

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**DANGER**  
**KEEP OUT OF REACH OF CHILDREN**

Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if inhaled. Harmful if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Causes asthmatic signs and symptoms in hyper-reactive individuals.  
Do not get in eyes, on skin, on clothing.  
Avoid breathing vapor. Do not swallow.  
Wear goggles, protective clothing, and rubber gloves.  
Wash thoroughly with soap and water after handling.  
Remove contaminated clothing and wash before reuse.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. 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.

**STORAGE AND HANDLING**

PIROR® 850 SLMicide and Water Treatment Microbiocide solutions are incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. These solutions can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about -6°F (-21°C). Therefore, unless the storage tank is inside or underground, heating and insulation may be required. If heating is needed, exposure to high temperatures should be avoided. For short storage times (up to about 1 month), temperatures of up to 100°F (37°C) can be tolerated but the preferred maximum storage temperature is about 80°F (28°C).  
A stainless steel centrifugal pump is suggested for transfer service. Spiral wound stainless steel with TEFLON® is suitable for gaskets and packing.

**LIMITED WARRANTY AND DISCLAIMER**

The manufacturer warrants (a) that this product conforms to the chemical description on the label, (b) that this product is reasonably fit for the purposes set forth in the directions for use when it is used in accordance with such directions, and (c) that the directions, warnings and other statements on this label are based upon responsible experts' evaluation of reasonable tests of effectiveness and of toxicity to laboratory animals. Tests have not been made on all varieties or in all states or under all conditions. THE MANUFACTURER NEITHER MAKES NOR INTENDS, NOR DOES IT AUTHORIZE ANY AGENT OR REPRESENTATIVE TO MAKE, ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND IT EXPRESSLY EXCLUDES AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. This warranty does not extend to, and the Buyer shall be solely responsible for, any and all loss or damage which results from the use of this product in any manner which is inconsistent with the label directions, warnings or cautions.

BUYER'S EXCLUSIVE REMEDY AND MANUFACTURER'S OR SELLER'S EXCLUSIVE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES, DAMAGES, OR INJURIES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER OR NOT SUCH LIABILITY IS BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, SHALL BE LIMITED, AT THE MANUFACTURER'S OPTION, TO REPLACEMENT OF, OR THE REPAYMENT OF THE PURCHASE PRICE FOR, THE QUANTITY OF PRODUCT WITH RESPECT TO WHICH DAMAGES ARE CLAIMED. IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

**BEFORE HANDLING OR USING, READ AND UNDERSTAND CURRENT UNION CARBIDE MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT.**

**STORAGE AND DISPOSAL**

**PESTICIDE DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or residue is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or your Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.  
**CONTAINER DISPOSAL:** Metal Containers or Plastic Containers: Triple rinse (or equivalent). Then offer for recycling, reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures approved by state and local authorities.  
Plastic Containers: May be incinerated, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.  
Metal Containers: Must not be incinerated. Do not cut or weld on or near metal containers.

*This label is FOR INFORMATIONAL PURPOSES ONLY and shall not be distributed to anyone unless duly authorized by the Manager, Regulatory Affairs.*

**UNION CARBIDE PIROR® 850 SLMicide and WATER TREATMENT MICROBIOCIDE**  
A MICROBIOCIDE FOR USE IN CONTROLLING SLIME FORMING BACTERIA, SULFATE-REDUCING BACTERIA, FUNGI, YEAST AND ALGAE IN BEET SUGAR MILLS AND BEET SUGAR MILL PROCESS WATER SYSTEMS, PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS AND WATER BASED COATINGS FOR PAPER AND PAPERBOARD, AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS, SERVICE WATER AND AUXILIARY SYSTEMS, RECIRCULATING COOLING AND PROCESS WATER SYSTEMS INCLUDING THOSE THAT CONTAIN REVERSE OSMOSIS MEMBRANES AND WASTEWATER SYSTEMS INCLUDING WASTEWATER SLUDGE AND HOLDING TANKS.

Active Ingredient: Glutaraldehyde ..... 50.0%  
Inert Ingredients: ..... 50.0%  
100.0%

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER**

**STATEMENT OF PRACTICAL TREATMENT**

**IF IN EYES:** Immediately flush with plenty of water for at least 15 minutes. Get immediate medical attention.  
**IF ON SKIN:** Immediately wash with plenty of soap and water. Get medical attention.  
**IF INHALED:** Remove to fresh air. If breathing is difficult, administer oxygen. If symptoms persist, call a physician.  
**IF SWALLOWED:** DO NOT INDUCE VOMITING. Do not give anything to drink. Seek medical advice with urgency.  
**NOTE TO PHYSICIAN:** Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage.

