

67071-5

6/27/2011

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



United States  
Environmental Protection  
Agency

Office of Pesticide Programs

Thor GmbH  
Landwehrstrasse 1  
D-67346, Speyer, Germany

JUN 27 2011

**AGENT: Acti-Chem Specialties, Inc.**  
**56 Quarry Road**  
**Trumbull, CT 06611**

Attention: Lynn P. Tordo, MS.

Subject: ACTICIDE® 14F  
EPA Registration No. 67071-5  
Amendment Dated April 20, 2011

The amendment, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended, to expand the uses to include the preservation of products and systems (coatings, aqueous compositions, liquid household, consumer, industrial, janitorial products; semi-solid/solid household, consumer, industrial, janitorial products including process wash solution, Ultra filtration units, industrial wastewater treatment systems and sewage systems, is acceptable, provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA sec. 3©(5) and sec. 4 uses when the Agency requires all registrants of similar products to submit such data.
2. Submit two (2) copies of final printed labeling before you release the product for shipment.

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.

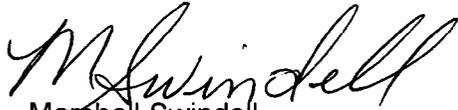
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A stamped copy of the "accepted" product labeling is enclosed for your records.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,



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

Enclosure



# ACTICIDE® 14F INFORMATION SHEET



**THIS ACTICIDE® 14F INFORMATION SHEET MUST ACCOMPANY EACH SHIPMENT OF ACTICIDE® 14F**

## DIRECTIONS FOR USE

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

**PRESERVATIVE FOR METAL WORKING FLUIDS:** ACTICIDE® 14F microbiocide is recommended for the control of bacteria and fungi in soluble and emulsifiable type aqueous metal working fluid solutions and emulsions. Add 3.5 fluid ounces ( 0.3 lb) per 1000 gallons of emulsion every four weeks or 3.5 to 16 fluid ounces (0.3 to 1.3 lb) per 1000 gallons of emulsion for maintenance of a nonfouled system. For a noticeably fouled system use an initial dose of 7 to 16 fluid ounces (0.6 to 1.3 lb) per 1000 gallons emulsion followed by subsequent maintenance dosage as above. A higher dosage rate and/or increased frequency of treatment may be required depending upon the nature and severity of contamination, level of control required, filtration effectiveness, system design, etc. The preservative should be dispensed into the use dilution of the metal working fluid using a metering pump and uniformly dispersed throughout the system.

**METAL CLEANING FLUID PRESERVATION:** ACTICIDE® 14F microbiocide is recommended as a preservative for use in the manufacture and use of alkaline, acid and emulsion based metal cleaning fluids typically used in electroplating, phosphatizing, galvanizing and general metal cleaning operations. For addition to a metal cleaning concentration, add ACTICIDE® 14F microbiocide at a level to ensure that the final use-dilution fluid will contain 56 to 225 ppm product (8 to 32 ppm active isothiazolones). For direct addition to a fouled system, add 7.2 to 29 fluid ounces (0.6 to 2.3 lb) of ACTICIDE® 14F microbiocide to each 1000 gallons of use-dilution metal cleaning fluid every 3 to 4 weeks to provide 56 to 225 ppm product (8 to 32 ppm active isothiazolones). A higher dosage range and/or increased frequency of treatment may be required depending on the rate of dilution of the preservative with the make up fluid, the nature and severity of the contamination, level of control required, filtration effectiveness, system design, etc. The preservative should be dispensed into the use dilution of the metal cleaning fluid using a metering pump and uniformly dispersed throughout the system.

**PRESERVATIVE FOR WATER-BASED HYDRAULIC FLUID:** ACTICIDE® 14F microbiocide is recommended as a preservative for use in the manufacture and use of high water-based hydraulic fluids and invert emulsion hydraulic fluids typically prepared by emulsifying 40% by volume water in 60% by volume of mineral oil using an oil soluble emulsifying agent.

For the maintenance of a non-fouled system, use ACTICIDE® 14F microbiocide at 12 to 15 fluid ounces (1.0 to 1.2 lb) per 1000 gallons fluid every 8 weeks. For a noticeably fouled system use an initial dose of 15 to 25 fluid ounces (1.2 to 2.0 lb) per 1000 gallons fluid to be followed by subsequent maintenance dosage. A higher dosage range and/or increased frequency of treatment may be required depending upon rate of dilution of the preservative with make-up fluid, the nature and severity of contamination, level of control required, filtration effectiveness, system design, etc.

