



# MATERIAL SAFETY DATA SHEET

MINX™ Ornamental Miticide/Insecticide

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Please read the entire document. This Material Safety Data Sheet contains important environmental, health and toxicology information for your employees, and anyone who will use, transport, store, dispose of or handle this product. Please make sure this information is given to them as required by Federal and State law. It also contains information to help meet community right to know/emergency response reporting requirements under SARA Title III and many other laws. If you resell this product, this MSDS must be given to the buyer or the information contained herein must be incorporated in your MSDS.

## SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** MINX™ Ornamental Miticide/Insecticide  
**EPA REGISTRATION NUMBER(S):** 1001-83  
**CHEMICAL NAME:** Avermectin B1a, Avermectin B1b  
**SYNONYM:** Abamectin  
**GENERAL USE:**

### COMPANY

Cleary Chemicals LLC  
178 Ridge Road, Suite A  
Dayton, New Jersey 08810

### EMERGENCY TELEPHONE NUMBERS

CLEARY CHEMICALS LLC  
**M-F 9-5 EST**  
**(800) 524-1662 OR**  
**(732) 329-8399**

PROSAR:  
**(800) 324-7598**  
CHEMTREC 24 HOUR:  
**(800) 424-9300**

## SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS

Component	CAS Number	Content (%) by wt.	ACGIH TLV	OSHA PEL
Abamectin	71751-41-2	2	NA	NA
Avermectin B1a	65195-55-3			
Avermectin B1b	65195-56-4			
Other Ingredients*	Proprietary	98		

\*All ingredients may not be listed. Ingredients not listed do not meet the reporting requirements of the OSHA Hazard Communication Standard (HCS) as specified in 29 CFR 1910.1200.

## SECTION 3: HAZARDS IDENTIFICATION

**WARNING** Causes substantial but temporary eye injury. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wear protective eye ware (goggles or face shield). Do not get in eyes, on skin, or on clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

## 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 poison control center or doctor for treatment advice.

**If Swallowed:** Do not induce vomiting unless told to do so by the poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person. Call poison control center or doctor for treatment advice.

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Effective Date: 10.23.08

NDA = No Data Available      NA = Not Applicable

**SECTION 4: FIRST AID MEASURES (continued from page 1)**

**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 poison control center or doctor for 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 further treatment advice.

**Note To Physician:** Recommendations for Medical Treatment for MINX (Avermectin B1) Acute Toxicity: Early signs of intoxication include mydriasis (dilated pupils), ataxia (unsteadiness), and muscle tremors. Toxicity follows accidental ingestion of the concentrate and can be minimized by inducing vomiting within one-half hour of exposure. If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels) as indicated by clinical signs, symptoms, and measurements. In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since Avermectin is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic Avermectin exposure.

For additional information on this pesticide product (including health concerns, medical emergencies, or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378 or Poison Control Center for assistance.

**SECTION 5: FIRE FIGHTING MEASURES**

**Fire and Explosion Hazards:** Combustible liquid. Flash point >61°C (Closed cup method). When heated above the flash point, this product releases vapors which, when mixed with air, can burn or be explosive.

**Firefighting Media:** Foam; dry chemical or CO<sub>2</sub> to extinguish fire

**Firefighting Precaution:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode. Keep unnecessary people away. Use as little water as possible. Dike area of fire to prevent material run-off. Decontaminate emergency personnel with soap and water before leaving the fire area. Avoid breathing dusts, vapors and fumes from burning materials. Control run-off water.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

In case materials are released, contact emergency response personnel. Keep unnecessary persons away. If emergency response personnel are unavailable, absorb small spills on spill pillows or other suitable absorbing material and place in a sealed container for disposal. Dike large spills and transfer to an appropriate container for disposal. Avoid contact of spilled materials and runoff with soil and surface waterways. Use suitable protective equipment (Section 8). Follow all fire prevention procedures (Section 5).

**SECTION 7: HANDLING AND STORAGE**

**Handling Precautions:** Harmful if swallowed or absorbed through skin. Avoid contact with eyes, skin or clothing. Do not breathe spray mist. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Follow manufacturer's instructions for cleaning/maintaining Personal Protective Equipment (PPE). If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

**Storage Precautions:** Do not use, pour, or store near heat or open flame. Store in the original container and keep closed. Store in cool, dry and well-ventilated place.

## SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

**Engineering Controls:** Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust or process enclosure ventilation system.

**Eyes and Face:** To protect against accidental eye contact, goggles/face-shield should be worn.

**Skin Protection:** Rubber gloves should be worn. Wash thoroughly with soap and water after handling.

**Respiratory Protection:** Ensure good ventilation. For maximum protection, wear a supplied air, full-face piece respirator, air lined hood, or full-face piece self-contained breathing apparatus.

