



SAFETY DATA SHEET

Product: MARC 220 COOLING TOWER MICROBICIDE

Form R04132

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER AND NAME: MARC 220 COOLING TOWER MICROBICIDE

SDS DATE: 05/03/16

SUPPLIER: Mid-American Research Chemical Corp.

ADDRESS: P. O. Box 927 Columbus, NE 68602-0927

PHONE: 402-564-7104 FAX: 402-563-1290

EMERGENCY PHONE: InfoTrac 1-800-535-5053

E-MAIL: marc@marc1.com WEBSITE: www.marc1.com

RECOMMENDED USE: Prevents and controls microbiological growth in cooling systems.

PREPARED BY: MARC

SECTION 2: HAZARDS IDENTIFICATION

CLASSIFICATION: Not classified.

OTHER HAZARDS: No additional information available.

UNKNOWN ACUTE TOXICITY: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Specific percentages may be claimed as a trade secret.

| NAME | PRODUCT IDENTIFIER | Wt. % | CLASSIFICATION(GHS-US) |
|--|----------------------|------------|---|
| Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethyl-enedichloride] | (CAS NO.) 31512-74-0 | 7.0 – 13.0 | Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation, dust, mist), H332 Eye Irrit. 2B, H320 |

SECTION 4: FIRST AID MEASURES

FIRST AID MEASURES: If you feel unwell, seek medical advice (show the label where possible).

EYES: Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

SKIN: Rinse skin with water/shower.

INGESTION: Rinse mouth with water. **Do NOT induce vomiting!**

INHALATION: If inhaled remove person to fresh air.

MOST IMPORTANT SYMPTOMS AND EFFECTS,

BOTH ACUTE AND DELAYED:

SYMPTOMS INJURIES:

Not expected to present a significant hazard under anticipated conditions of normal use.

SYMPTOMS AFTER EYE CONTACT:

Direct contact with eyes is likely irritating.

SYMPTOMS AFTER SKIN CONTACT:

Contact during a long period may cause light irritation.

SYMPTOMS AFTER INGESTION:

Gastrointestinal complaints.

SYMPTOMS AFTER INHALATION:

None under normal use.

INDICATION OF ANY IMMEDIATE MEDICAL

ATTENTION AND SPECIAL TREATMENT NEEDED: No additional information available.



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SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: No additional information available.

**SPECIAL FIRE FIGHTING PROCEDURES/
PROTECTION:**

Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.

Do not enter fire area without proper protective equipment, including respiratory protection.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Upon combustion: CO and CO₂ are formed.

SECTION 6: ACCIDENTAL RELEASE MEASURES

GENERAL MEASURES: Isolate from fire, if possible, without unnecessary risk.

NON-EMERGENCY PERSONNEL:

PROTECTIVE EQUIPMENT: Protective goggles. Gloves. Protective clothing.

EMERGENCY PROCEDURES: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing.

EMERGENCY PERSONNEL:

PROTECTIVE EQUIPMENT: Equip cleanup crew with proper protection.

EMERGENCY PROCEDURES: Stop leak if safe to do so. Stop release. Ventilate area.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. Prevent entry to sewers and public waters.

METHODS AND MATERIAL FOR CONTAINMENT

AND CLEANING UP: Contain released substance, pump into suitable containers. This material and its container must be disposed of in a safe way, and as per local legislation.

REFERENCE TO OTHER SECTIONS: No additional information available.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE

HANDLING: Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse.

OTHER PRECAUTIONS: **KEEP OUT OF REACH OF CHILDREN!! DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD.**

STORAGE: Keep container tightly closed when not in use. Store in a cool area in a well-ventilated place. Meet the legal requirements and comply with applicable regulations.

INCOMPATIBLE PRODUCTS: Oxidizing agent.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS: Personal protective equipment. Use appropriate personal protective equipment when risk assessment indicates this is necessary.

**ENGINEERING CONTROLS/
VENTILATION:** None under normal use.

RESPIRATORY PROTECTION: None under normal use.



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EYE PROTECTION: Protective goggles.

SKIN PROTECTION/PROTECTIVE GLOVES: Gloves.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Protective clothing.

