



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON D.C., 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

JUN 15 2010

Rohm and Haas Company  
100 Independence Mall West  
Philadelphia, PA 19106-2399

Attention: Valerie Phillips  
Regulatory Manager

Subject: Kathon™ CF-400 Industrial Microbiocide  
EPA Reg. No. 707-316  
Amendment Application Date: March 16, 2010  
EPA Received Date: March 18, 2010

The amendment referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. The Agency has no objection to the following:

- Updating label requirements for Storage Container Disposal (PR Notice 2007-4)
- Add an emergency contact number
- Updating First Aid Language

A stamped label is included with this letter for your records. If you have any questions concerning this letter, please contact Demson Fuller at (703) 308-8062.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Swindell".

Marshall Swindell  
Product Manager (33)  
Regulatory Management Branch 1  
Antimicrobials Division (7510C)

# KATHON™ CF-400

Industrial Microbicide for use in Industrial Process Water Systems, Recirculating Water Cooling Towers, Air Washer Systems, Oil Field Injection Waters, Wood Mildew Control, Papermill Slime Control, Dispersed Pigments, Recirculating Closed Loop Water Cooling Systems, Brewery Pasteurizer/Can Warmer/Retort Water Systems, Air Conditioner/Refrigeration Condensate Water Systems, Coal Slurry Systems, Evaporative Condenser Water Systems, Hydrostatic Sterilizer Water Systems, Influent Water Filtration Systems, Immersion Ultrasonic Tank Water, Reverse Osmosis and Ultra Filtration Systems, Industrial Scrubbing Systems, Industrial Wastewater Treatment Systems, Laboratory Equipment Water Baths, Sewage Systems, Paint Spray Booth Systems, Recirculating Electrodeposition Systems, and Polymer Latices.



100 INDEPENDENCE MALL WEST  
PHILADELPHIA, PA 19106  
TELEPHONE: (215) 592-3000

ACCEPTED  
with COMMENTS  
EPA Letter Dated:

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Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 707-316

**ACTIVE INGREDIENTS:**

5-Chloro-2-methyl-4-isothiazolin-3-one 2.95%  
2-Methyl-4-isothiazolin-3-one 1.05%

**INERT INGREDIENTS:**

Total: 96.00%  
100.00%

**KEEP OUT OF REACH OF CHILDREN  
DANGER  
FIRST AID**

**IF ON SKIN:**

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 min.
- Call a poison control center or doctor for treatment advice.

**IF IN EYES:**

- Hold eye open and rinse slowly and gently with water for 15-20 min.
- Remove contact lenses, if present, after first 5 min. then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

**IF INHALED:**

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to- mouth if possible.
- Call a poison control center or doctor for further treatment advice.

**IF SWALLOWED:**

- Call a poison control center or doctor immediately for treatment advice.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Have person sip a glass of water if able to swallow. Do not give anything to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

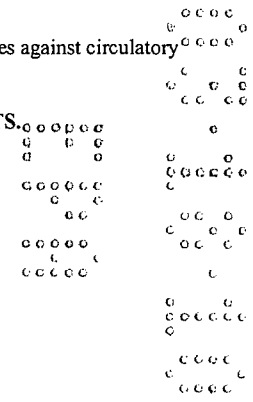
**IN CASE OF EMERGENCY CALL ROHM AND HAAS COMPANY 215-592-3000**

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be necessary.

SEE SIDE PANELS FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

**PRECAUTIONARY STATEMENTS  
HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER  
CORROSIVE  
CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN BURNS  
HARMFUL IF SWALLOWED  
MAY BE FATAL IF ABSORBED THROUGH THE SKIN  
MAY BE FATAL IS INHALED**



**MAY CAUSE ALLERGIC SKIN REACTIONS**

Do not get in eyes, on skin, or on clothing. Mixers, loaders and others exposed to this product must wear: long-sleeved shirt and long pants; chemical resistant gloves such as nitrile or butyl rubber, shoes plus socks; goggles and face shield; and chemical resistant apron. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Users should remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly. This product may cause skin sensitization reactions in some people.

**ENVIRONMENTAL HAZARDS**

This chemical is toxic to aquatic plants, fish and aquatic invertebrates. 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 authority 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. Do not contaminate water by cleaning of equipment or disposal of waste. Apply this pesticide only as specified on this label

**STORAGE AND DISPOSAL**

**PESTICIDE STORAGE**

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Do not apply this product in a way that will contact workers or other persons.

