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#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

FEB 9 2010

OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES

Ms. Heather R. Bjornson Regulatory Assistant for, Copper Development Association 260 Madison Avenue New York, New York 10016

Mail to: Heather R. Bjornson Technology Sciences Group, Inc. 1150 18<sup>th</sup> Street, N.W. Suite 1000 Washington, D.C. 20036

Subject: Antimicrobial Copper Alloys Group III EPA Registration Number 82012- 3 Your Amendment Dated September 17<sup>th</sup>, 2009 EPA Received Date September 18<sup>th</sup>, 2009

The amendment referred to above, submitted in connection with under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act, FIFRA, as amended, to add new claims for effectiveness as a sanitizer against Enterococcus faecalis Vancomycin Resistant, is acceptable.

The submitted efficacy data (MRID 478595-01) support the use of the product, Copper Alloy C26000, as a sanitizer against Enterococcus faecalis Vancomycin Resistant in the presence of a 5% fetal bovine serum and 0.01% Triton X-100 organic soil load. Specifically, the product (i.e., surface) was known to be effective in killing greater than 99.9 percent of bacteria in 120 minutes. Neutralization confirmation testing met the acceptance criterion of growth with 1log<sub>10</sub> of the numbers control. Viability controls were positive for growth. Purity controls were reported as pure. Sterility controls did not show growth.

The submitted efficacy data (MRID 478595-02) support the use of the product, Copper Alloy C26000, as a residual self-sanitizer against Enterococcus faecalis Vancomycin Resistant in the presence of a 5% fetal bovine serum and 0.01% Triton X-100 organic soil load. Specially, the product (i.e., surface) was shown to be effective in reducing the total number of organisms by at least 99.9 percent on the surface within/for prescribed exposure time. Neutralization confirmation testing met the acceptance criterion of growth within  $1\log_{10}$  of the numbers control. Purity controls were reported as pure. Sterility controls did not show growth.

The submitted efficacy data (MRID 478595-03) support the use of the product, Copper Alloy C26000, as a <u>continuous reduction sanitizer</u> against Enterococcus faecalis Vancomycin Resistant in the presence of a 5% fetal bovine serum and 0.01% Triton X-100 organic soil load. Specifically, the product (i.e., surface) was shown to be effective in continuously reducing bacteria(by at least 90 percent) over a 24 hour inoculation and exposure time at ambient conditions. Neutralization confirmation testing met the acceptance criterion of growth with 1 log<sub>10</sub> of the numbers control. Viability controls were positive for growth. Purity controls were reported a pure. Sterility controls did not show growth.

The proposed label for the product, Antimicrobial Copper Alloys Group III, claims that this surface, when cleaned regularly:

- Continuously reduces bacterial contamination, achieving 99.9% reduction within 2 hours of exposure
- Kills greater than 99.9% of gram-negative and gram-positive bacteria within 2 hours of exposure
- Delivers continuous and on-going antibacterial action, remaining effective in killing greater than 99.9% of bacteria within 2 hours
- Kills greater than 99.9% of bacteria within 2 hours, and continues to kill 99% of bacteria even after repeated contamination
- Helps inhibit the buildup and growth of bacteria within 2 hours of exposure between routing cleaning and sanitizing steps.

These claims, as they pertain to Enterococcous faecalis Vancomycin Resistant, are acceptable as they are supported by the submitted data.

A stamped copy of the labeling is enclosed. Submit three (3) copies of your final printed labeling before distributing or selling the product bearing the revised labeling.

Submit and/or cite all data required for registration /reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.

If the above conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these condition

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If you have questions concerning this letter, please contact Karen M. Leavy at (703)-308-6237.

Sincerely,

DHE for

Marshall Swindell Product Manager 33 Regulatory Management Branch I Antimicrobial Division(7510P)

## ANTIMICROBIAL COPPER ALLOYS GROUP III<sup>+</sup>

<sup>+</sup>NOTE: Product labels will bear the name of a copper alloy specified in the approved registration. Distributors may substitute a Product Brand Name in place of the name of the copper alloy on the label.

