Date Prepared

Replaces

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: NARCO Nar-Cide Algaecide Product Number(s): P902-3501, 3001-1

U.S. EPA: Reg. No. 1448-62-40536, Est. No. 40536-TX-1

Product Use: Broad spectrum microbiocide for cooling water systems

Company Name: North American Research Corporation

P.O. Box 1318 Lewisville, TX 75067

Telephone Numbers: (972) 492-1800, (800) 527-7520, Fax (972) 394-6755

Emergencies: Infotrac (800) 535-5053 (24 hours, everyday)

SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

CAS
Registry No. OSHA PE

OSHA PEL ACGIH TLV

Other Limits

% (Optional)

Poly[oxyethylene(dimethylimino)ethyle ne(dimethylimino)ethylene dichloride]

31512-74-0 Not established Not Established

None

20

Nov. 19, 2004

Aug. 06, 2004

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

CAUTION: Harmful if swallowed. Avoid breathing vapors. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling.

POTENTIAL HEALTH EFFECTS

EYE CONTACT: May be irritating to eyes.

SKIN CONTACT: May be moderately irritating to the skin.

INHALATION: Not expected to be an inhalation hazard during normal use.

INGESTION: May be irritating to the mouth, throat, and stomach.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known other than existing skin disorders.

CARCINOGENICITY: NTP? No IARC Monographs? No OSHA Regulated? No

SECTION 4 FIRST-AID MEASURES

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able

to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give

anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

SECTION 5 FIRE-FIGHTING MEASURES

FLASHPOINT: >100°C (212°F) METHOD: Pensky-Martens Closed Cup FLAMMABLE LIMITS: LEL: Not applicable UEL: Not applicable

AUTOIGNITION TEMP: Not applicable

FIRE EXTINGUISHING MEDIA: Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fireexposed containers cool.

SPECIAL INFORMATION: None known.

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Put on appropriate personal protective equipment.

Leaking or damaged containers should be placed in overpack drums for disposal. Spills should be absorbed in sawdust or sand and disposed of in a sanitary landfill.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish and aquatic organisms. Do not contaminate water by cleaning of equipment or disposal of waste. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of the 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 into sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

SECTION 7 STORAGE AND HANDLING

Do not contaminate water, food, or feed by storage or disposal. PESTICIDE STORAGE: Do not stack more than 4 containers high. Leaking or damaged containers should be placed in overpack drums for disposal. Spills should be absorbed in sawdust or sand and disposed of in a sanitary landfill. Keep containers closed when not in use. HANDLING: For Industrial Use Only. Avoid skin and eye contact. Wash thoroughly after handling, before eating or drinking, and before using the restroom. KEEP OUT OF REACH OF CHILDREN. Store in closed, properly labeled, original containers. Do not remove or deface label.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS: No special ventilation requirements. General room ventilation is adequate.

PERSONAL PROTECTION:

EYES:Safety glasses with side shields. HANDS: Gloves; rubber, neoprene, or other impervious material.

RESPIRATORY:No special requirements. FEET: No special requirements. BODY:If major exposure is possible, wear suitable, impervious protective clothing.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear to pail straw liquid. Bland odor. SPECIFIC GRAVITY: 1.044

VAPOR PRESSURE: Not determined

SOLUBILITY IN WATER: Complete

VAPOR DENSITY: Not determined

pH: 6 (neat), 6-7@100 ppm in water

BOILING POINT: >100°C (212°F) FREEZING / MELTING POINT: Not Determined

EVAPORATION RATE (Butyl Acetate = 1): Not determined

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY (Materials to Avoid): None known. HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

SECTION 11 TOXICOLOGICAL INFORMATION

Oral $LD_{50} = 3700 \text{ mg/kg Rat}$ Dermal $LD_{50} = 2000 \text{ mg/kg Rabbit}$ Inhalation $LC_{50} = 26.4 \text{ mg/l}$ (4 hours) Rat

SECTION 12 ECOLOGICAL INFORMATION

No information available.

SECTION 13 DISPOSAL CONSIDERATIONS

Do not contaminate water, food, or feed by storage or disposal.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: PLASTIC: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. METAL: 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.

SECTION 14 TRANSPORT INFORMATION

U.S. Department of Transportation: Not regulated.

SECTION 15 REGULATORY INFORMATION

TSCA: All components may not be listed on the TSCA inventory. Registered pesticides are exempt from the requirements of TSCA. CERCLA: No reportable ingredients

SARA TITLE III:

Section 311/312 Hazard Category: Acute: Yes Chronic: No Fire: No Pressure: No Reactive Hazard: No

Section 313 Reportable Ingredients: None

SECTION 16 OTHER INFORMATION

NFPA RATING: Health – 1, Flammability – 1, Reactivity – 0

HMIS® RATING: Health - 1, Flammability - 1, Reactivity - 0

HMIS[®] ratings are to be used with a fully implemented HMIS[®] program. HMIS[®] is a registered mark of the National Paint and Coatings Association (NPCA).

NOTICE: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all federal, state, provincial, and local laws and regulations.