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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

11/4/99

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Thor Chemie GmbH Landwehrstrasse 1 D-67346 Speyer, Germany

Attention: Geraldine Werdig Manager, Regulatory Affairs

Subject: Acticide LG EPA Registration No. 67071-1 Your Amendment Dated September, 21, 1999

31910-6

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), as amended to add the remaining uses from the Acticide 14F label onto the Acticide LG label and to change the name of the resulting product from Acticide LG to Acticide LG-F is acceptable provided that you:

1. Submit/cite all data required for registration and/or reregistration of your product under the FIFRA section 3(c)(5) and section 4 when the Agency requires all registrants of similar products to submit such data.

2. Submit two (2) copies of your 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 section 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.

CONCURRENCES										
SYMBOL										
SURNAME										
DATE					· · · · · · · · · · · · · · · · · · ·					
EPA Form 1320-1A (1/90)		Printed on Recycled Paper					OFFICIAL FILE COP			

If you have any questions concerning this letter, please contact Pam Hasty at (703) 308-7933.

Sincerely,

Martha SSengfron

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

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ACCEPTED with COMMENTS in EPA Letter Dated:

NOV 0 4 1999

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

registered under EPA Reg. No. 67071-1

ACTICIDE<sup>®</sup> LG-F

Industrial microbiocide for use in recirculating water cooling towers, air wash systems, oil field injection waters, paper slime control, recirculating closed loop water cooling systems, brewery pasteurizer and can warmer systems, metal working fluids, adhesives, tackifiers, hydraulic fluids, dispersed pigments, metal cleaning fluids, building materials, polymer latices, paints and coatings which are classified as indoor non-food and non-food applications.

## ACTIVE INGREDIENTS:

5Chloro-2-methyl-4-isothiazolin-3-one	1.1%
2-Methyl-4-isothiazolin-3-one	0.4%

## OTHER INGREDIENTS: 98.5%

## TOTAL: \_\_\_\_\_\_100.0%

# KEEP OUT OF REACH OF CHILDREN DANGER

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

#### STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED: Do not induce vomiting. Drink promptly large quantities of water. Avoid alcohol. Call a physician immediately.

IF ON SKIN: Wash thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

IF IN EYES: Flush with plenty of water for at least 15 minutes. Call a physician.

IF INHALED: Remove immediately to fresh air. If not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Call physician.

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

EPA Reg. No. 67071-1\*

### EPA Est. No. 37429-DEU-1

U.S. Office:

Acti-Chem Specialties, Inc. 56 Quarry Road Trumbull, CT 06611 USA Tel. (203) 365-6530

NOT FOR SALE OR USE AFTER 12 MONTHS FROM DATE OF MANUFACTURING.

Net Contents: \_\_\_\_\_ Pounds

Date of Manufacture: \_\_\_\_\_

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Manufactured By:

Thor Chemie GmbH

Tel. (06232) 6360

D-67346 Speyer, Germany

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Lot # \_\_\_\_\_

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ACCEPTED	
with COMMENTS	•
in EPA Letter Dated	1:

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

## DANGER

KEEP OUT OF REACH OF CHILDREN. CORROSIVE. CAUSES EYE DAMAGE AND SKIN BURNS. MAY CAUSE ALLERGE SKIN Pederal Insecticide, REACTION, MAY BE HARMFUL IF INHALED, MAY BE FATAL IF SWALLOWED OR ABSORBED THROUGH THE SKIN. Do not get in eyes, on skin, on clothing. Wear goggles or face shield and rubber gloves when handling. Avoid breathing vapor or spray mistravioide, and Rodenticide Act as contamination of food. Do not take internally. Wash thoroughly with soap and water after handling,

**ENVIRONMENTAL HAZARDS** 

This pesticide is toxic to fish and wildlife. Do not discharge effluent containing this product into takes, 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. Do not contaminate water by cleaning of equipment or disposal of waste. Apply this pesticide only as specified on this label.

#### STORAGE AND DISPOSAL

This product (pH 3.0) is corrosive to mild steel. 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 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 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, Plastic container: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, if allowed by state and local authorities. If burned, stay out of smoke

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

#### CONDITIONS OF SALE AND WARRANTY

Thor Chemie 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 CHEMIE 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 Chemie 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 CHEMIE GMBH OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

## DIRECTIONS FOR USE

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

## INDUSTRIAL RECIRCULATING WATER COOLING TOWER:

Acticide LG-Fmicrobiocide 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 0.3 to 1.86 lb of Acticide LG-F per 1000 gallons of water (35 to 220 ppm Acticide LG-F) weekly or as needed for maintenance. For noticeably fouled systems use an initial dose of 1.25 to 7.5 lb Acticide LG-F 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.

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Add 0.3 to 7.5 lb Acticide LG-F to 1000 gallons of water (35 to 886 ppm Acticide LG-F) 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.