**Respiratory Protection:** Ensure good ventilation. For maximum protection, wear a supplied air, full-face piece respirator, air lined hood, or full-face piece self-contained breathing apparatus.

**Note to applicators and handlers of agricultural products:** Applicators and handlers must wear the following Personal Protective Equipment (PPE):

- Coveralls worn over short-sleeved shirt and short pants.
- Chemical-resistant gloves – EPA chemical resistance category B (e.g. barrier laminate or butyl rubber ≥ 14 mils).
- Chemical-resistant footwear plus socks.
- Protective eyewear
- Chemical-resistant headgear for overhead exposure
- Chemical-resistant apron when cleaning equipment, mixing and loading.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Amber liquid
<b>Odor:</b>	OdorCharacteristic odor
<b>Specific Gravity</b>	0.966 lb/gal
<b>Water Solubility</b>	Disperse in water

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable under normal handling and storage conditions.

**Incompatibilities:** Avoid mixed with highly reactive chemicals such as strong acid, strong base or strong oxidizing agent.

**Hazard Decomposition:** Thermal decomposition may emit toxic fumes of carbon monoxide and carbon dioxide.

**Hazardous Polymerization:** Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Acute Oral Toxicity:** LD50 for albino rats 303 mg/kg

**Acute Dermal Toxicity:** LD50 for rabbits >2020 mg/kg

**Acute Inhalation Toxicity:** LC50 (4 h) for rats 2.29 mg/l

**Skin Irritation:** Moderately irritating

**Eye Irritation:** Moderately irritating

**Dermal Irritation:** Mildly irritating to the skin

## SECTION 12: ECOLOGICAL INFORMATION

This product is toxic to aqueous organism. Referenced technical ecological toxicology data list as below:

**Birds:** Acute oral LD50 for mallard ducks 84.6, bobwhite quail >2000 mg/kg

**Fish:** LC50 (96 h) for rainbow trout 3.2, bluegill sunfish 9.6 µg/l.

**Bees:** Toxic to bees.

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**SECTION 12: ECOLOGICAL INFORMATION (continued from page 3)****Environmental Fate:**

**Animals:** Rapidly eliminated (80-100% in 96 h), mainly via feces; urinary excretion was 0.5-1.4%.

**Plants:** Degradation/metabolism in each of three different plants is similar and occurs predominantly by photolysis on the plant surfaces. The definition of the residues is thus expressed as the combined residues of avermectin B 1 and its 8,9- Z-avermectin B 1 photoisomer.

**Soil/Environment:** Binds tightly to soil, with rapid degradation by soil microorganisms. No bioaccumulation.

**SECTION 13: DISPOSAL CONSIDERATIONS**

Disposal of product would be treated, stored, transported, and disposed of according to the local waste regulation authority. Do not flush to surface water or sanitary sewer system.

**SECTION 14: TRANSPORT INFORMATION****US DOT Classification:**

**Proper Shipping Name:** PESTICIDES, LIQUID, TOXIC, N.O.S. (Abamectin)

**Class:** 6.1

**UN Number:** 2902

**Packaging Group:** III

**Marine Pollutant:**

**IMO Classification:**

**Proper Shipping Name:** PESTICIDES, LIQUID, TOXIC, N.O.S. (Abamectin)

MINX™ Agricultural Miticide/Insecticide (19g/kg) Emulsifiable Concentrate

**Class:** 6.1

**UN Number:** 2902

**Packaging Group:** III

**Marine Pollutant:**

**IATA Classification:**

**Proper Shipping Name:** PESTICIDES, LIQUID, TOXIC, N.O.S. (Abamectin)

MINX™ Agricultural Miticide/Insecticide (19g/kg) Emulsifiable Concentrate

**Class:** 6.1

**UN Number:** 2902

**Packaging Group:** III

**Marine Pollutant:**

**SECTION 15: REGULATORY INFORMATION**

**CERCLA Reportable Quantity (RQ):** NA

**SARA Title III – Sec 302 Extremely Hazardous Substances TPQ:** NA

**SARA Title III – Sec 304 Extremely Hazardous Substance RQ:** NA

**SARA Title III – Sec 313 Toxic Chemical Notification:** Listed

**RCRA Code:** NA

**NFPA Ratings:** Health: 2 Flamability: 2 Reactivity: 1

**SECTION 16: OTHER INFORMATION**

Disclaimer: The information provided by Cleary Chemicals, LLC. herein is given in good faith and to the best of our knowledge. However, no warranty is expressed or implied.

<b>Reason for issue:</b> New Product	<b>Effective date:</b> 10/23/2008
<b>Prepared by:</b> R. Fletcher	<b>Replaces:</b>