THOR

ACTICIDE® 14F

Industrial microbiocide for use in metal working fluids, metal cleaning fluids, hydraulic fluids, adhesives, tackifiers; dispersed pigments, paints, building materials, polymer latices, oil field injection waters, paper slime control, recirculating water cooling towers, air washer systems, recirculating closed loop water cooling systems, brewery pasteurizer and can warmer systems.

ACTIVE INGREDIENTS:

5-Chloro-2-methyl-4-isothiazolin-3-one	10.2%
2-Methyl-4-isothiazolin-3-one	4.0%
INERT INGREDIENTS:	85.8%
TOTAL:	100.0%

ACCEPTED
JAN 23 2002
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 67071-5

KEEP OUT OF REACH OF CHILDREN

DANGER - PELIGRO

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

FIRST AID

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

IF SWALLOWED:
- *Call a poison control center or doctor immediately for treatment advice.
- *Have person sip a glass of water if able to swallow.
- *Do not induce vomiting unless told to by a poison control center or doctor.

IF ON SKIN:
- *Take off contaminated clothing.
- *Rinse skin immediately with plenty of water for 15-20 minutes.
- *Call a poison control center or doctor for treatment.

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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

EPA Reg. No. 67071-5

EPA Est. No. 67071-DEU-001

Manufactured By:
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RECOMMENDED TO BE USED WITHIN 12 MONTHS FROM DATE OF MANUFACTURE.

Net Contents: _____ Pounds

Date of Manufacture: _____

Lot # _____

12/14/01

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PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE AND SKIN BURNS. MAY BE FATAL IF SWALLOWED OR ABSORBED THROUGH SKIN. HARMFUL IF SWALLOWED. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. DO NOT BREATH VAPOR OR SPRAY MIST. AVOID CONTACT WITH SKIN PROLONGED OR FREQUENTLY REPEATED SKIN CONTACT MAY CAUSE ALLERGIC REACTION IN SOME INDIVIDUALS. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Mixers, loaders, and others exposed to methylisothiazolinone must wear:

- Coveralls over long-sleeved shirt and long pants
- Socks and chemical resistant footware
- Goggles or face shield
- Chemical-resistant gloves (such as rubber or made out of any waterproof material)
- A respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or NIOSH approved Respirator with an organic (OV) cartridge or canister with any R, P, or HE prefilter.
- In addition, mixers and loaders and persons cleaning equipment must wear a chemical-resistant apron.

Follow manufacturer's instructions for cleaning / maintaining PPE. If there are no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

User Safety Recommendations: 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. Discard clothing or other absorbent materials that have been drenched or heavily contaminated with this product's concentrate.

STORAGE AND DISPOSAL

PROHIBITIONS: This product (pH 3.0) is corrosive to mild steel.

PESTICIDE STORAGE: Do not store or transport in unlined metal containers. Do not contaminate food or feed by storage, disposal or cleaning of equipment.

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

CONTAINER DISPOSAL: Metal container: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by state and local authorities. Plastic container: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incinerator or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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

CONDITIONS OF SALE AND WARRANTY

Thor GmbH warrants that the 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 under normal conditions of use. THOR GMBH 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 Thor GmbH and Seller. Risks such as ineffectiveness or other unintended consequences resulting from, but not limited to, failure to follow label directions will be assumed by the Buyer or User. IN NO CASE WILL THOR GMBH OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

ACCEPTED

JAN 23 2002

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

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PHYSICAL AND CHEMICAL HAZARD

This product is corrosive to mild steel.

ENVIRONMENTAL HAZARDS

This pesticide 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.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.
Do not apply this product in a way that will contact workers or other persons.

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 (6.25 to 25 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 (6.25 to 25 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. Add 0.06 to 0.225 lb. of Acticide 14F (25 to 102 grams) to each 1000 lb. (454 kg) of fluid to provide 7 to 25 ppm active isothiazolones.

PRESERVATIVE FOR ADHESIVES AND TACKIFIERS: 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 latices. Acticide 14F microbiocide is recommended as a preservative for tackifiers derived from rosin and hydrocarbon resins.

Add 0.6 to 0.22 lb. Acticide 14F microbiocide (25 to 102 g) to each 1000 lb of fluid to provide 7 ppm to 25 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.

PRESERVATIVE FOR PAINTS AND COATINGS: 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 7 ppm to 25 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.

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 (4.0 to 12.6 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 (24 to 48 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. A single application will afford protection for 12 weeks.

PRESERVATIVE FOR BUILDING MATERIALS: 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 25 ppm active isothiazolones.

PRESERVATIVE FOR LATICES: 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 7 ppm to 50 ppm active isothiazolones.

OIL FIELD INJECTION WATERS: Add 2.5 to 6.1 lb (0.29 to 0.7 gallons) Acticide 14F per 1000 barrels of water (7.1 to 17.5 ppm Acticide 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 14F per 1000 barrels of water (17.4 to 34.8 ppm Acticide 14F) may be used until control is achieved. This product may be used for terrestrial and off-shore oil drilling muds and packer fluids.

PAPERMILLS: Add 0.048 to 0.16 lb of Acticide 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 14F should be added to a point such as the Beater or Hydropulper to ensure uniform mixing.

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.

AIR WASHER SYSTEMS: 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.

INDUSTRIAL RECIRCULATING CLOSED LOOP WATER COOLING 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.

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 in 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.

SPECIAL PURPOSE COATING USES: Include 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 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. Alternatively, 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 71-245 ppm Acticide 14F microbiocide (0.7-2.5 galls 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 compound 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 ELECTRODEPOSITION 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 (07.-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 35-105 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: Regardless of the manner of incorporation, the total active ingredient level in the system should never exceed 35 ppm (equivalent to 245 ppm Acticide 14F or 2.5 gallons per 10,000 gallons of system fluid).

PHOTOPLATE PROCESSING, FOUNTAIN SOLUTIONS AND INK/INK COMPONENTS: 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.

Acticide 14F microbiocide weighs 10.4 lb. per gallon.

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.

ACCEPTED

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EPA Reg. No. [illegible]