Active Ingredient: Copper 82.6% Other 17.4%

Total

EPA Registration No. 82012-3

Made in the United States by \*\*\*\*\*\* Distributed by \*\*\*\*\*\*

EPA Establishment No. \*\*\*\*\*

Net Contents: \*\*\*\*\*

ACCEPTED with COMMENTS EPA Letter Dated:

100%

FEB - 9 2010 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 82012-3 . . . . . - - -- - - -

#### Sublabel I: Complete Label

#### ANTIMICROBIAL COPPER ALLOYS GROUP III<sup>+</sup>

\*NOTE: Product labels will bear the name of a copper alloy specified in the approved registration. Distributors may substitute a Product Brand Name in place of the name of the copper alloy on the label.

Laboratory testing has shown that when cleaned regularly:

[This surface continuously reduces bacterial\* contamination, achieving 99.9% reduction within two hours of exposure.]

[This surface kills greater than 99.9% of Gram-negative and Gram-positive bacteria\* within two hours of exposure.]

[This surface delivers continuous and ongoing antibacterial\* action, remaining effective in killing greater than 99.9% of bacteria\* within two hours.

[This surface kills greater than 99.9% of bacteria\* within two hours, and continues to kill 99% of bacteria\* even after repeated contamination.]

[This surface helps inhibit the buildup and growth of bacteria\* within two hours of exposure between routine cleaning and sanitizing steps.]

\* Testing demonstrates effective antibacterial activity against *Staphylococcus aureus*, *Enterobacter aerogenes*, Methicillin-Resistant *Staphylococcus aureus* (MRSA), *Escherichia coli* O157:H7, *Pseudomonas aeruginosa*, and Vancomycin – Resistant *Enterococcus faecalis (VRE)*.

The use of a Copper Alloy surface is a supplement to and not a substitute for standard infection control practices; users must continue to follow all current infection control practices, including those practices related to cleaning and disinfection of environmental surfaces. The Copper Alloy surface material has been shown to reduce microbial contamination, but it does not necessarily prevent cross contamination.

\* \* \* \* \*

Active Ingredient: Copper Other

Total

EPA Registration No. 82012-3 EPA Establishment No. \*\*\*\*\*

Net Contents: \*\*\*\*\*

Made in the United States by \*\*\*\*\*\* Distributed by \*\*\*\*\*\*

with COMMENTS EPA Letter Dated:

FEB - 9 2010

registered under EPA Reg. No. 82012-3

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide,

82.6%

17.4%

100%

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

[The directions in bracketed text below may be included in an insert. If so, there will be a statement to see the insert for additional directions for use of the product.]

[Directions for Use in the insert also may include installation and operation instructions, user manuals, and similar instructional materials appropriate for the end use product. No additional pesticidal claims will be made as part of these materials.]

**Proper Care and Use of Antimicrobial Copper Alloys:** The use of Antimicrobial Copper Alloys does not replace standard infection control procedures and good hygienic practices. Antimicrobial Copper Alloys surfaces must be cleaned and sanitized according to standard practice. Health care facilities must maintain the product in accordance with infection control guidelines; users must continue to follow all current infection control practices, including those practices related to disinfection of environmental surfaces.

Copper Alloy surfaces may be subject to recontamination and the level of active bacteria at any particular time will depend on the frequency and timing of recontamination and cleanliness of the surface (among other factors). In order for the copper alloy surface to have proper antimicrobial effect, the product must be cleaned and maintained according to the directions included on this label.

#### This product must not be waxed, painted, lacquered, varnished, or otherwise coated.

Routine cleaning to remove dirt and filth is necessary for good sanitation and to assure the effective antibacterial performance of the Antimicrobial Copper Alloy surface. Cleaning agents typically used for traditional touching surfaces are permissible; the appropriate cleaning agent depends on the type of soiling and the measure of sanitization required. [Normal tarnishing or wear of Antimicrobial Copper Alloy surfaces will not impair the antibacterial effectiveness of the product.]