**\*PRESERVATIVE FOR DISPERSED PIGMENT:** ACTICIDE® 14F microbiocide is recommended for the control of bacteria and fungi in the manufacture and storage of dispersed pigments such as kaolin clay, montmorillonite clay, titanium dioxide, calcium carbonate, calcium sulfate, barium sulfate, magnesium silicate and kieselguhr used in paint and paper productions coatings (including process wash solutions\*). Add 0.06 to 0.225 lb. of ACTICIDE® 14F (25 to 102 grams) to each 1000 lb. (454 kg) of fluid to provide 8.5 to 32 ppm active isothiazolones. \*Not approved for this use in the State of California.

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. 67071-5

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Manufactured By/For: Thor GmbH  
D-67346 Speyer, Germany  
Tel. (06232) 6360  
Thor Specialties, Inc.  
56 Quarry Road, Trumbull, CT  
06611 USA  
Tel. (203) 365-6530

U.S. Office:

# ACTICIDE® 14F INFORMATION SHEET



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## DIRECTIONS FOR USE

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**PRESERVATIVE FOR ADHESIVES AND TACKIFIERS** (including process wash solutions\*): ACTICIDE® 14F microbiocide is recommended as an in-container preservative for the control of bacteria and fungi in water soluble and water dispersed adhesive such as animal glues, vegetable glues, natural rubber latices, polyvinyl acetate, styrene-butadiene and acrylic lattices. ACTICIDE® 14F microbiocide is recommended as a preservative for tackifiers derived from rosin and hydrocarbon resins. Add 0.06 to 0.22 lb. ACTICIDE® 14F microbiocide (25 to 102 g) to each 1000 lb of fluid to provide 8.5 ppm to 32 ppm of active isothiazolone ingredients. A higher dosage rate providing up to 45 ppm active ingredient may be required for storage during extremely high temperatures and humidity.

*\*Not approved for this use in the State of California*

**PRESERVATIVE FOR WOOD AND WOOD PRODUCTS:** ACTICIDE® 14F 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 pressure-treatment solution with 0.027 to 0.086 gallons (3.4 to 11 fluid ounces) of ACTICIDE® 14F per 1000 gallons of solution (4.0 to 12.6 ppm active isothiazolones) in the pressure treating process for mold and mildew control. Under extreme mildew conditions, ACTICIDE® 14F may be used up to a maximum concentration of 48 ppm active isothiazolones (up to 33 fluid ounces per 1000 gallons of treatment solution). This application will afford protection up to 12 weeks and during repeated use of solution. ACTICIDE® 14F may be used at higher concentrations so long as the end-use product/article contains a maximum concentration of 48 ppm active isothiazolones

**PRESERVATIVE FOR PAINTS AND COATINGS** (including process wash solutions\*): ACTICIDE® 14F microbiocide is recommended as an in-container preservative for the control of bacteria and fungi in water based coatings such as paper and wood coatings and paints used for architectural product finishes and special purpose coatings. Add 0.06 to 0.22 lb. (25 to 102 grams) ACTICIDE® 14F microbiocide to each 1000 lb. (454 kg) of fluid to provide 8.5 ppm to 32 ppm of active isothiazolone ingredients. A higher dosage rate providing up to 45 ppm active ingredients may be required for storage during extremely high temperatures and humidity.

*\*Not approved for this use in the State of California*

\*Specifically as a wood coating, ACTICIDE® 14F 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. As a pressure treatment for mold and mildew control for southern yellow pine, hemlock, ponderosa pine and other soft woods, treat with 27 to 86 ppm of ACTICIDE® 14F (3.8 to 12.1 ppm active isothiazolones), by adding 0.2 to 0.7 lb or 3.4 to 11 fluid ounces of ACTICIDE® 14F per 1,000 gallons of preservative. Thoroughly wet and allow to dry. A single application will provide protection for 12 weeks. Under extreme mildew conditions, treat with 160 to 330 ppm (23 to 47 ppm active) by adding 1.4 to 2.7 lb or 17 to 33 fluid ounces of ACTICIDE® 14F for every 1,000 gallons of wood treatment solution. Thoroughly wet and allow to dry. ACTICIDE® 14F may be used at higher concentrations so long as the end-use product/article contains a maximum concentration of 48 ppm active isothiazolones \*Not approved for this use in the State of California.