WORK HYGIENIC PRACTICES: Always practice good housekeeping and hygienic measures. Wash thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE-
PHYSICAL STATE:** Liquid
COLOR: Clear, light yellow.
ODOR: Mild odor.
ODOR THRESHOLD: No data available.
pH: 5 - 7
MELTING/FREEZING POINT: No data available.
BOILING POINT: No data available.
FLASH POINT/METHOD USED: >200°F Closed Cup
RELATIVE EVAPORATION RATE: No data available.
FLAMMABILITY (solid, gas): No data available.
EXPLOSIVE LIMITS: No data available.
EXPLOSIVE PROPERTIES: No data available.
OXIDIZING PROPERTIES: No data available.
VAPOR PRESSURE (mmHg): No data available.
RELATIVE DENSITY (AIR = 1): No data available.
RELATIVE VAPOR DENSITY: No data available.
SPECIFIC GRAVITY (H₂O = 1): 1.02 g/ml
SOLUBILITY IN WATER: Soluble in water.
KOG POW: No data available.
LOG KOW: No data available.
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available.
VISCOSITY: No data available.
VISCOSITY, KINEMATIC: No data available.
VISCOSITY, DYNAMIC: No data available.
VOC CONTENT: 0%

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: Upon combustion: CO and CO₂ are formed.

CHEMICAL STABILITY: No additional information available.

CONDITIONS TO AVOID: No additional information available.

INCOMPATIBILITY (MATERIAL TO AVOID): No additional information available.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

HAZARDOUS POLYMERIZATION: No

CONDITIONS TO AVOID (POLYMERIZATION): NA



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SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Not classified.

| | |
|--|-----------------|
| Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylenedichloride] (31512-74-0) | |
| LD50 oral rat | 1951 mg/kg Male |
| LD50 dermal rabbit | >2000 mg/kg |

SERIOUS EYE DAMAGE/IRRITATION: Not classified.
pH: 5 - 7

SKIN CORROSION/IRRITATION: Not classified.
pH: 5 - 7

RESPIRATORY OR SKIN SENSITIZATION: Not classified.

GERM CELL MUTAGENICITY: Not classified.

CARCINOGENICITY: Not classified.

REPRODUCTIVE TOXICITY: Not classified.

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Not classified.

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): Not classified.

ASPIRATION HAZARD: Not classified.

SYMPTOMS AFTER EYE CONTACT: Direct contact with eyes is likely irritating.

SYMPTOMS AFTER SKIN CONTACT: Contact during a long period may cause light irritation.

SYMPTOMS AFTER INGESTION: Gastrointestinal complaints.

SYMPTOMS AFTER INHALATION: None under normal use.

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY: No additional information available.

PERSISTENCE & DEGRADABILITY: No additional information available.

BIOACCUMULATIVE POTENTIAL: No additional information available.



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SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose in a safe manner in accordance with applicable federal, state and local laws and regulations.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (for ground/non-bulk containers)

CONTAINER SIZES(S): PAILS
PROPER SHIPPING NAME: DEODORANTS OR DISINFECTANTS, N.O.I.
HAZARD CLASS: NONE
ID NUMBER: NONE
PACKING GROUP: NONE
LABEL STATEMENT: NONE

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

311/312 HAZARD CATEGORIES: N/A

313 REPORTABLE INGREDIENTS: N/A

CALIFORNIA PROPOSITION 65 – This product contains, or may contain, trace quantities of a substance(s) known to the state of California to cause cancer and/or reproductive toxicity.

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION: Harmful if swallowed. Avoid breathing vapors. Do not get in eyes or on skin or clothing. Wash hands thoroughly with plenty of soap and water after use. Avoid contamination of food.



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SECTION 16: OTHER INFORMATION

TRAINING ADVICE: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

| | |
|---------------------------------------|--|
| Acute Tox. 4 (Inhalation, dust, mist) | Acute Toxicity (Inhalation, dust, mist) Category 4 |
| Acute Tox. 4 (Oral) | Acute Toxicity (oral) Category 4 |
| Eye Irrit. 2B | Serious eye damage/eye irritation Category 2B |
| H302 | Harmful if swallowed |
| H320 | Causes eye irritation |
| H332 | Harmful if inhaled |

HMIS/NFPA Ratings: Health = 1
Flammability = 0
Reactivity = 0
Other = -
Protection = -

REVISION DATE: 05/03/16

DISCLAIMER: The information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such venders or users assume all risks associated with the use of this material .