This product can not be used for any direct food contact or food packaging uses.

[Antimicrobial Copper Alloys may be used in hospitals, other healthcare facilities, and various public, commercial, and residential buildings for the non-food contact surfaces listed below.] [The following statement will appear on the label if the use involves potential exposure to outdoor conditions: Surfaces that may be exposed to outdoor environmental conditions (*e.g.*, handrails, shopping carts, child seats and ATM machines) are not representative of indoor laboratory test conditions, and therefore, may impart reduced efficacy if not cleaned when visibly soiled.]

#### Healthcare Facilities

- Bedrails, footboards
- Over-bed tables

FEB - 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 820/23

Antimicrobial Copper Alloys Group III (EPA Reg. No. 82012-3) Redline version (3) dated September 16, 2009 3

- Bed-side tables in hospitals, extended care facilities, senior housing etc. (knobs, 0 pulls, handles; surfaces)
- o Handrails, (corridor/hallways) (Senior housing), automatic door push plates
- Stair rails, handrails, tubular railing, and supports, rail fittings T's, elbows and 0 brackets
- Bedrails, assistance rails, 0
- Toilet safety rails 0
- Carts 0

Hospital carts (table surfaces, handles, legs) Computer carts Record carts Phlebotomy carts

- Other Carts (tables/surfaces, shelving, railings, handles, pulls)
- Equipment carts (horizontal surfaces, frames, handles) 0
- Door push plates, kick plates, mop plates, stretcher plates 0
- Sinks: spigots, drains, sinks themselves 0
- Faucet: handles, spigot, drain control lever 0
- Water fountains: bubbler head, drain strainer, handle 0
- Alcohol sanitizer dispenser, handle
- Paper towel holders, facial tissue holders, toilet paper holders
- Air hand dryer, controls and push buttons on air hand dryers
- Hydrotherapy tanks (whirlpool tanks): shells, covers, headrests, drain fittings (outer surfaces without water contact)
- Door handles, doorknobs (outer touch surfaces) 0
- Grab bars in bathrooms showers and bathtubs 0
- Panic bars on emergency room doors 0
- Towel bars 0
- o 'Showerheads
- Countertops and tabletops (non-food use only) 0
- Hinges, locks, latches, and trim 0
- Door stops, door pulls, and protector guards
- 0
- 0
- Closures 0
- Vertical locking arms 0
- Vertical cover guards 0
- Protection bars
- Light switches, switch plates
- Visitor chairs: armrests, metal frames 0
- Thermostat covers, control knobs and wheels 0
- Telephone handsets and surfaces (housings), keypad 0
- Kitchen surfaces (non-food contact only): table tops, counter tops, handles 0 (microwave, refrigerator, stove), cabinet doors, cabinet hinges, pulls, backsplash, hoods, control knobs (appliances, fans)
- o Floor tiles
- Ceiling tiles (non-porous) 0

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Wall tiles O

#### Antimicrobial Copper Alloys Group III (EPA Reg. No. 82012-3) Redline version (3) dated September 16, 2009

## ACCEPTED with COMMENTS EPA Letter Dated:

# FEB - 9 2010

Door stops, door puils, and protection Under the Federal Insecticide, rangicide, and Rodenticide Act as amended, for the pesticide, egistered under EPA Reg. No. 82012-3

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o Instrument handles

Medical equipment knobs, pulls and handles for:

- Drug delivery systems
- Monitoring systems
- Hospital beds
- Office equipment
- Operating room equipment
- Stands and fixtures

Types of knobs: *e.g.*, Prong, fluted, knurled, push/pull, T-handle, tapered, and ball knobs

