



U.S. ENVIRONMENTAL PROTECTION AGENCY

Office of Pesticide Programs  
Antimicrobials Division (7510C)  
1200 Pennsylvania Avenue NW  
Washington, D.C. 20460

NOTICE OF PESTICIDE:

- Registration
- Reregistration

(under FIFRA, as amended)

EPA Reg. Number:  
85290-3

Date of Issuance:  
OCT 31 2008

Term of Issuance:  
Unconditional

Name of Pesticide Product:  
MicroGuard III

Name and Address of Registrant (include ZIP Code):

PMX Industries, Inc.  
5300 Willow Creek Drive  
Cedar Rapids, IA 52404

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for re-registration of your product under FIFRA section 4.
2. Make the labeling changes listed below before you release the product for shipment:
  - a. Add the phrase "EPA Registration Number 85290-3."

Signature of Approving Official:

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

Date:

OCT 31 2008

The following are a listing of Conditions of Registration for PMX Industries, Inc. registration and associated labeling issues:

### **Conditions 1**

CDA will prepare and implement an Antimicrobia Copper Alloy Stewardship Plan ("the Plan") designed to support the responsible use of antimicrobial copper products. The Plan will be submitted for EPA review and approval within two months after the registration date. If EPA determines at any time after 18 months following registration that the Plan is not being adequately or timely after 18 months following registration that the Plan is not effectively ensuring the proper sale, distribution, or use of antimicrobial copper alloy products, the registration may be automatically cancelled by the Agency by order with no opportunity for a hearing but only after notification to the Registrant and an opportunity to meet with the Director of the Office of Pesticide Programs.

The Plan will include, at a minimum, the following elements:

(a) Outreach to the infection control community, including:

- (i) A goal of educating and reinforcing, for infection control professionals and other products users, the proper use of Antimicrobial Copper Alloys.
- (ii) Written (including electronic) communications directed to associations of infection control professionals, including at the least APIC, ASHES, and any other relevant organizations identified by CDA or EPA, and State Departments of Health.
- (iii) Outreach communications will be sent within six months after the date of registration and within one year after the date of registration, and then annually thereafter on the anniversary of the date of the registration unless more frequent outreach is deemed necessary.
- (iv) The content of the outreach communications will include statements explaining the registered claims and applications of Antimicrobial Copper Alloys, as well as their proper use. The communications also will inform the recipients about (1) the Antimicrobial Copper Alloy Working Group (see below). Additional content of outreach efforts will be developed as part of the Working Group activities.

(b) Development of a Stewardship Website ("the Website") under the auspices of the Copper Development Association ("CDA").

- (i) The website will serve as a resource for conveying accurate information to the public about the efficacy and proper use of Antimicrobial Copper Alloys.
- (ii) The Website will include information on proper labeling and claims (including advertising); supporting science; applications; maintenance; and federal and state regulations and statutory requirements.

- (iii) A question and answer or Frequently Asked Questions (FAQs) section will be incorporated to address common issues or questions raised with regard to Antimicrobial Copper Alloys.
  - (iv) The Website also will serve as a forum to correct any false or misleading third party statements or publications, including scientific papers, concerning Antimicrobial Copper Alloys. Any such false or misleading third party statements or publications will be corrected promptly after CDA or any member of CDA becomes aware of such and the responsive Website update will be incorporated promptly thereafter. CDA shall inform EPA within 30 calendar days following its receipt of any such false or misleading third party statements or publications and that same time product the Agency with a copy of such statement or publication along with a hard copy of the Website entry correcting such statement or publication.
  - (v) CDA will arrange for and establish links between the Stewardship Website and the websites of appropriate infection control organizations, including but not limited to APIC and ASHES.
- (c) Establishment of an Antimicrobial Copper Alloy Working Group (“the Working Group”).
- (i) Invited participants will include alloy manufacturers, component makers, and representatives from the infection control community, including appropriate trade associations (e.g., APIC and ASHES) and State Department of Health.
  - (ii) The Working Group will meet at least twice a year, either in person or by live video conferencing (WEBEX) or teleconferencing.
  - (iii) The Working Group will serve as a forum to expand educational efforts, develop, outreach communications, and address any questions or concerns the public and infection control community.
  - (iv) CDA shall provide EPA with minutes of any such meetings within 60 days of the end of any such meeting.

## **Condition 2**

For at least the first 24 months after registration or until the Agency terminates this condition, whichever is later, the CDA will submit to EPA sample advertising materials. Advertising materials will be representative of advertisements intended for use in the marketplace.

The Confidential Statement of Formula dated July 10<sup>th</sup>, 2008, is acceptable.

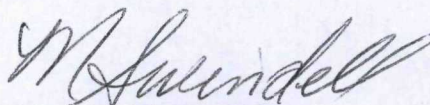
4 8 12

3. Submit three (3) copies of the final printed label prior to releasing this product for sale.

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

A stamped copy of the label is enclosed for your records.

Sincerely,



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

Enclosure: (Stamped Labeling)

5 8 12

### MicroGuard III

Laboratory testing has shown that when cleaned regularly:

[Antimicrobial Copper Alloys continuously reduce bacterial\* contamination, achieving 99.9% reduction within two hours of exposure.]

[Antimicrobial Copper Alloys surfaces kill greater than 99.9% of Gram-negative and Gram-positive bacteria\* within two hours of exposure.]