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Special purpose coating uses: Includes uses as: 1) preservative for electrodeposition paints or solutions, 2) preservative for photoplating solutions or coatings, and 3) preservative in fount (or fountain) solutions used in the printing process as a maintenance fluid/coating and as a special coating for printing plates. The application/addition directions for these special purpose coating uses are:

**ELECTRODEPOSITION:** ACTICIDE® 14F microbiocide is recommended as a tankside additive for the control of bacteria, fungi, and algae in re-circulating electrodeposition systems and associated rinse systems. Alternately, ACTICIDE® 14F microbiocide may be added through the components of the electrodeposition paint prior to their addition to the electrodeposition system.

**Tankside Addition To Electrodeposition Systems:** ACTICIDE® 14F microbiocide should be dispensed into the recirculating rinse system, ultrafilter permeate, or final distilled rinse system at a point to insure uniform mixing. When the system is noticeably fouled, add 71 to 245 ppm ACTICIDE® 14F microbiocide (0.7-2.5 gallons per 10,000 gallons of fluid in the system). This will provide 10 to 35 ppm of active ingredients. Repeat until control is achieved. When microbial control is evident, add 35 -105 ppm ACTICIDE® 14F (0.35-1.1 gallons per 10,000 gallons of fluid in the system) weekly or as needed to maintain the system. This will provide 5-15 ppm of active ingredient. A change of frequency of treatment may be required depending on the rate of dilution of the preservative with the makeup fluid, the nature and severity of contamination, level of control required, filtration effectiveness, system design, etc.

### TREATMENT OF ELECTRODEPOSITION PAINT COMPONENTS:

**INITIAL DOSE OF PAINT COMPONENTS:** ACTICIDE® 14F microbiocide 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 35-245 ppm product (5-35 ppm active ingredient).

**SUPPLEMENTAL TANKED DOSING OF ELETRODEPOSITION SYSTEM:** If additional microbial control is necessary, ACTICIDE® 14F microbiocide may be added to the electrodeposition system tankside to supplement the microbiocide incorporated through paint components. If the system becomes noticeably fouled, add 71-245 ppm ACTICIDE® 14F microbiocide (0.7-2.5 gallons per 10,000 gallons of fluid in the system). This will provide 10-35 ppm of active ingredients. Repeat until control is achieved. When microbial control is evident, the system can be maintained by addition of 35-106 ppm ACTICIDE® 14F microbiocide (0.35-1.1 gallons per 10,000 gallons of fluid in the system) weekly or as needed. This will provide 5-15 ppm of active ingredients.

**NOTE:** To insure uniform mixing, add ACTICIDE® 14F microbiocide to latex or solution slowly with agitation. The actual concentrations required will depend upon such factors as the specific substance to be treated, frequency of repeated microbial contamination expected and level of protection required.

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# ACTICIDE® 14F INFORMATION SHEET



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## DIRECTIONS FOR USE

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**PHOTOPLATE PROCESSING, FOUNTAIN SOLUTIONS, AND INK/INK COMPONENTS** (including process wash solutions\*): ACTICIDE® 14F microbiocide is recommended for the control of bacteria and fungi in photoplate processing such as stabilizer solutions and in fountain solutions. ACTICIDE® 14F microbiocide is recommended for water-based printing inks such as flexographic, gravure, screen and ink jet types. ACTICIDE® 14F microbiocide is recommended for the control of bacteria and fungi in printing ink components such as resins, plasticizers, water soluble dyes, pigments, gelling agents, waxes, surfactants, and thickeners.

ACTICIDE® 14F microbiocide should be added to achieve the recommended dosage range for ink, ink components, fountain solutions and photoplate processing chemicals of 0.1% to 1.0% on a total weight basis. The optimum level range for acidic fountain solutions is 0.2% to 0.5%; the optimum level range for basic fountain solutions is 0.5% to 0.8%. A level adjustment may be necessary to accommodate the slight change in solution formulations.

