

MATERIAL SAFETY DATA SHEET

This information must be made available to all personnel using this product.

WESTERN WATER MANAGEMENT, INC.
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North Kansas City,
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Phone No. (weekdays)
816-842-0560
CHEMTREC (Emergency Phone)
1-800-424-9300 (24 hr.)

PRODUCT NAME Microbicide YR HAZARD CLASSIFICATION
PRODUCT TYPE Cooling Water Microbiocide CORROSIVE; SENSITIZER
EPA Registration # 707-133-7547

NFPA HAZARD RANKING 3-Health/ 0-Fire/ 0-Reactivity/ COR-Special

SECTION 1 HAZARDOUS INGREDIENTS

Ingredient		TLV
5-chloro-2-methyl-4-isothiazolin-3-one	(1.1-1.5%)	ACGIH & OSHA: None Established
CAS# 26172-55-4		Manufacturer's: TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³
2-methyl-4-isothiazolin-3-one	(0.4-0.5%)	ACGIH & OSHA: None Established
CAS# 2682-20-4		Manufacturer's: TWA: 0.1 mg/m ³ STEL: 0.3 mg/m ³
magnesium chloride	CAS# 7786-30-3 (1.0-1.2%)	ACGIH & OSHA: none established
magnesium nitrate	CAS# 10377-60-3 (1.6-1.8%)	ACGIH & OSHA: none established
cupric nitrate	CAS# 10031-43-3 (0.15-0.17%)	ACGIH & OSHA: none established

This product does not contain 1% or greater of hazardous ingredients listed in Subpart D of SARA Title III, Section 313, nor does it contain 0.1% or greater of any ingredients listed as carcinogens by NTP, IARC, or OSHA.

SECTION 2 PHYSICAL DATA

Appearance and Odor	pale yellow to green liquid with mild aromatic odor		
Specific Gravity	1.02	Boiling Point (F.)	212
Percent Volatile	95-96	Vapor Pressure (mm Hg)	17 (est.)
Evaporation Rate	<1	Vapor Density (air=1)	0.62 (est.)
pH	3-5	Solubility in Water	complete

SECTION 3 HEALTH HAZARD INFORMATION

Effects of Overexposure EYES: Corrosive to eyes; causes corneal injury and irreversible eye damage. SKIN: Corrosive to the skin; causes skin burns, these effects may be delayed for hours. Can cause allergic contact dermatitis. A skin sensitizer. Harmful if absorbed through skin; may be fatal from large exposures. Dermal LD50 for rabbits: greater than 5 g/kg. INHALATION: Harmful if inhaled. INGESTION: May be fatal if swallowed. Oral LD50 for rats: 3.81 g/kg.

SECTION THREE HEALTH HAZARD INFORMATION CONTINUED ON NEXT PAGE-

Emergency and First Aid Procedures **EYES:** Immediately flush with plenty of water continuously for at least 15 minutes. Hold eyelids open to ensure flushing of the entire eye surface. Rinsing eyes within one minute and not less than 15 minutes is essential to achieve maximum effectiveness. Get emergency medical treatment. Continue flushing with water if medical attention is not immediately available.

SKIN: Flush contaminated areas with water for at least 15 minutes. Wash with soap and water following rinsing. Remove contaminated clothing and footwear. Get emergency medical treatment. Continue flushing with water if medical attention is not immediately available.

INHALATION: Remove patient to fresh air. Observe for possible delayed reaction. If breathing has stopped, give artificial respiration. If breathing with difficulty, give oxygen, provided a qualified operator is available. Get emergency medical attention.

INGESTION: Have conscious patient rinse mouth with water. Do not swallow rinse water. Then drink a large glass of water for dilution. Contact the nearest poison control center for guidance. Do not force fluids or induce vomiting in an unconscious victim. Get emergency medical attention.

NOTE TO PHYSICIAN: Mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsions may be needed.

SECTION 4 FIRE & EXPLOSION HAZARDS

Flash Point none **Flammable Limits** not flammable

Extinguishing Media whatever is appropriate for surrounding fire

Special Fire Fighting Procedures Use water spray to cool fire-exposed containers. Firefighters should always wear protective clothing and positive pressure self-contained breathing apparatus when fighting fires near chemicals.

Unusual Fire & Explosion Hazards Thermal decomposition (as may be experienced in a fire) may produce hazardous sulfur dioxide and hydrogen chloride.

SECTION 5 REACTIVITY

Stability stable

Conditions to Avoid none known

Incompatibility (Materials to Avoid) none known

Hazardous Decomposition Products Thermal decomposition (as may be experienced in a fire) may produce sulfur dioxide and hydrogen chloride.

Hazardous Polymerization will not occur

SECTION 6 SPECIAL PROTECTION

Respiratory Protection NIOSH approved respirator suitable for concentrations encountered where exposure limits are exceeded. Consult respirator manufacturer for appropriate type.

Ventilation local mechanical exhaust at point of contaminant

Eye Protection chemical splash goggles

Protective Gloves butyl rubber or nitrile

Other Protective Equipment emergency eye wash station, safety shower, long-sleeved shirt, long pants, rubber boots and rubber apron

SECTION 7 SPILL OR LEAK CLEANUP AND DISPOSAL INFORMATION

Steps to be Taken in Case Material is Released or Spilled Keep unauthorized persons out of spill area. Authorized personnel must wear full protective clothing.

SECTION SEVEN SPILL OR LEAK CLEANUP AND DISPOSAL INFORMATION CONTINUED ON NEXT PAGE-

Stop spill at source if without risk. Contain spilled liquid with inert absorbent material (dry earth or sand). Shovel all contaminated solids - diking material, absorbent and soil - into corrosion-proof drums. Seal drums tightly. Flush spill area with water spray and notify pollution control authorities. Keep this material out of sewers and public waters except for locally approved discharges to sanitary systems and NPDES permitted discharges.

Reportable Quantity 100 lbs (generic RQ for unlisted corrosive waste)
Waste Disposal Method Recovered spill material or unused product which cannot be recycled or used is an EPA regulated hazardous waste by characteristic of corrosivity, as defined in 40 CFR 261. Consult proper Federal or state agencies for approved disposal procedures.

SECTION 8 SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing CORROSIVE material, handle with care. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or mists. Use with adequate ventilation and use protective equipment (see Section 6). Wash thoroughly after handling. A water source and shower should be installed in storage and work areas. Wash contaminated clothing before reuse. Discard contaminated leather shoes or other contaminated leather articles. Do not mix with any other concentrated chemicals. Store in a cool, well-ventilated area. Keep drum tightly closed when not in use. Protect container from physical damage. Changes in temperature create air pressure inside drums. Use proper caution in unscrewing plug and inserting faucet. Unscrew plug slowly, allowing air to escape before completely removing plug. Do not use pressure to empty container. Empty containers may contain hazardous residue and vapors and should be handled with care as if they were full. Do not reuse empty container. Do not wear contact lenses when working with chemicals. Always practice good housekeeping when handling and storing any chemicals.