SEE SIDE PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS.

**UNION CARBIDE CORPORATION**

39 Old Ridgebury Road • Danbury, CT 06817-0001  
EPA Reg. No. 10352-37  
PIROR is a registered trademark of Union Carbide  
Net Contents 5 or 55 gallons

EPA Est. No. 10352-WV-2  
UCC-L72117 (D 9/95)  
Made in USA  
PE0995

72117 PRODUCT CODE	CONTAINER SIZE	CONTAINER SIZE	SHIPPING NAME	CORROSIVE LIQUID, ACIDIC, ORGANIC, N O S (GLUTARALDEHYDE SOLUTION)	
	5 GALLONS	55 GALLONS		HAZARD CLASS	ID NUMBER UN 3265
	46 POUNDS NET WEIGHT	500 POUNDS NET WEIGHT			

**EMERGENCY CONTACT (24 HOURS PER DAY): IN USA 1-800-UCC-HELP (1-800-822-4357) OUTSIDE USA 01-304-744-3487**

**DIRECTIONS FOR USE**

**GENERAL CLASSIFICATION**

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

**PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS**

PIROR® 850 SLMicide and Water Treatment Microbiocide should be added to the paper making system at a point of uniform mixing such as the beaters, broke chest pump, save-all tank, or white-water tank.  
**Initial Dose:** When the system is noticeably contaminated, add 0.5 to 3.0 lbs of PIROR® 850 SLMicide and Water Treatment Microbiocide per ton of pulp or paper (dry basis) as a slug dose. Repeat until control is achieved. Heavily fouled systems should be boiled out prior to initial treatment.  
**Subsequent Dose:** When microbial control is evident, add 0.3 to 2.0 lbs of PIROR® 850 SLMicide and Water Treatment Microbiocide per ton of pulp or paper (dry basis) as a slug dose as necessary to maintain control.

**PIGMENTS AND FILLER SLURRIES FOR PAPER AND PAPERBOARD**

Add sufficient quantities of PIROR® 850 SLMicide and Water Treatment Microbiocide to produce a concentration of 100 to 600 ppm based on slurry solids.

**WATER BASED COATINGS**

NOTE: For use in non-food contact coatings only.

Add sufficient quantities of PIROR® 850 SLMicide to produce a concentration of 100 to 600 ppm based on slurry solids.

**BEET SUGAR MILLS AND BEET SUGAR MILL PROCESS WATER SYSTEMS**

PIROR® 850 SLMicide and Water Treatment Microbiocide should be added to the system at a point of uniform mixing such as the diffuser, transport water pump, weir box, or diffuser feed water pump. Additions may be made intermittently (SLUG DOSE) or continuously.

**INTERMITTENT (SLUG DOSE) METHOD**

**Initial Dose:** When the system is noticeably contaminated, add 5.5 to 13.6 fluid ounces (200 to 500 ppm product) of PIROR® 850 SLMicide and Water Treatment Microbiocide per metric ton or 200 to 500 mL of PIROR® 850 SLMicide and Water Treatment Microbiocide per metric ton of sliced beets as a slug dose. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 0.8 to 8.2 fluid ounces (30 to 300 ppm) of PIROR® 850 SLMicide and Water Treatment Microbiocide per ton or 30 to 300 mL of PIROR® 850 SLMicide and Water Treatment Microbiocide per metric ton of sliced beets in the system as a slug dose as necessary to maintain control. The total should not exceed 106 gallons per 1000 tons of beets sliced per day.

**CONTINUOUS FEED METHOD**

**Initial Dose:** When the system is noticeably contaminated, add 5.5 to 13.6 fluid ounces/minute (200 to 500 ppm product) of PIROR® 850 SLMicide and Water Treatment Microbiocide per ton or 200 to 500 mL/minute of PIROR® 850 SLMicide and Water Treatment Microbiocide per metric ton of beets sliced per minute in the system via automatic pump of suitable construction.