*\*Not approved for this use in the State of California*

**PRESERVATIVE FOR BUILDING MATERIALS** (including process wash solutions\*): ACTICIDE® 14F microbiocide is recommended as an in-container preservative for the control of bacteria and fungi in building materials such as mastics, caulks, joint cements, spackling and grouting. Add 0.05 to 0.225 lb. of ACTICIDE® 14F microbiocide to each 1000 lb. of fluid to provide 7 ppm to 32 ppm active isothiazolones.

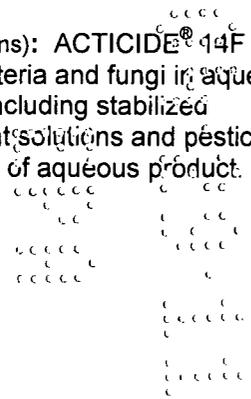
*\*Not approved for this use in the State of California*

**PRESERVATIVE FOR LATICES** (including process wash solutions\*): ACTICIDE® 14F microbiocide is recommended for the control of bacteria and fungi in the manufacture and storage of synthetic and natural polymer latices including: acrylics, styrene-butadiene, carboxylated styrene-butadiene, ethylene-vinyl acetate and biopolymers intended for industrial use such as xanthan gum, gum arabic, guar gum, protein derived polymers, starches and casein derived polymers. Add 0.06 to 0.45 lb. (25 to 205 g) of ACTICIDE® 14F microbiocide to each 1000 lb. (454kg) of emulsion to provide 8.5 ppm to 63.5 ppm active isothiazolones. ACTICIDE® 14F microbiocide may be added to the above products formulated as concentrates which are in turn diluted for use at a level to ensure that the final use-dilution product will not exceed the concentration indicated above.

*\*Not approved for this use in the State of California*

**\*PRESERVATIVE FOR AQUEOUS COMPOSITIONS** (including process wash solutions): ACTICIDE® 14F microbiocide is recommended as an in-container preservative for the control of bacteria and fungi in aqueous products such as fiber glass sizing solutions, aqueous emulsions and dispersions including stabilized oil/water emulsions, surface preparation compounds, foam control products, nutrient solutions and pesticide formulations. Add 0.05 to 0.35 lb. of ACTICIDE® 14F microbiocide to each 1000 lb. of aqueous product.

*\*Not approved for this use in the state of California*



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U.S. Office:

# ACTICIDE<sup>®</sup> 14F INFORMATION SHEET



**THIS ACTICIDE<sup>®</sup> 14F INFORMATION SHEET MUST ACCOMPANY EACH SHIPMENT OF ACTICIDE<sup>®</sup> 14F**

## DIRECTIONS FOR USE

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

**\*LIQUID HOUSEHOLD, CONSUMER, INDUSTRIAL, JANITORIAL-PRODUCTS** (including process wash solutions): ACTICIDE<sup>®</sup> 14F is added at a level of 0.04 to 0.16 lb. to each 1000lb. of product to be protected. For the control of bacteria and fungi in liquid soaps, liquid cleaners, liquid detergents, liquid laundry products, liquid dishwashing detergents, waxes, polishes, liquid fabric treatment/refreshers products, liquid air fresheners/deodorizers, car care products, and other similar cleaners. ACTICIDE<sup>®</sup> 14F may also be used for the control of bacteria and fungi in package utility products such as pre-moistened sponges and mops. ACTICIDE<sup>®</sup> 14F may also be used for the control of bacteria and fungi in solutions that are then put into/onto wet wipes for use in industrial, commercial, residential and household uses cited above. Wet wipes containing a solution preserved with this product may not be used for personal care, as baby wipes, or for food contact.

ACTICIDE<sup>®</sup> 14F microbicide may be added to those products formulated as concentrates which are in turn diluted for use at a level to ensure that the final use-dilution product will contain between 40 ppm to 160 ppm ACTICIDE<sup>®</sup> 14F microbicide.