- Intravenous (IV) poles, bases, hangers, clips
- Trays (instruments, non-food contact)
- o Pans (bed)
- o Walkers, wheelchair handles, and tubular components
- Computer keyboards: keys, housings, computer mouse surfaces
- o Exercise and rehabilitation equipment, handles, bars
- Physical therapy equipment: physical therapy tables, treatment chairs and portable taping tables
- Chairs (shower chairs, patient chairs, visitor chairs): rails, backs, legs, seats
- Lighting products: X-ray illuminators, operating rooms, patient examination rooms, surgical suites, and reading lamps for hospital rooms and assisted living facilities etc. Components can include bases, arms, housings, handles, hinges)
- Headwall systems: the unit themselves, outlet covers, knobs and dials, lighting units (lamp housings and adjustable arms), CRT monitors with rotating knobs and levers and adjustments. Baskets, monitor housings, knobs, baskets, tables, IV poles
- Critical care cart: Table top, drawer, drawer pull, lock, copper wire baskets for storage of equipment and charts.
- Bedside lavatory: sink, faucet, handles, drawer pulls, toilet seat, toilet seat cover, toilet handle, door and cabinet facings, counter tops
- o Medical records: Chart holders, clipboards, filing systems
- Storage Shelving: wire shelving etc. for medical supplies
- Grab handles on privacy curtains
- o Lids of laundry hampers, trash canisters, and other containers
- o Bedside pitchers
- o Closet rods and hangers
- Television controls: knobs, buttons, remote
- Monitor (television, computer, etc.) housing
- o Cup Holder
- o Toothbrush holder
- Soap holder
- o Magazine rack
- o Signage
- Coat rack and hooks
- o Shower curtain rings
- Radiator cover
- o Bracelets

#### ACCEPTED with COMMENTS EPA Letter Dated:

FEB - 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 820(2+3

Antimicrobial Copper Alloys Group III (EPA Reg. No. 82012-3) Redline version (3) dated September 16, 2009

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- o Pens
- o Badge clips
- o Name tags
- o Patient gown snaps
- Window sills, pulls and locks
- Electrical wallplates

#### Community Facilities (including various public and commercial buildings)

- o Shopping cart handles, child seats, handrails
- Cash registers: housing, keypads
- ATM machines: keys, housing
- o Gym/Health club lockers, locker handles, locker shelving, trainers' tables,
- Ice and water dispensers (outer surfaces without water contact)
- Elevator: handrail, control panel, buttons, interior walls, floor tiles, exterior call button plate
- o Paper towel dispensers. Housing itself, (turn) handle, (push) handle
- Soap holder
- Soap dispenser (wall mounted): push bar and dispenser itself
- Soap dispenser (sitting on counter): dispenser housing itself, push mechanism
- Toilet paper dispenser (housing)
- Windows (crank), Locking mechanism, pull handles
- Window treatments (cord pulls), Venetian blinds (wands, cord pulls)
- Jalousie Windows (crank)
- Casement (cranks, levers, hinges)
- Single and double-hung windows (locks and pulls)
- o Light switches, switch plates
- o Lids of laundry hampers, trash canisters, and other containers
- Magazine rack
- o Signage
- o Coat rack and hooks
- Shower curtain rings
- Radiator cover
- o Bracelets
- Badge clips
- o Name tags
- Vending machines (non-food contact only)

hoods, control knobs (appliances, fans)

- Window sills
- o Electrical wallplates
- Clip boards

residences)

• Office supplies: paper clips, staplers, tape dispensers

Residential Buildings (including homes, apartments, apartment buildings and other

• Kitchen surfaces (non-food contact only): table tops, counter tops, handles

(microwave, refrigerator, stove), cabinet doors, cabinet hinges, pulls, backsplash,

ACCEPTED with COMMENTS EPA Letter Dated:

FEB - 9 2010 Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 82012-3

Antimicrobial Copper Alloys Group III (EPA Reg. No. 82012-3) Redline version (3) dated September 16, 2009