**Subsequent Dose:** When microbial control is evident, add 0.8 to 8.2 fluid ounces/minute (30 to 300 ppm) of PIROR® 850 SLMicide and Water Treatment Microbiocide per ton or 30 to 300 mL/minute of PIROR® 850 SLMicide and Water Treatment Microbiocide per metric ton of beets sliced per minute in the system, or as necessary to maintain control. The total should not exceed 106 gallons per 1000 tons of beets sliced per day.

**AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS/ RECIRCULATING COOLING AND PROCESS WATER SYSTEMS**

This product may be used only in industrial air washers and air washer systems which have mist-eliminating components.

PIROR® 850 SLMicide and Water Treatment Microbiocide should be added at the application rates described below, to a water treatment system at a convenient point of uniform mixing such as the basin area. Addition may be made intermittently (SLUG DOSE) or continuously. Badly fouled systems can be shock treated with PIROR® 850 SLMicide and Water Treatment Microbiocide. Under these conditions, blowdown should be discontinued for up to 24 hours.

PIROR® 850 SLMicide and Water Treatment Microbiocide can be used in industrial process water systems that contain ultra filtration units and non-medical reverse osmosis membranes (where approved for compatibility by the membrane manufacturer) and associated distribution systems.

**INTERMITTENT (SLUG DOSE) METHOD**

**Initial Dose:** When the system is noticeably fouled, apply 11.5 to 23.0 fluid ounces (100 to 200 ppm product) of PIROR® 850 SLMicide and Water Treatment Microbiocide per 1000 gallons of water in the system or 100 to 200 mL of PIROR® 850 SLMicide and Water Treatment Microbiocide per 1000 liters of water in the system. Repeat until control is achieved.

**Subsequent Dose:** When microbial control is evident, add 4.6 to 11.5 fluid ounces (40 to 100 ppm) of PIROR® 850 SLMicide and Water Treatment Microbiocide per 1000 gallons of water in the system weekly or 40 to 100 mL of PIROR® 850 SLMicide and Water Treatment Microbiocide per 1000 liters of water in the system weekly, or as needed to maintain control.

Badly fouled systems must be cleaned before treatment is begun.

CONTINUED ON PAGE TWO

10352-37

DMJ

NOV 11 10352-37

### CONTINUOUS FEED METHOD

**Initial Dose:** When the system is noticeably fouled, apply 11.5 to 23.0 fluid ounces (100 to 200 ppm product) of PIROR® 850 Slicicide and Water Treatment Microbiocide per 1000 gallons of water in the system or 100 to 200 mL of PIROR® Slicicide and Water Treatment Microbiocide per 1000 liters of water in the system.

**Subsequent Dose:** Maintain this treatment level by starting a continuous feed of 2.3 to 11.5 fluid ounces (20 to 100 ppm) of PIROR® 850 Slicicide and Water Treatment Microbiocide per 1000 gallons of water in the system per day or 20 to 100 mL of PIROR® 850 Slicicide and Water Treatment Microbiocide per 1000 liters of water in the system per day.

Badly fouled systems must be cleaned before treatment is begun.

### SERVICE WATER AND AUXILIARY SYSTEMS

PIROR® 850 Slicicide and Water Treatment Microbiocide should be used in the same application rates, and in the same manner as described above. It should be added to the system at a point that will allow for uniform mixing throughout the system.

### HEAT TRANSFER SYSTEMS

(Evaporative Condensers, Dairy Sweetwater Systems, Hydrostatic Sterilizers and Retorts and Pasteurizers and Warmers and Once-Through Cooling Water Systems)

PIROR® 850 Slicicide and Water Treatment Microbiocide should be used at the same application rates, and in the same manner as described above. It should be added to the system at a point of uniform mixing such as a basin area, sump area, or other reservoir or collecting area from which the treated water will be circulated uniformly throughout the system.

### INDUSTRIAL WASTEWATER SYSTEMS

(Wastewater Systems, Wastewater Sludge and Wastewater Holding Tanks)

PIROR® 850 Slicicide and Water Treatment Microbiocide should be added to a wastewater system or sludge at a convenient point of uniform mixing such as the digester. Add 0.5 to 2.3 gallons (450 to 2250 ppm) of PIROR® 850 Slicicide and Water Treatment Microbiocide per 1000 gallons of wastewater or sludge or 450 mL to 2250 mL of PIROR® 850 Slicicide and Water Treatment Microbiocide per 1000 liters of wastewater or sludge.

NOV 11 1981  
10352-27