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Date-Issued: 09/08/1997 MSDS Ref. No: AGDX23060 Date-Revised: 05/04/2000

Revision No: 1

Guardex Algaecide 60

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Guardex Algaecide 60 GENERAL USE: Swimming pool algaecide.

CHEMICAL FAMILY: Polymer

MANUFACTURER Asepsis, Inc. 24 HR. EMERGENCY TELEPHONE NUMBERS

Guardex CHEMTREC (Transportation) (800) 424-9300 P.O. Box 537 Poison Control Center (Medical)(877) 800-5553

Avondale Estates, GA 30002

Customer SERVICE: (800) 959-7946

COMMENTS:

EPA Registration Number: 5185-339-10305

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name CAS# Wt.%

Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene

diablarida!

31075-24-8 60

dichloride]

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE:

Clear, pale yellow liquid with a mild odor.

IMMEDIATE CONCERNS:

CAUTION: Avoid contact with skin, eyes, or clothing. Harmful if swallowed. Wear goggles or safety glasses and rubber gloves when handling this product. Irritating to nose and throat. Avoid breathing vapors. Remove and wash contaminated clothing before reuse.

POTENTIAL HEALTH EFFECTS

EYES:

CAUTION: Causes eye irritation. Avoid contact with eyes.

SKIN:

Product is non-irritating to skin. Avoid contact with skin.

INGESTION:

Harmful if swallowed.

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INHALATION:

Irritating to nose and throat. Avoid breathing vapors.

CHRONIC:

There are no known chronic hazards.

ROUTES OF ENTRY:

Skin Contact, Inhalation, Ingestion, Eye Contact.

4. FIRST AID MEASURES

EYES:

If contact with eyes occurs: Immediately flush with cold water for at least 15 minutes. Then get immediate medical attention.

SKIN:

Wash off excess chemical with soap and water and flush skin with cold water for at least 15 minutes. If irritation persists, get medical attention.

INGESTION:

If swallowed: Drink large amounts of water. Do not induce vomiting. Avoid alcohol. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. Call a physician or poison control center immediately.

INHALATION:

If inhaled: Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If not breathing, give artificial respiration. Call a physician immediately.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: Not Applicable

GENERAL HAZARD:

There are no unusual fire and explosion hazards known.

EXTINGUISHING MEDIA:

Dry chemical, water foam or carbon dioxide. Water should be used to cool surrounding containers.

FIRE FIGHTING EQUIPMENT:

Firefighters should wear full protective clothing and self contained breathing apparatus (SCBA). Thoroughly decontaminate fire fighting equipment including all fire fighting wearing apparel after the incident.

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6. ACCIDENTAL RELEASE MEASURES

GENERAL PROCEDURES:

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Utilizing approporiate clothing and safety equipment, contain spill material. Cover the liquid with an inert absorbent. Using clean, dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean dry plastic containers for disposal. Dispose of according to local, state and federal regulations.

7. HANDLING AND STORAGE

GENERAL PROCEDURES:

Avoid contact with eyes, skin or clothing. Avoid breathing vapors.

HANDLING:

Mix only with water. Never add water to product. Always add product to large quantities of water. Do not mix with other chemicals. Use clean dry utensils. Do not add this product to any dispensing device containing remnants of any other product. Such use may cause a violent reaction leading to fire or explosion.

STORAGE:

Keep this product in original closed container when not in use. Store in a cool, dry, well ventilated area away from heat or open flame. Do not contaminate water, food or feed by storage or disposal or cleaning of equipment.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES:

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200)

| | | OSHA PEL | | RE LIMIT IH TLV mg/m ³ | S SUPPLI ppm | ER OEL mg/m ³ |
|--|-----|--------------------|-----|---|--------------------|-----------------------------|
| Poly[oxyethylene(dimethyliminio)e- thylene(dimethyliminio)ethylene dichloride] | TWA | N/E ^[1] | N/E | | | |
| OSHA TABLE COMMENTS: | | | | | | |

1. N/E = Not Established

ENGINEERING CONTROLS:

General room ventilation plus local exhaust should be used to minimize exposure to vapors.

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PERSONAL PROTECTIVE EQUIPMENT:

EYES AND FACE:

Wear goggles or safety glasses with side shields when handling this product.

SKIN:

Wear rubber gloves when handling this product. Avoid contact with skin.

RESPIRATORY:

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

WORK HYGIENIC PRACTICES:

Remove and wash contaminated clothing before reuse.

OTHER USE PRECAUTIONS:

Facilities storing or utilizing this material should be equipped with an eyewash and safety shower.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Mild

APPEARANCE: Clear COLOR: Pale yellow

pH: 6 to 7

VAPOR PRESSURE: Not Established VAPOR DENSITY: Not Established BOILING POINT: >100°C (212°F) FREEZING POINT: <0°C (32°F) SOLUBILITY IN WATER: Soluble SPECIFIC GRAVITY: 1.15 g/cm3

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:

High temperature. Poor ventilation. Contamination.

STABILITY:

This product is stable under normal conditions.

POLYMERIZATION:

Hazardous polymerization will not occur under normal conditions.

HAZARDOUS DECOMPOSITION PRODUCTS:

None known.

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INCOMPATIBLE MATERIALS:

Other swimming pool/spa chemicals in their concentrated forms. Anionic polymers.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD $_{50}$: >2000 mg/kg of body weight in rabbits. ORAL LD $_{50}$: Male: 1951 mg/kg, Female 2587 mg/kg

INHALATION LC₅₀: 2.9 mg/l

EYE EFFECTS:

Mildly irritating to eyes.

SKIN EFFECTS:

Non-irritating to skin.

SENSITIZATION:

This product is not a skin sensitizer.

CARCINOGENICITY:

This product is not listed as a carcinogen by IARC. This product is not listed as a carcinogen by NTP. This product is not listed as a carcinogen by OSHA.

MUTAGENICITY:

Mutagenicity studies were negative.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION:

This pesticide is toxic to fish and aquatic organisms. Do not disharge effluent containing this product into lakes, streams, ponds or estuaries, oceans, or ther 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.

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13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:

Pesticide wastes are toxic. 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. Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor. Contact with incompatible materials could cause a reaction or fire.

EMPTY CONTAINER:

Do not reuse container. Rinse thoroughly before discarding in trash.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated.

OTHER SHIPPING INFORMATION: Bill of Lading Description - Disinfectants or Deodorants, NOI, in bulk, barrels, boxes, kits, pails or package (NMFC 57100, SUB 3).

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT) 313 REPORTABLE INGREDIENTS: This product or its components are not listed.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT) CERCLA REGULATORY: This product or its components are not listed.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: This product or its components are not subject to export notification.

TSCA STATUS: This product or its components are listed on the TSCA Inventory.

RCRA STATUS:

This product, as sold, would not be considered a RCRA Hazardous Waste.

OSHA HAZARD COMM. RULE:

Product is hazardous by definition of the Hazardous Communication Standard.

FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):

This product is a registered pesticide.

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FDA (FOOD AND DRUG ADMINISTRATION): Not listed.

16. OTHER INFORMATION

REVISION SUMMARY

Revision #: 1

This MSDS replaces the September 08, 1997 MSDS. Any changes in information are as follows:

NFPA CODES

HEALTH: 1 FIRE: 1 REACTIVITY: 1

HMIS CODES

HEALTH: 1 FIRE: 1 REACTIVITY: 1 PROTECTION: B

MANUFACTURER DISCLAIMER:

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