

PM33  
 707-259  
 1/21/98  
 1874

ALB KG  
 vLB KG  
 gLB KG

# KLARIX™ 4000

Industrial Microbicide for use in Recirculating Water Cooling Towers, Air Washer Systems, Pulp Mills, Papermill Slime Control, Recirculating Closed Loop Water Cooling Systems, Decorative Fountains, Can Warmer and Brewery Pasteurizers, and Dispersed Pigments.



Lot Number ( )

ACTIVE INGREDIENT:	
4,5-Dichloro-2-n-octyl-3(2H)-isothiazolone	4.25%
INERT INGREDIENTS:	
	95.75%
TOTAL:	100.00%

**KEEP OUT OF REACH OF CHILDREN  
 DANGER**

### STATEMENT OF PRACTICAL TREATMENT

**IF IN EYES:** Hold eyelids open and flush with steady, gentle stream of water for 15 minutes. Get medical attention.  
**IF ON SKIN:** Wash with plenty of soap and water. Get attention if symptoms persist.  
**IF INHALED:** Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.  
**IF SWALLOWED:** Call a physician or Poison Control Center. Do not induce vomiting. Drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Avoid alcohol.  
**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.  
**SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.**

**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 under normal conditions of use. 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 label directions will be assumed by the Buyer or User. IN NO CASE WILL ROHM AND HAAS OR SELLER BE HELD LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE HANDLING, STORAGE OR USE OF THIS PRODUCT.

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER**  
**CORROSIVE**  
**CAUSES IRREVERSIBLE EYE DAMAGE**  
**HARMFUL IF ABSORBED THROUGH THE SKIN**  
**AVOID CONTACT WITH SKIN OR CLOTHING**  
**HARMFUL IF INHALED**  
**MAY CAUSE ALLERGIC SKIN REACTION**

This product is a dermal sensitizer. Do not get in eyes, on skin, or on clothing. Wear goggles and face shield, protective clothing and rubber gloves. Avoid breathing vapor or spray mist. Keep container closed. Use with adequate ventilation. Do not take internally. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to 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 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.

\*note: Accepted Stamp of 1/21/98 appears on Page four.

Product  
Code  
(91)



Container:  
Code Number Label Number  
«SN1» KLARXEPA

**STORAGE AND DISPOSAL  
PROHIBITIONS**

This product is corrosive to mild steel. Do not store or transport in unlined metal containers. Do not contaminate water, food or feed by storage, disposal or cleaning of equipment. Keep product from freezing.

**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 CONTAINERS**

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 CONTAINERS**

Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by incineration, 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.**

Date of Manufacture: location for date  
EPA Reg. No. 707-259  
EPA Est. No. establishment number

2094

**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 TOWERS**

For the control of bacteria, algae and fungi add Klarix 4000 microbicide to the tower basin, distribution box, or some other point to insure uniform mixing. Treatment may be made by slug dosing or continuous dosing to achieve the desired level of biocide.

For noticeably fouled systems, apply 47 - 141 ppm Klarix 4000 microbicide (2 - 6 ppm active ingredient) (0.39 - 1.2 pound or 5.9 - 18 fluid ounce) per 1000 gallon of water. Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

When microbial control is evident, add 5.9 - 47 ppm Klarix 4000 microbicide (0.25 - 2 ppm active ingredient) (0.05 - 0.39 pound or 0.74 - 5.9 fluid ounce) per 1000 gallon of water. Dose weekly or as needed to maintain control.

**INDUSTRIAL RECIRCULATING CLOSED LOOP WATER COOLING SYSTEMS**

For the control of bacteria, algae and fungi add Klarix 4000 microbicide to the reservoir, recirculating line, or some other point in the system to insure uniform mixing

For noticeably fouled systems, apply 47 - 141 ppm Klarix 4000 microbicide (2 - 6 ppm active ingredient) (0.39 - 1.2 pound or 5.9 - 18 fluid ounce) per 1000 gallon of water. Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

When microbial control is evident, add 24 - 47 ppm Klarix 4000 microbicide (1 - 2 ppm active ingredient) (0.20 - 0.39 pound or 2.95 - 5.9 fluid ounce) per 1000 gallon of water. Dose weekly or as needed to maintain control.

**AIR WASHER SYSTEMS**

Add Klarix 4000 microbicide to the air washer sump or chill water sump to insure uniform mixing for control of fungi, bacteria and algae.

For noticeably fouled systems, apply 47 - 141 ppm Klarix 4000 microbicide (2 - 6 ppm active ingredient) (0.39 - 1.2 pound or 5.9 - 18 fluid ounce) per 1000 gallon of water. Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

When microbial control is evident, add 12 - 47 ppm Klarix 4000 microbicide (0.50 - 2 ppm active ingredient) (0.10 - 0.39 pound or 1.58 - 5.9 fluid ounce) per 1000 gallon of water. Dose weekly or as needed to maintain control.

