% serum load, remains effective against Pseudomonas aeruginosa, Staphylococcus aureus and Salmonella choleraesuis for up to 1 year in storage as long as it remains sealed. If product becomes visibly dirty or contaminated, the use-dilution must be discarded and fresh product prepared. Always use clean, dry containers when diluting this product.

(For Refilling Concentrate From Large Containers Into Smaller Containers:)

VIREX™ II/ 128 may be used to fill and refill clean, properly labeled containers. Make sure the small container has been cleaned, dried and properly labeled. Also make sure other items (funnels or hand pumps) are properly cleaned and dried. To refill, simply pour (or pump product) from the larger container directly into the smaller one being careful not to spill any product. Keep both containers sealed when not in use. When ready for use, mix product according to the Directions for Use.

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

ANGER: Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin or on clothing. Wear chemical splash-proof goggles or face shield, rubber gloves, protective clothing, and protective footwear. Concentrate may be harmful if inhaled. Avoid breathing vapor. Concentrate is harmful if swallowed or absorbed through skin. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. (After product is diluted in accordance with Directions For Use, causes moderate eye irritation. Avoid contact with eyes, skin, and clothing. Protective eyewear, clothing, and gloves are not required. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.)

FIRST AID

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

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

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF SWALLOWED: Immediately drink 1 to 2 glasses of water or milk. Do not induce vomiting or give anything by mouth to an unconscious person. Call a doctor or get medical attention. (If the diluted product gets: In Eyes, flust) eyes with plenty of water. Call a physician, if irritation persists. If On Skin, wash with plenty of soap and water. Get medical attention if irritation persists.)

Note to Physician: Probable prucesal damage may contraindicate gastric lavage.

with COMMENTS in EPA Letter Dated:

MAR - 6 2000

10/13/99 Page 8 of 11 EPA Reg. No. 70627-21

Under the Federal Insecticide,
Pangicide, and Rodenticide Act as
amended, for the pasticide,
Tegistered under EPA Reg. No.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE

Do not reuse empty container unless refilling from a larger container of the same product according to the refilling directions outlined previously. (Keep from freezing).

PESTICIDE DISPOSAL

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL

(Plastic Containers:)

If not being refilled with VIREX™ II/ 128, triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Sealed Dispenser Cartridges/Portion-Dose (ACCUMIX™) bottles/Tear-open pouches:)

b not reuse, wrap empty container and put in trash. [Note to Agency: Please note that neither dispenser cartridges nor portion-dose (ACCUMIX) bottles can be triple rinsed because they are closed sealed systems designed to reduce worker exposure to the concentrate.]

ENVIRONMENTAL HAZARDS (for containers of 5 gallons or 50 lbs. or more)

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting agency has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Si no puede leer en ingles, pregunte a su supervisor sobre las instrucciones de uso apropiadas antes de trabajar con este producto.

HMIS

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HAZARD RATING/CLASIFICACION EN CUANTO AL PELIGRO:

` ϝ Very High	Conc	entrate	
3 =High	HMIS	NFPA	
2=Moderate	3	3	Health/Salud
1=Slight	0	0	Flammibility/Inflamabilidad
0=Insignificant	0_	0	Reactivity/Reactividad

1:128 Dilution 4=Muy Alto NFPA 3=Alto 2=Moderado 1=Bajo 0=Insignificante

Questions? Comments:

Call 800-558-2332 Weekdays 8-5 Central Time (or) Write Customer Service Department, SC Johnson Professional, P.O. Box 902, Sturtevant WI 53177-0902.

EPA Reg. No. 70627-21 EPA Est. No. _

(Lot number suffix (A) or (B) indicates appropriate establishment number.)