Bedrails, footboards 0

o Handrails

o Stair rails

- Door push plates
- o Sinks: spigots, drains, sinks themselves
- Faucet: handles, spigot, drain control lever
- o Paper towel holders, facial tissue holders, toilet paper holders
- Door handles, doorknobs (outer touch surfaces)
- o Grab bars in bathrooms showers and bathtubs
- o Towel bars
- o Showerheads
- Countertops and tabletops
- o Hinges, locks, latches, and trim
- o Door stops, door pulls, and protector guards
- o Toilet and urinal hardware, levers, push buttons
- Toilet seat inlay for lifting of seat
- o Light switches, switch plates
- o Thermostat covers, control knobs and wheels
- o Telephone handsets and surfaces (housings), keypad
- o Floor tiles
- Ceiling tiles (non-porous)
- Wall tiles
- o Computer keyboards: keys, housings, computer mouse surfaces
- o Exercise equipment, handles, bars
- Windows (crank), Locking mechanism, pull handles
- Window treatments (cord pulls), Venetian blinds (wands, cord pulls)
- o Jalousie Windows (crank)
- o Casement (cranks, levers, hinges)
- Single and double-hung windows (locks and pulls)
- Television control knobs and buttons
- o Lids of laundry hampers, trash canisters, and other containers
- o Bedside pitchers
- o Closet rods and hangers
- Television remote
- o Cup Holder
- o Toothbrush holder
- o Soap holder
- Magazine rack
- Coat rack and hooks
- Shower curtain rings
- Radiator cover
- Window sills
- o Electrical wallplates
- Baby cribs: rails, fittings, brackets, supports
- o Bowl stands
- Office supplies: paper clips, staplers, tape dispensers
- o Monitor (television, computer, etc.) housing

### ACCEPTED with COMMENTS EPA Letter Dated:

FEB - 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 820/2-3

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#### **Mass Transit Facilities**

- o Handrails
- o Stair rails, tubular railing, and supports; elbows and brackets
- Door push plates, kick plates
- Door handles, door knobs (outer touch surfaces)
- Grab bars and handles
- Tiles: wall, floor, ceiling (non-porous)
- o Chairs and benches: rails, backs, legs, seats
- o Window sills, pulls, and handles
- o Signage
- Vending machines (non-food contact only)

#### Other

- Play area equipment (indoor only): bars, handles, chains, push plates, handrails, stair rails and risers, wheels, knobs, flooring
- Chapel pews
- Eye glass frames and protective eye wear
- o Pens
- o Combs
- o Ashtrays

#### STORAGE AND DISPOSAL

Antimicrobial Copper Alloys should be disposed in a responsible manner, including recycling.

#### WARRANTY STATEMENT

If used as intended, Antimicrobial Copper Alloys are wear-resistant and the durable antibacterial properties will remain effective for as long as the product remains in place and is used as directed.

ACCEPTED with COMMENTS EPA Letter Dated: FEB - 9 2010 Under the Federal Insecticide, Rungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 82012-3

Antimicrobial Copper Alloys Group III (EPA Reg. No. 82012-3) Redline version (3) dated September 16, 2009

## Sublabel II: Hang Tay Lavel

**Antimicrobial** 

**Copper Alloys** 

**Group III** 

100.0%

Copper ..... 82.6%

See Back Panel for Directions for Use

FRONT

Made from

Active Ingredient:

Total

## BACK

#### ANTIMICROBIAL COPPER ALLOYS GROUP III

- Laboratory testing has shown that when cleaned regularly:
- This surface continuously reduces bacteria\* contamination, achieving 99.9% reduction within 2 hours of exposure.
- This surface kills greater than 99.9% of Gram-negative and Gram-positive bacteria\* within 2 hours of exposure.
- This surface delivers continuous and ongoing antibacterial\* action, remaining effective in killing greater than 99.9% of bacteria\* within 2 hours.
- This surface kills greater than 99.9% of bacteria\* within two hours and continues to kill 99% of bacteria\* even after repeated contaminations.
- This surface helps inhibit the buildup and growth of bacteria\* within 2 hours of exposure between routine cleaning and sanitizing steps.

\* Testing demonstrates effective antibacterial activity against Staphylococcus aureus, Enterobacter aerogenes, Methicillin-Resistant Staphylococcus aureus (MRSA), Escherichia coli O157:H7, Pseudomonas aeruginosa, and Vancomycin – Resistant Enterococcus faecalis (VRE).