## **OIL FIELD INJECTION WATERS:**

Add 23 to 58 lb (2.8 to 6.9 gallons) Acticide LG-F per 1000 barrels of water (66 to 165 ppm Acticide LG-F) 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 57 to 115 lb Acticide LG-F per 1000 barrels of water (162 to 324 ppm Acticide LG-F) may be used until control is achieved.

### PAPER MILLS:

Add 0.45 to 1.5 lb of Acticide LG-F 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 LG-F should be added to a point such as the Beater or Hydropulper to ensure uniform mixing.

NOV 0 4 1999 amended, for the pesticide, registered under EPA Reg. No. 678741

ACCEPTED WINCOMMENTS INDUSTRIAL RECIRCULATING CLOSED LOOP WATER COOLING SYSTEMS: in EPA Letter Dated: Add 0.3 to 1.86 lb of Acticide LG-F per 1000 gallons of water in the system weekly to maintain control NOV 0 4 1399 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 1.25 to 7.5 lb Acticide LG-F per 1000 Under the Federal Insecticide, gallons of water may be needed depending on the severity of the fouling. Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. BREWERY PASTEURIZERS AND CAN WARMER SYSTEMS: 67071-1 Add 0.3 to 1.86 lb of Acticide LG-F 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 1.25 to 7.5 lb of Acticide LG-F per 1000 gallons of water may be needed depending on the severity of the fouling PRESERVATIVE FOR METAL WORKING FLUIDS Acticide LG-F microbiocide 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 dispensed 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 LG-F microbiocide 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 LG-F microbiocide is recommended as a preservative for tackifiers derived from rosin and hydrocarbon resins. Add 0.5 to 1.65 lb. Acticide LG-F microbiocide 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 LG-F 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 LG-F microbiocide 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 LG-F 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 0.6 to 2.25 lb of Acticide LG-F (250 to 1020 gran(s)) to each 1000 lb (453 kg) of fluid to provide 7 to 25 ppm active isothiazolones.

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#### METAL CLEANING FLUID PRESERVATION

ACCEPTED Acticide LG-F microbiocide is recommended as a preservative for use in the manufacture and with COMMENTS use of alkaline, acid and emulsion based metal cleaning fluids typically used in electroplatingin EPA Letter Dated: phosphatizing, galvanizing and general metal cleaning operations.

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For addition to a metal cleaning concentration, add Acticide LG-F microbiocide at a levalute he Federal Insecticide, ensure that the final use-dilution fluid will contain 560 to 2250 ppm product (about 6 to 25 ppm ie, and Rodenticide Act active isothiazolones). amended, for the pesticide, registered under EPA Reg. No.

For direct addition to a fouled system, add 72 to 290 fluid ounces (6 to 23 lb) of Acticide LG-F microbiocide 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 dispensed into the use-dilution metal cleaning fluid using a metering pump and uniformly dispersed throughout the system.

### PRESERVATIVE FOR BUILDING MATERIALS

Acticide LG-F 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 0.5 to 1.65 lb of Acticide LG-F microbiocide to each 1000 lb of fluid to provide 7 ppm to 25 ppm active isothiazolones.

#### PRESERVATIVE FOR LATICES

Acticide LG-F 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 0.5 to 3.3 lb. (227 g to 1.5 kg) of Acticide LG-F microbiocide to each 1000 lb. (454 kg) of emulsion to provide 7 ppm to 50 ppm active isothiazolones.

Note: To insure uniform mixing, add Acticide LG-F microbiocide 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 LG-F microbiocide 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 LG-F microbiocide 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 photoplating solutions or coatings, <> preservative in fount (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 LG-F 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 LG-F 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 LG-F 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 650 to 2245 ppm Acticide LG-F microbiocide (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 LG-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 LG-F 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 321 to 2245 ppm product (5 - 35 ppm active ingredient).

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

PHOTOPLATE PROCESSING, FOUNTAIN SOLUTIONS, AND INK/INK COMPONENTS: Acticide LG-F microbiocide is recommended for the control of bacteria and fungì in photoplate processing such as stabilizer solutions and in fountain solutions. Acticide LG-F microbiocide is recommended for water-based printing inks such as flexographic, gravure, screen and ink jet types. Acticide LG-F microbiocide is recommended for the control of bacteria and fungì in printing ink components such as resins, plasticizers, water soluble dyes, pigments, gelling agents, waves, surfactants, and thickeners. Acticide LG-F 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 neutral fountain solutions is 0.5% to 0.8%. A level adjustment may be necessary to accommodate the slight change in solution formulations.

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

#### GENERAL ADVISORY STATEMENT

ACTICIDE LG-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.

Acticide LG-F microbiocide weighs 8.4 lb. per gallon.

ACCEPTED with COMMENTS in EPA Letter Dated:

NOV 0 4 1999

Under the Federal Insecticide. Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 2707/-1