(MSDS Ref. No.xxxxxxxxxx)

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with COMMENTS in EPA Letter Dated:

MAR - 6 2000

10/13/99 Page 9 of 11 EPA Reg. No. 70627-21

Under the Federal Insecticide, Pengicide, and Rodenticide Act as registered under EPA Reg. No. 70627-21 amended, for the pesticide,



VIREX™ II/ 128 REFERENCE SHEET

When used as directed at a 1:128 dilution (1oz. per gallon of water) (8mL/L), VIREX™ II/ 128 contains 660 ppm of active quaternary germicide making it highly effective against a wide variety (broad-spectrum) of pathogenic microorganisms.

Using approved AOAC test methods (under Good Laboratory Practices, [GLP's]), in the presence of 400 ppm hard water, 10% serum load and 10 minutes contact time VIREX™ II/ 128 kills the following:

Bacteria (Bactericidal Activity) - kills on hard non-porous inanimate surfaces:

Pseudomonas aeruginosa, (ATCC 15442) Staphylococcus aureus, (ATCC 6538) Salmonella choleraesuis, (ATCC 10708) Acinetobacter calcoaceticus, (ATCC 9957) Bordetella bronchiseptica, (ATCC 10580) Burkholderia cepacia, (ATCC 25416) ampylobacter fetus, (ATCC 27374) robacter freundii, (ATCC 8090) Énterobacter agglomerans, (ATCC 27155) Enterobacter cloacae, (ATCC 23355) Enterobacter liquefaciens, (ATCC 14460) Enterococcus faecalis, (ATCC 19433) Enterococcus hirae, (ATCC 10541) Escherichia coli, (ATCC 11229) Escherichia coli 0157:H7, (ATCC 43890) Flavobacterium meningosepticum, (ATCC 13253) Haemophilus influenza, (ATCC 10211) Hafnia alvei, (ATCC 13337) Klebsiella oxytoca, (ATCC 13182) Klebsiella pneumoniae, (ATCC 13883)

Legionella pneumophila, (ATCC 33153) Listeria monocytogenes, (ATCC 15313) Micrococcus luteus, (ATCC 4698) Micrococcus sedentarius, (ATCC 27573) Neisseria gonomhae, (ATCC 43069) Pasteurella multocida, (ATCC 43137) Proteus mirabilis, (ATCC 9240) Proteus vulgaris, (ATCC 13315) Pseudomonas cepacia, (ATCC 25416) Pseudomonas diminuta, (ATCC 11568) Pseudomonas fluorescens, (ATCC 13525) Pseudomonas putida, (ATCC 12633) Pseudomonas stutzeri, (ATCC 17588) Salmonella choleraesuis pullorum, (ATCC 19945) Salmonella enteritidis, (ATCC 13076) Salmonella gallinarum, (ATCC 9184) Salmonella schottmuelleri, (ATCC 10719) Salmonella typhi, (ATCC 6539) Salmonella typhimurium, (ATCC 13311) Serratia grimesii, (ATCC 14460)

Serratia liquefaciens, (ATCC 14460) Serratia marcescens, (ATCC 9103) Shigella dysenteriae, (ATCC 29026) Shigella flexneri, (ATCC 25875) Shigella sonnei. (ATCC 25931) Staphylococcus aureus, (ATCC 25923) Staphylococcus aureus (Toxic Shock), (ATCC 33586) Staphylococcus epidermidis, (ATCC 14990) Staphylococcus haemolyticus, (ATCC 29970) Streptococcus agalactiae, (ATCC 13813) Streptococcus faecalis, (ATCC 19433) Streptococcus mutans, (ATCC 25175) Streptococcus pyogenes, (ATCC 19615) Streptococcus pyogenes ("Strep A" -Flesh Eating Strain), (clinical isolate)

Vibrio cholera, (ATCC 11623) Yersinia enterocolitica, (ATCC 9610)

Antibiotic-Resistant (Strains of) Bacteria (Antibiotic-Resistant Bactericidal Activity) - kills on hard non-porous

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Klebsiella oxytoca, (ATCC 15764); (resistent to Ampicillin, Dihydrostreptomycin) Micrococcus luteus, (ATCC 14452), (resistant to Dihydrostreptomycin, Neomycin, Streptomycin)

Micrococcus sedentarius, (ATCC 27573); (resistant to Methicillin)

Staphylococcus aureus (MRSA, GRSA, VRSA and others), (ATCC 33592 & 14154, CDC HIP 5836); (resistant to Methicillin [MRSA], Gentamicin [GRSA], Vancomycin (VRSA), Penicillin, Erythromycin, Streptomycin, Tetracycline)

Streptococcus pneumoniae, (ATCC 51915) resistant to Penicillin [PRSP]

Viruses (*Virucidal Activity) - kills on hard non-porous inanimate surfaces.