[Antimicrobial Copper Alloys surfaces deliver continuous and ongoing antibacterial\* action, remaining effective in killing greater than 99.9% of bacteria\* within two hours, even after repeated wet and dry abrasion and re-contamination.]

[When cleaned regularly, Antimicrobial Copper Alloys surfaces kill greater than 99.9% of bacteria\* within two hours, and continue to kill more than 99% of bacteria\* even after repeated contamination.]

[Antimicrobial Copper Alloys surfaces help 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, and *Pseudomonas aeruginosa*.

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	82.6%#
Other	17.4%#
Total	100%

# Nominal percentages for purpose of review and approval. Actual percentage of copper and other ingredients will be indicated on labels distributed with the product.

EPA Registration No. \*\*\*\*

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

Manufactured by:

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

PMX Industries, Inc.  
5300 Willow Creek Dr.  
Cedar Rapids, IA 52404

ACCEPTED  
with COMMENTS  
in EPA Letter Dated:  
OCT 31 2008

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended through subsequent  
regulatory actions EPA Reg. No.

85290-3

**DIRECTIONS FOR USE**

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 MicroGuard IV:** The use of MicroGuard IV does not replace standard infection control procedures and good hygienic practices. MicroGuard IV 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.

MicroGuard IV 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 MicroGuard IV 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 MicroGuard IV 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 MicroGuard IV 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.

[MicroGuard IV 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
- 

ACCEPTED  
with COMMENTS  
in EPA Letter Label:

103108

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

85290-3

7 7 12

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

- 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)
- Door push plates, kick plates, mop plates, stretcher plates
- Sinks: spigots, drains, sinks themselves

- Faucet: handles, spigot, drain control lever
- Water fountains: bubbler head, drain strainer, handle
- 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)
- Grab bars in bathrooms showers and bathtubs
- Panic bars on emergency room doors
- Towel bars
- 

ACCEPTED  
with COMMENTS  
by [illegible]

103108  
Under the Federal Acquisition  
Regulation, and Trade Agreements Act as  
amended, in the purchase  
required under FAR Reg. No.  
85290-3

Showerheads

- Countertops and tabletops (non-food use only)
- Hinges, locks, latches, and trim
- Door stops, door pulls, and protector guards
- Toilet and urinal hardware, levers, push buttons
- Toilet seat inlay for lifting of seat

Closures

- Vertical locking arms
- Vertical cover guards
- Protection bars
- Light switches, switch plates
- Visitor chairs: armrests, metal frames
- Thermostat covers, control knobs and wheels
- Telephone handsets and surfaces ( housings), keypad

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)

- Floor tiles
- Ceiling tiles (non-porous)
- Wall tiles

Instrument handles

Medical equipment knobs, pulls and handles for:

- Drug delivery systems
- Monitoring systems
- Hospital beds
- 

ACCEPTED  
 with COMMENTS  
 in 6/14/12 Letter Dated:  
 103108  
 Under the provisions of the  
 Federal Acquisition Regulation Act as  
 amended, the following  
 registered number is hereby No.  
 85290-3



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)

○

Pans (bed)

○

Walkers, wheelchair handles, and tubular components

○

Computer keyboards: keys, housings, computer mouse surfaces

○

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

○

Medical records: Chart holders, clipboards, filing systems

○

Storage Shelving: wire shelving etc. for medical supplies

○

Grab handles on privacy curtains

○

Lids of laundry hampers, trash canisters, and other containers

ACCEPTED  
with COMMENTS  
in 2nd letter dated

103108

Under the Federal Acquisition  
Regulations, and their amendments, act as  
authorized in the purchase,  
registered under Fed Reg. No.

85290-3

10 7 12

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

- Shopping cart handles, child seats, handrails
- Cash registers: housing, keypads
- ATM machines: keys, housing
- 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
- 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)
- Light switches, switch plates
- Lids of laundry hampers, trash canisters, and other containers

ACCEPTED  
with COMMENTS  
in 2014 Letter Book  
103100  
Under the Federal Acquisition,  
Regulation, and Administration Act as  
amended, for the contract,  
registered under Fed Reg. No.  
85290-3

**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)
-

- Bedrails, footboards
- 
- Handrails
- 
- Stair rails
- 
- Door push plates
- 
- Sinks: spigots, drains, sinks themselves
- 
- Faucet: handles, spigot, drain control lever
- 
- Paper towel holders, facial tissue holders, toilet paper holders
- 
- Door handles, doorknobs (outer touch surfaces)
- 
- Grab bars in bathrooms showers and bathtubs
- 
- Towel bars
- 
- Showerheads
- 
- Countertops and tabletops
- 
- Hinges, locks, latches, and trim
- 
- Door stops, door pulls, and protector guards
- 
- Toilet and urinal hardware, levers, push buttons
- 
- Toilet seat inlay for lifting of seat
- 
- Light switches, switch plates
- 
- Thermostat covers, control knobs and wheels
- 
- 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

ACCEPTED  
 with COMMENTS  
 103108  
 Under the Federal Hazardous  
 Materials and Toxic Substances Act as  
 amended, by the protocols  
 registered under EPC Reg. No.  
 85290-3

- 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)
- Television control knobs and buttons
- Lids of laundry hampers, trash canisters, and other containers

**Other**

- Play area equipment (indoor only): bars, handles, chains, push plates, handrails, stair rails and risers, wheels, knobs, flooring

**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  
in EPA Letter Dated:

103108

Under the Resource Conservation  
and Recovery Act as  
amended, in the products,  
regulation under EPA Reg. No.

85290-3