**PESTICIDE DISPOSAL**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. It 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.

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**CONTAINER DISPOSAL**

Nonrefillable container. Do not reuse or refill this container. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by procedures approved by state and local authorities.

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**GENERAL**

CONSULT FEDERAL, STATE, OR LOCAL DISPOSAL AUTHORITIES FOR APPROVED ALTERNATIVE PROCEDURES

**CONDITIONS OF SALE AND WARRANTY**

Rohm and Haas warrants that this product conforms to its chemical description and is reasonably fit for the purpose stated on the label only when used in accordance with label directions and as defined the Directions for Use on this label. ROHM AND HAAS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, EITHER OF MERCHANTABILITY OR FITNESS, FOR A PARTICULAR USE. Handling, storage, and use of the product by Buyer or User are beyond the control of Rohm and Haas and Seller. Risks such as ineffectiveness or other unintended consequences resulting from, but not limited to, failure to follow directions will be assumed by the Buyer or User. TO THE EXTENT PERMITTED BY LAW, NEITHER ROHM AND HAAS NOR SELLER SHALL BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT

Date of Manufacture: location for date  
EPA Reg. No. 707-316  
EPA Est. No. establishment number

**DIRECTIONS FOR USE**

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

For the control of microbial biofilms, bacteria, algae, and fungi, add Kathon CF-400 microbicide to: industrial process water systems, industrial recirculating water cooling towers, industrial recirculating closed loop water cooling systems, brewery pasteurizers, can warmers, retort water systems, industrial scrubbing systems, evaporative condenser water systems, hydrostatic sterilizer water systems, air conditioner/refrigeration condensate water systems, coal slurry systems, immersion ultrasonic tank water, laboratory equipment water baths and influent water filtration systems. Add Kathon CF-400 microbicide at some point in the system to insure uniform mixing.

**INITIAL DOSE:** When the system is noticeably fouled, apply 56 - 331 ppm Kathon CF-400 microbicide (2.0 - 13.2 ppm active ingredient) which is 0.46 - 2.76 pound or 6.6 - 40 fluid ounce of Kathon CF-400 per 1000 gallon of water in the system. Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

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**SUBSEQUENT DOSE:** When microbial control is evident, add 13 - 82 ppm Kathon CF-400 microbicide (0.5 - 3.3 ppm active ingredient) which is 0.11 - 0.68 pound or 1.6 - 9.8 fluid ounce of Kathon CF-400 per 1000 gallon of water in the system weekly or as needed to maintain control.

**DISPERSED PIGMENT PRESERVATION**

Kathon CF-400 microbicide is recommended for the control of microbial biofilms, bacteria and fungi in the manufacture and storage of dispersed pigments such as kaolin and montmorillite clays, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate, and kieselguhr used in paint and paper productions. Add 0.16 - 0.63 pound of Kathon CF-400 (73 - 286 gram) to each 1000 pound (453 kilogram) of fluid to provide 156 to 625 ppm product (6.25-25 ppm active ingredient).

**AIR WASHER SYSTEMS/ PAINT SPRAY BOOTHS**

Add to the air washer sump, chill water sump, or paint spray booth to insure uniform mixing, 13 - 331 ppm Kathon CF-400 microbicide (0.5 - 13.2 ppm active ingredient) which is 0.11 - 2.8 pound or 1.6 - 40 fluid ounce of Kathon CF-400 per 1000 gallon of water in the system depending upon the severity of contamination to control microbial biofilms, bacteria, fungi, and algae which cause fouling in industrial air washer systems and paint spray booths.

**INTERMITTENT OR SLUG METHOD**

**INITIAL DOSE:** When the system is noticeably fouled, apply 56 - 331 ppm Kathon CF-400 microbicide (2.2 - 13.2 ppm active ingredient) which is 0.46 - 2.8 pound or 6.6 - 40 fluid ounce of Kathon CF-400 per 1000 gallon of water in the system. Repeat until control is achieved.  
**SUBSEQUENT DOSE:** When microbial control is evident, add 13 - 82 ppm Kathon CF-400 microbicide (0.5 - 3.3 ppm active ingredient) which is 0.11 - 0.7 pound or 1.6 - 9.8 fluid ounce of Kathon CF-400 per 1000 gallon of water in the system weekly or as needed to maintain control. Badly fouled systems should be cleaned before treatment is begun.