HIV-1 (AIDS virus)**, (HTLV-III,) Cytomegalovirus, (VR -538) Herpes simplex Type 1, (VR -733) (Veterinary viruses:)

Enterococcus faecalis, (ATCC 51299);

(resistant to Vancomycin [VRE])

Herpes simplex Type 2, (VR-734) Influenza Type A₂ (Hong Kong), (VR-544) Parainfluenza Type 3, (VR- 93)

Respiratory syncytial virus, (VR -26) Vaccinia virus, (VR- 119)

Avian Infectious bronchitis (IBV), (VR-22) Avian Influenza, (VR -2072)

Chlamydia psittaci, (VR-125) Feline virual rhinotracheitis, (VR- 636) Infectious bovine rhinotracheitis, (VR -188) New Castle disease, (VR -108) Pseudorabies, (VR- 135) ... Transmissible gastrcenteritis virus (TGE). (U of Minn. Strain)

Canine distemper, (VR -128)

Fungi/Yeast (Fungicidal and Yeast Activity) - kills on hard non-porous inanimate surfaces;

Geotrichum candidum, (ATCC 18301)

Saccharomyces cerevisiae, (ATCC 2601)

ACCEPTED with COMMENTS in EPA Letter Dated.

MAR = 6.2000

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Under the Federal Insecticide, Pangicide, and Podenticide Act as amended, for the pesticide, registered under EPA Reg. No. 70627-21 Mold/Mildew Mildewstatic Activity - controls and prevents (inhibits) the growth of mold and mildew: Aspergillus niger (ATCC 6275) (and the odors caused by them when applied to hard, non-porous environmental surfaces).

**Tests performed using 1 minute contact time.

Using approved AOAC test methods (under Good Laboratory Practices, [GLP's]), in the presence of 400 ppm hard water, 5% serum load and 10 minutes contact time VIREX™ II/ 128 kills the following:

Viruses (*Virucidal Activity) - kills on hard non-porous inanimate surfaces:

Adenovirus Type 2, (VR-2)

Fungi/Yeast (Fungicidal and Yeast Activity) - kills on hard non-porous inanimate surfaces:

Fungi:

Aspergillus niger, (ATCC 6275)

Trichophyton mentagrophytes (athlete's foot fungus), (ATCC 9533)

/east:

Candida albicans, (ATCC 10231)

Mold/Mildew Mildewcidal Activity - kills the growth of mold and mildew: Aspergillus niger (ATCC 6275) (and the odors caused by them when applied to hard, non-porous environmental surfaces).

Malodor(s) (Activity) (Counteractancy) – eliminates (destroys) odors and odor-causing bacteria in restroom areas, behind and under sinks and counters, and storage areas (and other places where bacterial growth can cause malodors).

Bactericidal Stability of Use-Dilution - Tests show VIREX™ II/ 128, when diluted in 400 ppm hard water and in the presence of 5% serum load, remains effective against Pseudomonas aeruginosa, Staphylococcus aureus and Salmonella choleraesuis for up to 1 year in storage as long as it remains sealed. If product becomes visibly dirty or contaminated, the use-dilution must be discarded and fresh product prepared. Always use clean, dry containers when diluting this product.

Questions? Comments:

Call 800-558-2332 Weekdays 8-5 Central Time (or) Write Customer Service Department, SC Johnson Professional, P.O. Fox 902, Sturtevant WI 53177-0902.

EPA Reg. No. 70627-21

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Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 70627-21

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