The use of this product is a supplement to and not a substitute for standard infection control practices; users must continue to follow all current infection control practices, including those practices related to cleaning and disinfection of environmental surfaces. This surface has been shown to reduce microbial contamination, but it does not necessarily prevent cross contamination.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. *Proper Care and Use.* The use of this product does not replace standard infection control procedures and good hygienic practices. This product must be cleaned and sanitized according to standard practice. Healthcare facilities must maintain the product in accordance with infection control guidelines; users must continue to follow all current infection control practices, including those practices related to disinfection of environmental surfaces.

This surface may be subject to recontamination and the level of active bacteria at any particular time will depend on the frequency and timing of recontamination and cleanliness of the surface (among other factors). In order for this product to have proper antimicrobial effect, the product must be cleaned and maintained according to the directions included on this label.

This product must not be waxed, painted, lacquered, varnished, or otherwise coated.

Routine cleaning to remove dirt and filth is necessary for good sanitation and to assure the effective antibacterial performance of this surface. Cleaning agents typically used for traditional touching surfaces are permissible; the appropriate cleaning agent depends on the type of soiling and the measure of sanitization required. Normal tarnishing or wear of Antimicrobial Copper Alloy surfaces will not impair the antibacterial effectiveness of the product.

This product can not be used for any direct food contact or food packaging uses.

Surfaces that may be exposed to outdoor environmental conditions (e.g., handrails, shopping carts, child seats and ATM machines) are not representative of indoor laboratory test conditions, and therefore, may impart reduced efficacy if not cleaned when visibly soiled.

#### STORAGE AND DISPOSAL

Antimicrobial Copper Alloys Group III should be disposed in a responsible manner, including recycling.

#### WARRANTY STATEMENT

If used as intended, Antimicrobial Copper Alloys are wear-resistant and the durable antibacterial properties will remain effective for as long as the product remains in place and is used as directed.

EPA Reg. No. 82012-3 EPA Est. No. 82012-NY-001 Manufactured by: Copper Development Association, 260 Madison Ave., NY, NY 10016-2401

Antimicrobial Copper Alloys Group III (EPA Reg. No. 82012-3) Redline version (3) dated September 16, 2009

ACCEPTED with COMMENTS \* EPA Letter Dated:

FEB - 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 82012-3 Antimicrobial Copper Alloys may be used in hospitals, other healthcare facilities, and various public, commercial, and residential buildings for the non-food contact surfaces listed below.

Surfaces that may be exposed to outdoor environmental conditions (e.g., handrails, shopping carts, child seats and ATM machines) are not representative of indoor laboratory test conditions, and therefore, may impart reduced efficacy if not cleaned when visibly soiled.