**CONTINUOUS FEED METHOD**

**INITIAL DOSE:** When the system is noticeably fouled, apply 56 - 331 ppm Kathon CF-400 microbicide (2.2 - 13.2 ppm active ingredient) which is 0.46 - 2.8 pound or 6.6 - 40 fluid ounce of Kathon CF-400 per 1000 gallon of water in the system.  
**SUBSEQUENT DOSE:** Maintain this treatment level by adding a continuous feed of 13 - 82 ppm Kathon CF-400 (0.5 - 3.3 ppm active ingredient) which is 0.11 - 0.7 pound or 1.6 - 9.8 fluid ounce of Kathon CF-400 per 1000 gallon of makeup water. Badly fouled systems must be cleaned before initial treatment.  
**NOTE:** For use only in systems that maintain effective mist-eliminating components.

**OIL FIELD INJECTION WATERS**

For the control of microbial biofilm-forming and sulfate-reducing bacteria in oil and gas field water systems, including enhanced recovery injection fluids, drilling, fracturing and completion fluids, slug treat with 25 - 125 ppm Kathon CF-400 microbicide (0.2 - 5.0 ppm active ingredient) depending on the severity of contamination.

**INITIAL DOSE:** Add 62 - 125 ppm Kathon CF-400 (2.5 - 5.0 ppm active ingredient) which is 2.6 - 5.2 gallon or 22 - 44 pound Kathon CF-400 per 1000 barrel of water at a point in the system where it will be uniformly mixed. Repeat treatment after three days or as needed until control is achieved.  
**SUBSEQUENT DOSE:** Add 25 - 62 ppm Kathon CF-400 (0.2 - 2.5 ppm active ingredient) which is 1.1 - 2.6 gallon or 8.8 - 22 pound Kathon CF-400 per 1000 barrel of water every seven days or as needed to maintain control.

**RECIRCULATING ELECTRODEPOSITION SYSTEMS**

**METHOD OF ADDITION**

Kathon CF-400 microbicide is recommended as a tankside additive for the control of microbial biofilms, bacteria, fungi, and algae in recirculating electrodeposition systems and associated rinse systems. Alternatively, Kathon CF-400 microbicide may be added through the components of the electrodeposition paint prior to their addition to the electrodeposition system.

**TANKSIDE ADDITION TO ELECTRODEPOSITION SYSTEMS**

Kathon CF-400 microbicide should be dispensed into the recirculating rinse system, ultrafilter permeate, or final distilled rinse system at a point to ensure uniform mixing.

**INITIAL DOSE:** When the system is noticeably fouled, add 250 - 875 ppm Kathon CF-400 microbicide (10 - 35 ppm active ingredient) which is 2.3 - 8.2 gallon per 10,000 gallon of fluid in the system. Repeat until control is achieved.  
**SUBSEQUENT DOSE:** When microbial control is evident, add 125 - 375 ppm Kathon CF-400 microbicide (5 - 15 ppm active ingredient) which is 1.2 - 3.5 gallon per 10,000 gallon of fluid in the system. A change of frequency of treatment may be required depending upon the rate of dilution of the preservative with the makeup fluid, the nature and severity of contamination, level of control required, filtration effectiveness and system design.

**TREATMENT OF ELECTRODEPOSITION PAINT COMPONENTS**

**INITIAL DOSE OF PAINT COMPONENTS**

Kathon CF-400 microbicide should be added to the resin, pigment, or other component of the electrodeposition paint at a level to ensure that the final use-dilution fluid will contain 125 - 875 ppm product (5-35 ppm active ingredient).

**SUPPLEMENTAL TANKSIDE DOSING OF ELECTRODEPOSITION SYSTEMS**

If additional microbial control is necessary, Kathon CF-400 microbicide may be added to the electrodeposition system tankside to supplement microbicide incorporated through paint components.

**INITIAL DOSE:** If the system becomes noticeably fouled, add 250 - 875 ppm Kathon CF-400 microbicide (10 - 35 ppm active ingredient) which is 2.3 - 8.2 gallon per 10,000 gallon of fluid in the system. Repeat until control is achieved.  
**SUBSEQUENT DOSE:** When microbial control is evident, add 125 - 375 ppm Kathon CF-400 microbicide (5 - 15 ppm active ingredient) which is 1.2 - 3.5 gallon per 10,000 gallon of fluid in the system weekly or as needed.  
**NOTE:** Regardless of the manner of incorporation, the total active ingredient level in the system should at no time exceed 35 ppm (equivalent to 875 ppm Kathon CF-400 microbicide or 8.2 gallon per 10,000 gallon system fluid).