*\*Not approved for this use in the State of California*

**\*SEMI-SOLID/SOLID HOUSEHOLD, CONSUMER, INDUSTRIAL, JANITORIAL-PRODUCTS** (including process wash solutions): ACTICIDE<sup>®</sup> 14F is added at a level of 0.04 to 0.16 lb. to each 1000lb. of product to be protected. For the control of bacteria and fungi in semi-solid/solid soaps, semi-solid/solid cleaners, semi-solid/solid detergents, semi-solid/solid laundry products, semi-solid/solid dishwashing detergents, waxes, polishes, semi-solid/solid fabric treatment/refreshers products, semi-solid/solid air fresheners/deodorizers, car care products, and other similar cleaners. ACTICIDE<sup>®</sup> 14F may also be used for the control of bacteria and fungi in package utility products such as pre-moistened sponges and mops. ACTICIDE<sup>®</sup> 14F may also be used for the control of bacteria and fungi in solutions that are then put into/onto wet wipes for use in industrial, commercial, residential and household uses cited above. Wet wipes containing a solution preserved with this product may not be used for personal care, as baby wipes, or for food contact.

ACTICIDE<sup>®</sup> 14F microbicide may be added to those products formulated as concentrates which are in turn diluted for use at a level to ensure that the final use-dilution product will contain between 40 ppm to 160 ppm ACTICIDE<sup>®</sup> 14F microbicide.

*\*Not approved for this use in the State of California*

**\*OIL FIELD INJECTION WATERS:** Add 2.5 to 6.1 lb (0.29 to 0.7 gallons) ACTICIDE<sup>®</sup> 14F per 1000 barrels of water (7.1 to 17.5 ppm ACTICIDE<sup>®</sup> 14F) weekly or as needed to maintain control of slime-forming and sulfate reducing bacteria in oil and gas field water systems including enhanced recovery injection fluids and drilling fluids. An initial dose of 6.1 to 12.4 lb ACTICIDE<sup>®</sup> 14F per 1000 barrels of water (17.4 to 34.8 ppm ACTICIDE<sup>®</sup> 14F) may be used until control is achieved. This product may be used for terrestrial and off-shore oil drilling muds and packer fluids. *\*Not approved for this use in the State of California.*

**\*PAPERMILLS:** Add 0.048 to 0.16 lb of ACTICIDE<sup>®</sup> 14F per ton (dry basis) of pulp or paper produced as slug dose for the control of bacterial and fungal slime in the production of paper. ACTICIDE<sup>®</sup> 14F should be added to a point such as the Beater or Hydropulper to ensure uniform mixing. *\*Not approved for this use in the State of California.*

ACCEPTED  
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# ACTICIDE® 14F INFORMATION SHEET



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## DIRECTIONS FOR USE

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**\*INDUSTRIAL RECIRCULATING WATER COOLING TOWER:** ACTICIDE® 14F microbiocide is recommended for the control of bacteria, algae and fungi. It should be added to the tower basin or some other point to ensure uniform mixing. Add 0.032 to 0.196 lb of ACTICIDE® 14F per 1000 gallons of water (3.7 to 23 ppm ACTICIDE® 14F) weekly or as needed for maintenance. For noticeably fouled systems use an initial dose of 0.13 to 0.79 lb ACTICIDE® 14F per 1000 gallons of water. Repeat if necessary to achieve control. \*Not approved for this use in the State of California.

**\* AIR WASHER SYSTEMS / \*PAINT SPRAY BOOTHS:** For use only in industrial air washing systems that maintain effective mist eliminating components. Add 0.032 to 0.79 lb ACTICIDE® 14F to 1000 gallons of water (2.7 to 93.6 ppm ACTICIDE® 14F) in the air washer sump, or chill water sump to ensure uniform mixing for the control of bacteria, fungi and algae. A repeat treatment may be needed depending on the severity of contamination.

\*Not approved for this use in the State of California.

**\*INDUSTRIAL RECIRCULATING CLOSED LOOP WATER COOLING SYSTEMS AND PROCESS WATER SYSTEMS:** Add 0.032 to 0.196 lb ACTICIDE® 14F per 1000 gallons of water in the system weekly to maintain control of bacteria, fungi and algae in the reservoir, recirculating line or some other point to ensure uniform mixing. For noticeably fouled systems an initial treatment with 0.13 to 0.79 lb ACTICIDE® 14F per 1000 gallons of water may be needed depending on the severity of the fouling. \*Not approved for this use in the State of California.

**\*BREWERY PASTEURIZERS AND CAN WARMER SYSTEMS:** Add 0.032 to 0.196 lb of ACTICIDE® 14F per 1000 gallons of water in the system weekly or as needed to maintain control of bacteria, algae and fungi. For noticeably fouled systems an initial treatment with 0.13 to 0.79 lb ACTICIDE® 14F per 1000 gallons of water may be needed depending on the severity of the fouling.

