

THOR

ACTICIDE® RS-F

Industrial microbiocide for use in metal working fluids, metal cleaning fluids, hydraulic fluids, adhesives, tackifiers, dispersed pigments, paints, building materials and polymer latexes which are classified as indoor non-food and non-food applications.

ACTIVE INGREDIENTS:

5-Chloro-2-methyl-4-isothiazolin-3-one 1.11%
2-Methyl-4-isothiazolin-3-one 0.37%

Other Ingredients: 98.52%

TOTAL: 100.00%

Acticide RS-F microbiocide weighs 8.6 lb. per gallon.

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.

HOT LINE NUMBER: In case of emergency, for additional information call toll free 1-800-424-9300. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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

EPA Reg. No. 67071-10

EPA Est. No. 67071-DEU-1

Manufactured By:
Thor GmbH
D-67346 Speyer, Germany
Tel. (06232) 4380

U.S. Office: Acti-Chem Specialties, Inc.
56 Quarry Road
Trumbull, CT 06611 USA

ACCUTEST
Tel. (203) 365-4530

Net Contents: _____ Pounds

Date of Manufacture: JAN 19 2006

Lot #: _____

Under the Federal Insecticide, Fungicide, and
Rodenticide Act as amended, for the
pesticide, registered under
EPA Reg. No. 67071-10

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES IRREVERSIBLE EYE DAMAGE. HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. 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:

- Long-sleeve shirt and long pants

- Socks and Shoes

- Goggles or face shield

- Chemical-resistant gloves (such as rubber or made out of any waterproof material)

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.

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 public 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 sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

STORAGE AND DISPOSAL

This product (pH 1.95) is corrosive to mild steel.

PESTICIDE STORAGE: Do not store or transport in unlined metal containers. Do not contaminate water, 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 waste 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 containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or other procedures approved by state and local authorities. Plastic containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or incinerator or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Do not apply this product in a way that will contact workers or other persons

GENERAL: CONSULT FEDERAL, STATE AND 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.

11/04/05

Label # 100(e)

67071-10

11/19/2006

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ACCEPTED

JAN 19 2006

Under the Federal Insecticide, Fungicide, and
Rodenticide Act as amended, for the
pesticide, registered under
EPA Reg. No. 67871-10

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 RS-F microbicide is recommended for the control of bacteria and fungi in aqueous metal working fluid solutions and emulsions.

Add 32 fluid ounces (2 lb.) per 1000 gallons of emulsion every 4 weeks for maintenance of a non-fouled system. For a noticeably fouled system use an initial dose of 64 to 160 fluid ounces (4.5 to 10 lb.) per 1000 gallons emulsion followed by subsequent maintenance dosage 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 dispersed into the use dilution of the metal working fluid using a metering pump and uniformly dispersed throughout the system.

PRESERVATIVE FOR ADHESIVES AND TACKIFIERS: Acticide RS-F microbicide is recommended as an in-container preservative for the control of bacteria and fungi in water soluble and water dispersed adhesives such as animal glues, vegetable glues, natural rubber latices, polyvinyl acetate, styrene-butadiene and acrylic latices. Acticide RS-F microbicide is recommended as a preservative for tackifiers derived from rosin and hydrocarbon resins.

Add 0.5 to 1.65 lb. Acticide RS-F microbicide 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.

WATER-BASED HYDRAULIC FLUID PRESERVATION: Acticide RS-F microbicide 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 RS-F microbicide at 120 to 150 fluid ounces (10 to 12 lb) per 1000 gallons fluids every 8 weeks. For a noticeably fouled system use an initial dose of 150 to 250 fluid ounces (12 to 20 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.

DISPERSED PIGMENT PRESERVATION: Acticide RS-F microbicide 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 0.6 to 2.25 lb of Acticide RS-F (250 to 1020 grams) to each 1000 lb (453 kg) of fluid to provide 7 to 25 ppm active isothiazolones.

METAL CLEANING FLUID PRESERVATION: Acticide RS-F microbicide 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 RS-F microbicide at a level to ensure that the final use-dilution fluid will contain 560 to 2250 ppm product (about 6 to 25 ppm active isothiazolones).

For direct addition to a fouled system, add 72 to 290 fluid ounces (6 to 23 lb) of Acticide RS-F microbicide to each 1000 gallons of use-dilution metal cleaning fluid every 3 to 4 weeks to provide 560 to 2250 ppm product (about 6 to 25 ppm active isothiazolones). A higher dosage range and/or increased frequency of treatment may be required depending upon rate of dilution of the preservative with the make-up fluid, the nature and severity of contamination, level of control required, filtration effectiveness, system design, etc.