**NOTE:** For use only in industrial air washing systems that maintain effective mist-eliminating components.

**DISPERSED PIGMENTS PRESERVATION**

Klarix 4000 microbicide is recommended for the control of 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, and magnesium silicate used in paint and paper production. Add 0.24 - 1.2 pound (3.6 - 18 fluid ounce) of Klarix 4000 microbicide per 1000 pound of fluid to provide 235 - 1176 ppm product (10-50 ppm active ingredient).

This product is not cleared by FDA or EPA for use in the manufacture of paper and paper board products, including dispersed pigments, pulp slurries, paper coatings, paper and paper board, that may come in contact with food.

**PAPERMILLS**

To control fungal, bacterial and algal growth on paper and paperboard machines, add Klarix 4000 microbicide at 0.1 - 0.5 pound (1.5 - 12 fluid ounce) per ton of dry paper or paperboard produced at a location to insure uniform mixing (including beaters, wire pit, saveall tanks, headbox or machine chest). Treatment may be by slug or continuous dosing to achieve 12 - 94 ppm Klarix 4000 microbicide (0.5 - 4 ppm active ingredient) in the wet end portion of the system. Dosing frequency will depend on mill conditions and the level of microbial fouling.

For preparation of mold-resistant non-food contact paper or paperboard, Klarix 4000 microbicide may be dosed to achieve 588 - 2,353 ppm product (25 - 100 ppm active ingredient) on the final paper (dry basis). For uncoated paper or board, Klarix 4000 microbicide may be added to the surface sizing solution, water or other solvents and applied to the surface of the paper by means of applicator roll. It may also be added directly to the pulp slurry at the machine chest or headbox. For coated paper or paperboard, Klarix 4000 microbicide is incorporated into the coating mix prior to application of the coating to the paper.

For the preservation of agricultural mulch paper, Klarix 4000 microbicide should be added at 1.2 - 4.8 pound (18 - 72 fluid ounce) per ton of dry paper. It is applied to the surface of the mulch paper by spray or applicator roll before the paper is coated.

This product is not cleared by FDA or EPA for use in the manufacture of paper and paper board products, including dispersed pigments, pulp slurries, paper coatings, paper and paper board, that may come in contact with food.

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#### PULP MILLS

To prevent fungal degradation of wood chips during storage, add Klarix 4000 microbicide at 0.6 - 3.5 pound (9 - 53 fluid ounce) per ton of oven-dry wood. It may be applied by water shower or drip feeder during transport of the chips on a conveyor belt to the storage pile.

For preservation of wet-lap or sheet pulp, Klarix 4000 microbicide should be added at 1.2 - 4.8 pound (18 - 72 fluid ounce) per ton of oven-dry fiber. It may be applied directly to the surface of the dewatered sheet by spray, water shower or application rollers or it may be dosed in the pulp slurry prior to dewatering of the sheet.

This product is not cleared by FDA or EPA for use in the manufacture of paper and paper board products, including dispersed pigments, pulp slurries, paper coatings, paper and paper board, that may come in contact with food.

#### DECORATIVE FOUNTAINS

For the control of algae, fungi and bacteria, add Klarix 4000 microbicide to the basin, recirculation line or some other point in the system to insure uniform mixing. Treatment may be by slug dosing or continuous dosing to achieve the desired level of biocide.

For noticeably fouled systems, apply 47 - 141 ppm Klarix 4000 microbicide (2 - 6 ppm active ingredient) (0.39 - 1.2 pound or 5.9 - 18 fluid ounce) per 1000 gallon of water. Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

When microbial control is evident, add 5.9 - 47 ppm Klarix 4000 microbicide (0.25 - 2 ppm active ingredient) (0.05 - 0.39 pound or 0.74 - 5.9 fluid ounce) per 1000 gallon of water. Dose weekly or as needed to maintain control.

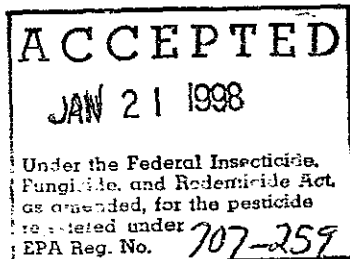
#### CAN WARMERS AND BREWERY PASTEURIZERS

For the control of bacteria, algae and fungi in brewery pasteurizer and can warmer systems, add Klarix 4000 microbicide at a point in the system to insure uniform mixing.

For noticeably fouled systems, apply 47 - 141 ppm Klarix 4000 microbicide (2 - 6 ppm active ingredient) (0.39 - 1.2 pound or 5.9 - 18 fluid ounce) per 1000 gallon of water. Repeat until control is achieved. Badly fouled systems should be cleaned before treatment is begun.

When microbial control is evident, add 5.9 - 47 ppm Klarix 4000 microbicide (0.25 - 2 ppm active ingredient) (0.05 - 0.39 pound or 0.74 - 5.9 fluid ounce) per 1000 gallon of water. Dose weekly or as needed to maintain control.

Klarix™ 4000 microbicide weighs 8.5 pound per gallon.



4/2/98