NOTE: Regardless of the manner of incorporation, the total active ingredient level in the system should never exceed 35 ppm (equivalent to 248 ppm ACTICIDE® 14F or 2.5 gallons per 10,000 gallons of system fluid).

\*Not approved for this use in the State of California.

**\*ULTRA FILTRATION UNITS, such as REVERSE OSMOSIS SYSTEMS:** ACTICIDE® 14F microbiocide is recommended for the control of bacteria and fungi in ultra filtration units, such as reverse osmosis systems. Add 1 - 35 ppm of ACTICIDE® 14F microbiocide (0.15 - 5 ppm active ingredient) into industrial ultra filtration or reverse osmosis systems by either continuous feed or periodic injection. Compatibility of ACTICIDE® 14F microbiocide with reverse osmosis membranes should be confirmed with membrane manufacturers. For the control of bacteria and fungi in carbon beds, add 1 - 35 ppm of ACTICIDE® 14F microbiocide (0.15 - 5 ppm active ingredient). For periodic membrane cleaning, add 0.04 - 0.10 lbs of ACTICIDE® 14F microbiocide to every 120 gallons of cleaning solution (6 - 15 ppm active ingredient). Badly fouled systems should be cleaned before treatment is begun.

\*Not approved for this use in the State of California.

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# ACTICIDE<sup>®</sup> 14F INFORMATION SHEET



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### DIRECTIONS FOR USE

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**\*INDUSTRIAL WASTEWATER TREATMENT SYSTEMS AND SEWAGE SYSTEMS:** ACTICIDE<sup>®</sup> 14F microbiocide is recommended for the control of microbial biofilms, bacteria, fungi, and algae in industrial waste water 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 15.5 – 93 ppm ACTICIDE<sup>®</sup> 14F microbiocide (0.13 – 0.78 pound or 2 – 12 fluid ounce of ACTICIDE<sup>®</sup> 14F per 1000 gallons 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 3.5 – 23 ppm ACTICIDE<sup>®</sup> 14F microbiocide (0.03 – 0.2 pounds or 0.45 – 3 fluid ounces of ACTICIDE<sup>®</sup> 14F per 1000 gallons of water in the system) weekly or as needed to maintain control.

*\*Not approved for this use in the State of California*

**\*FUEL PRESERVATION:** ACTICIDE<sup>®</sup> 14F is recommended for the control of bacteria and fungi in the following liquid hydrocarbon fuels and oils: crude oils, aviation fuels, kerosene, heating oils, diesel fuels, residual fuel oils, coal slurries, liquefied petroleum gases and petrochemical feedstocks. ACTICIDE<sup>®</sup> 14F is recommended for **REFINERY AND TERMINAL USE ONLY**. ACTICIDE<sup>®</sup> 14F should be directly dispensed into a fuel tank, storage tank or a flowing stream of fuel in a manner to ensure uniform distribution of the preservative in the fuel system. Slug dose or continuous feed methods are recommended.

**Curative Dose:** When the system is noticeably fouled, add 11 - 21 gallons ACTICIDE<sup>®</sup> 14F per 1 million gallons of fluid in the system. This will provide 11 to 21 ppm of ACTICIDE<sup>®</sup> 14F and 1.5 – 3.0 ppm active ingredient. Repeat until control is achieved. A shock dose of up to 42 gallons of ACTICIDE<sup>®</sup> 14F per 1 million gallons of fluid is recommended in the case of extreme contamination. Grossly contaminated systems should be physically cleaned to remove debris.

**Maintenance Dose:** When the system is not noticeably fouled, add 5 - 16 gallons of ACTICIDE<sup>®</sup> 14F per 1 million gallons of fluid to maintain the system. This will provide 5 to 16 ppm of ACTICIDE<sup>®</sup> 14F and 0.75 – 2.25 ppm active ingredient. Repeat every 4 – 6 weeks or when microbial contamination is detected.

**FOR USE IN AVIATION FUEL, THE FEDERAL AVIATION ADMINISTRATION MUST BE CONSULTED AS TO THE ACCEPTABILITY OF THE ADDITIVE FOR USE IN SPECIFIC ENGINES AND/OR AIRCRAFT.**

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