#### Healthcare Facilities

- 0 Bedrails, footboards
- Over-bed tables 0
- Bed-side tables in hospitals, extended care facilities, senior housing etc. (knobs, pulls, handles; surfaces) 0
- Handrails, (corridor/hallways) (Senior housing), automatic door push plates 0
- Stair rails, handrails, tubular railing, and supports, rail fittings T's, elbows and brackets 0
- Bedrails, assistance rails, 0 0
  - Toilet safety rails
- Carts 0
- Hospital carts (table surfaces, handles, legs) Computer carts
- Record carts
  - Phiebotomy carts
  - Other Carts (tables/surfaces, shelving, railings, handles, pulls)
- Equipment carts (horizontal surfaces, frames, handles) 0
- Door push plates, kick plates, mop plates, stretcher plates 0
- Sinks: spigots, drains, sinks themselves 0
- Faucet: handles, spigot, drain control lever 0
- Water fountains: bubbler head, drain strainer, handle 0
- Alcohol sanitizer dispenser, handle 0
- Paper towel holders, facial tissue holders, toilet paper holders 0
- Air hand dryer, controls and push buttons on air hand dryers 0
- Hydrotherapy tanks (whirlpool tanks): shells, covers, headrests, drain fittings (outer surfaces without water 0 contact)
- Door handles, doorknobs (outer touch surfaces) 0
- Grab bars in bathrooms showers and bathtubs 0
- Panic bars on emergency room doors 0
- Towel bars 0
- Showerheads 0
- Countertops and tabletops (non-food use only) 0
- Hinges, locks, latches, and trim 0
- 0 Door stops, door pulls, and protector guards
- Toilet and urinal hardware, levers, push buttons 0
- 0 Toilet seat inlay for lifting of seat
- 0 Closures
- Vertical locking arms 0
- Vertical cover guards 0
- 0 Protection bars
- Light switches, switch plates 0
- Visitor chairs: armrests, metal frames 0
- Thermostat covers, control knobs and wheels 0
- Telephone handsets and surfaces (housings), keypad 0
- Kitchen surfaces (non-food contact only): table tops, counter tops, handles (microwave, refrigerator, stove), 0 cabinet doors, cabinet hinges, pulls, backsplash, hoods, control knobs (appliances, fans)
- Floor tiles 0
- Ceiling tiles (non-porous) 0
- ο Wall tiles
- Instrument handles 0
  - Medical equipment knobs, pulls and handles for:
    - Drug delivery systems
    - Monitoring systems
    - Hospital beds
    - Office equipment
    - Operating room equipment
    - Stands and fixtures
    - Types of knobs: e.g., Prong, fluted, knurled, push/pull, T-handle, tapered, and ball knobs
- Intravenous (IV) poles, bases, hangers, clips 0
- 0 Trays (instruments, non-food contact)
- Pans (bed) 0
- Walkers, wheelchair handles, and tubular components 0
- 0 Computer keyboards: keys, housings, computer mouse surfaces
- Exercise and rehabilitation equipment, handles, bars

Antimicrobial Copper Alloys Group III (EPA Reg. No. 82012-3)

## Redline version (3) dated September 16, 2009

## with COMMENTS EPA Letter Dated:

FEB - 9 2010 Under the Federal Insecticide,

Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 82012-3

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ACCEPTED

- o Physical therapy equipment: physical therapy tables, treatment chairs and portable taping tables
- o Chairs (shower chairs, patient chairs, visitor chairs): rails, backs, legs, seats
- Lighting products: X-ray illuminators, operating rooms, patient examination rooms, surgical suites, and reading lamps for hospital rooms and assisted living facilities etc. Components can include bases, arms, housings, handles, hinges)
- Headwall systems: the unit themselves, outlet covers, knobs and dials, lighting units (lamp housings and adjustable arms), CRT monitors with rotating knobs and levers and adjustments. Baskets, monitor housings, knobs, baskets, tables, IV poles
- o Critical care cart: Table top, drawer, drawer pull, lock, copper wire baskets for storage of equipment and charts.
- Bedside lavatory: sink, faucet, handles, drawer pulls, toilet seat, toilet seat cover, toilet handle, door and cabinet facings, counter tops
- o Medical records: Chart holders, clipboards, filing systems
- o Storage Shelving: wire shelving etc. for medical supplies
- o Grab handles on privacy curtains
- o Lids of laundry hampers, trash canisters, and other containers
- o Bedside pitchers
- o Closet rods and hangers
- Television controls: knobs, buttons, remote
- o Monitor (television, computer, etc.) housing
- o Cup Holder
- o Toothbrush holder
- Soap holder
- o Magazine rack
- o Signage
- o Coat rack and hooks
- o Shower curtain rings
- Radiator cover
- o Bracelets
- o Pens
- o Badge clips
- Name tags
- o Patient gown snaps
- o Window sills, pulls and locks
- o Electrical wallplates
- · · · · · · · ·