The preservative should be dispersed into the use-dilution metal cleaning fluid using a metering pump and uniformly dispersed throughout the system.

PRESERVATIVE FOR BUILDING MATERIALS: Acticide RS-F microbicide 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 0.5 to 1.65 lb of Acticide RS-F microbicide to each 1000 lb of fluid to provide 7 ppm to 25 ppm active isothiazolones.

PRESERVATIVE FOR LATICES: Acticide RS-F microbicide is recommended for the control of bacteria and fungi in the manufacture and storage of synthetic and natural polymer latices including: acrylics, styrenebutadiene, carboxylated styrenebutadiene, 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 0.5 to 3.3 lb. (227 g to 1.5 kg) of Acticide RS-F microbicide to each 1000 lb. (454 kg) of emulsion to provide 7 ppm to 50 ppm active isothiazolones.

Note: To insure uniform mixing, add Acticide RS-F microbicide to latex or solutions 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.

PRESERVATIVES FOR PAINTS AND COATINGS: Acticide RS-F microbicide is recommended as an in-container preservative for the control of bacteria and fungi in water based coatings such as paper, wood coatings and paints used for architectural, product finishes and special purpose coatings.

Add 0.5 to 1.65 lb (227 to 750 grams) Acticide RS-F microbicide to each 1000 lb (454 kg) of fluid to provide 7 ppm to 25 ppm 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.

SPECIAL PURPOSE COATING USES: Include use as a: <> preservative for electrodeposition paints or solutions, <> preservative for photo plating solutions or coatings, <> preservative in fountain (or fountain) solutions used in the printing process as a maintenance fluid/coating and as a special coating for printing plates, and <> preservative in spin finish coatings for fibers. The application/addition directions for these special purpose coating uses are:

ELECTRODEPOSITION: Acticide RS-F microbicide 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 RS-F microbicide may be added through the components of the electrodeposition paint prior to their addition to the electrodeposition system.

Tankside Addition To Electrodeposition Systems: Acticide RS-F microbicide should be dispersed 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 650 to 2245 ppm Acticide RS-F microbicide (6.4 to 22.9 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 321 to 962 ppm Acticide RS-F (3.2 to 10.1 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 RS-F 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 321 to 2245 ppm product (5 - 35 ppm active ingredient).

Supplemental Tanked Dosing of Electrodeposition System: If additional microbial control is necessary, Acticide RS-F microbicide may be added to the electrodeposition system tankside to supplement the microbicide incorporated through paint components. If the system becomes noticeably fouled, add 650 to 2245 ppm Acticide RS-F microbicide (6.4 to 22.9 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, ink system can be maintained by addition of 321 to 962 ppm. Acticide RS-F microbicide (3.2 to 10.1 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 2245 ppm Acticide RS-F or 22.9 gallons per 10,000 gallons of system fluid).

PHOTOPLATE PROCESSING, FOUNTAIN SOLUTIONS, AND INK/INK COMPONENTS: Acticide RS-F microbicide is recommended for the control of bacteria and fungi in photoplate processing such as stabilizer solutions and in fountain solutions. Acticide RS-F microbicide is recommended for fountain-based printing inks such as lithographic, gravure, screen and ink jet types. Acticide RS-F microbicide 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 RS-F microbicide 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 neutral fountain solutions is 0.5% to 0.8%. A level adjustment may be necessary to accommodate the slight change in solution formulations.

PRESERVATIVE IN SPIN FINISH COATINGS FOR FIBERS: Acticide RS-F is recommended for the control of bacteria and algae in spin finish coating solutions used to coat fibers. Acticide RS-F should be dispersed into the spin finish coating system at a point to ensure uniform mixing. It should be added to achieve the recommended dosage range of 0.05% to 0.5% on a total weight basis, with the optimum level used if fouling becomes noticeable.

NOTE: To insure uniform mixing, add Acticide RS-F microbicide 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.

GENERAL ADVISORY STATEMENT:

ACTICIDE RS-F SHOULD 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 6-50 PPM ACTIVE ISOTHIAZOLONES, AS DESCRIBED ABOVE, EXCEPT FOR PAINTS AND COATINGS WHICH SHOULD BE AT 7 - 25 PPM AS DESCRIBED ABOVE.

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