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**POLYMER LATEX PRESERVATION**

Kathon CF-400 microbicide is recommended for the control of bacteria and fungi in the manufacture and storage of synthetic and natural polymer latices including: acrylic, styrene/butadiene, carboxylated styrene/butadiene, ethylene/vinyl acetate; biopolymers intended for industrial use, such as a xanthum gum, gum arabic, guar gum, protein-derived polymers, starches, casein-derived polymers latices; and solution polymers. Add 0.16 – 1.3 pound of Kathon CF-400 (71 - 567 gram) to each 1000 pound (453 kilogram) of emulsion to provide 156 – 1250 ppm product (6.25-50 ppm active ingredient).

**NOTE:** To insure uniform mixing, add Kathon CF-400 to latex or solutions slowly with agitation. The actual required concentrations will depend upon such factors as the specific substance to be treated, frequency of repeated microbial contamination expected, and level of production required.

**WOOD AND WOOD PRODUCTS**

Kathon CF-400 microbicide is recommended for the protection of wood and wood products, such as landscape timbers, fences, posts, pilings, cross ties, decks, and similar exterior structures from mold and mildew. Treat southern yellow pine, hemlock, ponderosa pine, and other soft woods with 56 - 375 ppm Kathon CF-400 (2.2 – 15 ppm active ingredient) which is 0.46 – 3.1 pound or 6.6 - 45 fluid ounce of Kathon CF-400 per 1000 gallon as an aqueous dip or pressure treatment for mold and mildew control. Thoroughly wet and allow to dry. A single application will afford protection for 12 weeks.

**ULTRA FILTRATION UNITS AND NON-MEDICAL/NON-POTABLE REVERSE OSMOSIS SYSTEMS**

Kathon CF-400 Microbicide is recommended for the control of microbial biofilms, bacteria and fungi in ultra filtration units and non-medical/non-potable reverse osmosis systems. Use of Kathon CF-400 microbicide in potable water or dialysis is prohibited. Add 4 - 125 ppm of Kathon CF-400 microbicide (0.15 - 5 ppm active ingredient) into industrial ultra filtration or reverse osmosis systems by either continuous feed or periodic injection. Compatibility of Kathon CF-400 microbicide with reverse osmosis membranes should be confirmed with membrane manufacturers.

For the control of bacteria and fungi in carbon beds, add 4 - 125 ppm of Kathon CF-400 microbicide (0.15 - 5 ppm active ingredient) by either continuous or batch feed.

For periodic membrane cleaning, add 0.15 – 0.38 lb of Kathon CF-400 microbicide to every 120 gallon of cleaning solution (6 - 15 ppm active ingredient).

Badly fouled systems should be cleaned before treatment is begun.

**INDUSTRIAL WASTEWATER TREATMENT SYSTEMS AND SEWAGE SYSTEMS**

Kathon CF-400 microbicide is recommended for the control of microbial biofilms, bacteria, fungi, and algae in industrial wastewater treatment and sewage systems. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority.

**INITIAL DOSE:** When the system is noticeably fouled, apply 56 - 331 ppm Kathon CF-400 microbicide (2.2 – 13.2 ppm active ingredient which is 0.21 – 1.26 pound or 6.6 - 40 fluid ounce of Kathon CF-400 per 1000 gallon of water in the system. Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

**SUBSEQUENT DOSE:** When microbial control is evident, add 13 - 82 ppm Kathon CF-400 microbicide (0.5 – 3.3 ppm active ingredient) which is 0.11 – 0.68 pound or 1.6 - 10 fluid ounce of Kathon CF-400 per 1000 gallon of water in the system weekly or as needed to maintain control.

**PAPERMILLS**

For the control of microbial biofilms, bacteria, algae and fungi, add Kathon CF-400 microbicide to the Beater, Hydropulper, or Fan or Broke Storage Pumps or some other point in the system to insure uniform mixing.

Apply 0.17 to 0.56 lb (2.4 – 8 fluid ounce) of Kathon CF-400 microbicide per ton (dry basis) of pulp or paper produced as a slug dose. If needed, repeat daily. Badly fouled systems should be cleaned before initial treatment.

Kathon CF-400 Microbicide weighs 9.04 pounds per gallon

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registered under EPA Reg. No. 707-316**