#### Community Facilities (including various public and commercial buildings)

- Shopping cart handles, child seats, handrails
- o Cash registers: housing, keypads
- o ATM machines: keys, housing
- o Gym/Health club lockers, locker handles, locker shelving, trainers' tables,
- o Ice and water dispensers (outer surfaces without water contact)
- o Elevator: handrail, control panel, buttons, interior walls, floor tiles, exterior call button plate
- o Paper towel dispensers. Housing itself, (turn) handle, (push) handle
- o Soap holder
- o Soap dispenser (wall mounted): push bar and dispenser itself
- o Soap dispenser (sitting on counter): dispenser housing itself, push mechanism
- Toilet paper dispenser (housing)
- Windows (crank), Locking mechanism, pull handles
- o Window treatments (cord pulls), Venetian blinds (wands, cord pulls)
- o Jalousie Windows (crank)
- Casement (cranks, levers, hinges)
- Single and double-hung windows (locks and pulls)
- o Light switches, switch plates
- o Lids of laundry hampers, trash canisters, and other containers
- Magazine rack
- o Signage
- Coat rack and hooks
- o Shower curtain rings
- o Radiator cover
- o Bracelets
- Badge clips
- o Name tags
- Vending machines (non-food contact only)
- o Window sills
- o Electrical wallplates
- Clip boards
- o Office supplies: paper clips, staplers, tape dispensers

ACCEPTED with COMMENTS & EPA Letter Dated:

FEB - 9 2010

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 820/23

Residential Buildings (including homes, apartments, apartment buildings and other residences)

- Kitchen surfaces (non-food contact only): table tops, counter tops, handles (microwave, refrigerator, stove), cabinet doors, cabinet hinges, pulls, backsplash, hoods, control knobs (appliances, fans)
- o Bedrails, footboards
- o Handráils
- o Stair rails
- Door push plates
- o Sinks: spigots, drains, sinks themselves
- o Faucet: handles, spigot, drain control lever
- o Paper towel holders, facial tissue holders, toilet paper holders
- o Door handles, doorknobs (outer touch surfaces)
- o Grab bars in bathrooms showers and bathtubs
- Towel bars
- Showerheads
- Countertops and tabletops
- o Hinges, locks, latches, and trim
- o Door stops, door pulls, and protector guards
- o Toilet and urinal hardware, levers, push buttons
- o Toilet seat inlay for lifting of seat
- Light switches, switch plates
- o Thermostat covers, control knobs and wheels
- o Telephone handsets and surfaces (housings), keypad
- Floor tiles
- Ceiling tiles (non-porous)
- Wall tiles
- Computer keyboards: keys, housings, computer mouse surfaces
- Exercise equipment, handles, bars
- o Windows (crank), Locking mechanism, pull handles
- o Window treatments (cord pulls), Venetian blinds (wands, cord pulls)
- Jalousie Windows (crank)
- Casement (cranks, levers, hinges)
- o Single and double-hung windows (locks and pulls)
- Television control knobs and buttons
- o Lids of laundry hampers, trash canisters, and other containers
- o Bedside pitchers
- Closet rods and hangers
- o Television remote
- Cup Holder
- o Toothbrush holder
- Soap holder
- Magazine rack
- Coat rack and hooks
- o Shower curtain rings
- Radiator cover
- o Window sills
- o Electrical wallplates
- o Baby cribs: rails, fittings, brackets, supports
- Bowl stands
- o Office supplies: paper clips, staplers, tape dispensers
- o Monitor (television, computer, etc.) housing

#### Mass Transit Facilities

- o Handrails
- Stair rails, tubular railing, and supports; elbows and brackets
- Door push plates, kick plates
- Door handles, door knobs (outer touch surfaces)
- o Grab bars and handles
- o Tiles: wall, floor, ceiling (non-porous)
- o Chairs and benches: rails, backs, legs, seats
- Window sills, pulls, and handles
- Signage
- Vending machines (non-food contact only)

#### Other

- Play area equipment (indoor only): bars, handles, chains, push plates, handrails, stair rails and risers, wheels, knobs, flooring
- Chapel pews
- o Eye glass frames and protective eye wear
- o Pens
- o Combs
- Ashtrays

Antimicrobial Copper Alloys Group III (EPA Reg. No. 82012-3) Redline version (3) dated September 16, 2009

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ACCEPTED with COMMENTS EPA Letter Dated:

FEB - 9 2010

Under the Federal Insecticide, Rungicide, and Rodenticide Act as amended. for the pesticide, registered under EPA Reg. No. 880/2-3