

1 IDENTIFICATION

Product Identifier:

Product Name: Greyhound™ Insecticide

EPA Reg. No.: 69117-2 **Synonyms:** None

Recommended Use: For systemic insecticide control in ornamental trees and ornamental palm plants.

Use Restrictions: Do not inject food bearing plants (including non-bearing growth stages).

Supplier Information: ArborSystems, Inc. d/b/a ArborSystems

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Omaha, NE 68168 USA
Toll Free: 800.698.4641
Phone: 402.339.4459
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Emergency Phone Number: 1.800.222.1222 (Medical)

HAZARDS IDENTIFICATION

Hazards Classification: This mixture is considered hazardous by the 2012 OSHA Communication Standard (29 CFR 1910.1200).

Acute toxicity-Oral Category 3 Acute toxicity-Inhalation (gases, vapors, dusts/mists) Category 1 Skin corrosion/irritation Category 2 Category 2A Serious eye damage/eye irritation Carcinogenicity Category 1B Reproductive toxicity Category 1B Specific target organ toxicity (single exposure) Category 3 Specific target organ toxicity (repeated exposure) Category 1 Flammable liquids Category 4

GHS Label Elements, including Precautionary Statements:

Signal Word: Danger

Hazards Statements: Toxic if swallowed. Fatal if inhaled. Causes skin irritation and serious eye irritation. May cause cancer. May damage fertility or the unborn child. May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure. Combustible liquid.







Appearance: Yellow Physical state: Liquid Odor: Not Determined

Precautionary Statements:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/clothing and eye/face protection. Thoroughly wash face, hands and any exposed skin after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear respiratory protection. Keep away from flames and hot surfaces. No smoking. Keep cool.

Response: If exposed or concerned, get medical advice/attention. Specific treatment is urgent (see supplemental first aid instructions).

Eyes: If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing if eye irritation persists. Get medical advice/attention.

Skin: If on skin, wash with plenty of soap and water. If irritation occurs, get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Inhalation: If inhaled, remove person to fresh air and keep comfortable for breathing. Immediately call a poison control center or doctor/physician. **Ingestion:** If swallowed, immediately call a poison control center or doctor/physician. Rinse mouth.

Fire: In case of fire use CO₂, dry chemical or foam to extinguish.

Storage: Store locked up in a well-ventilated place. Keep container tightly closed. **Disposal:** Dispose of contents/container to an approved waste disposal plant.

Other Information: May be harmful in contact with skin. Very toxic to aquatic life with long-lasting effects.

Unknown Acute Toxicity: 98% of the mixture consists of ingredient(s) of unknown toxicity. 1% of the mixture consists of ingredient(s) of unknown acute oral toxicity. 71% of the mixture consists of ingredient(s) of unknown acute dermal toxicity. 98% of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas, vapor, dust/mist).

3 COMPOSITION / INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS Number	Percent	HMIRA* Registry No.	Date HMIRA filed and date exemption granted (if applicable)
BHT	128-37-0	70	-	-
1-Methyl-2-pyrrolidone	872-50-4	27	-	-
Abamectin	65195-55-3	2	-	-
Mineral oil	64741-88-4	1	-	-

^{*}Hazardous Material Information Review Act.

4 FIRST-AID MEASURES

General Advice: Show this SDS to the doctor in attendance. Immediate medical attention is required. If exposed or concerned, get medical advice/ attention.

Inhalation: If breathing has stopped, give artificial respiration. Get immediate medical attention. Remove to fresh air. Do not use the mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, trained personnel should give oxygen. If exposed or concerned, get medical advice/ attention. Get immediate medical attention if symptoms occur.

Eye Contact: Immediately rinse with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.

Skin Contact: Immediately wash off with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.

Ingestion: Do **not** induce vomiting. Clean mouth with water and drink plenty of water afterwards. Never give anything by mouth to an unconscious person. Immediately call a physician or poison control center.

Self-protection of the first aider: Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved. Take precautions to protect oneself and prevent spread of contamination. Do not breathe vapor or mist. Do not use the mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Use personal protective equipment as required. See Section 8 for more information. Avoid contact with skin, eyes or clothing.

Most Important Symptoms and Effects: Coughing and/or wheezing. Difficulty in breathing. Burning sensation.

Note to Physician: Treat symptomatically.

5 FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol-resistant foam.

Unsuitable Extinguishing Media: CAUTION: Use of water spray when fighting fire may be inefficient.

Specific Hazards Arising from this Mixture: Keep product and empty containers away from heat and sources of ignition. In the event of fire, cool tanks with water spray.

Hazardous Combustion Products: Carbon oxides.

Sensitivity to Mechanical Impact: None. Sensitivity to Static Discharge: Yes.

Protective Equipment for Firefighters: Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Evacuate personnel to safe areas. Use personal protective equipment as required. See Section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Keep people away from and upwind of spill/leak.

Other Information: Refer to protective measures listed in Sections 7 and 8.

Containment Methods: Stop leak if you can do so without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.

Cleanup Methods: Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7 HANDLING AND STORAGE

Precautions for Safe Handling: Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat/hot surfaces/sparks/open flames/other ignition sources. No smoking. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practices. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Keep out of the reach of children. Store locked up.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters - Exposure Limits

Chemical Name / CAS Number	ACGIH TLV	OSHA PEL	NIOSH IDLH
BHT / 128-37-0	TWA: 2 mg/m³ inhalable fraction and vapor	(vacated) TWA: 10 mg/m ³	TWA: 10 mg/m ³

ACGIH TLV: American Conference of Governmental Industrial Hygienists Threshold Limit Value; OSHA PEL: Occupational Safety and Health Administration Permissible Exposure Limits; NIOSH IDLH: National Institute of Occupational Safety and Health Immediately Dangerous to Life or Health.

Other Exposure Guidelines: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 995 F.2d 962 (11th Cir., 1992). See Section 15 for national exposure control parameters.

Chemical Name / CAS Number	Alberta	British Columbia	Ontario TWAEV	Quebec
BHT / 128-37-0	TWA: 10 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³	STEL: 10 mg/m ³
1-Methyl-2-pyrrolidone / 872-50-4			TWA: 400 mg/m ³	

Appropriate Engineering Controls: Showers, eyewash stations and ventilation systems.

Individual Protection Measures – Personal Protective Equipment:

Eye/Face: Tight sealing safety goggles. **Hand:** Wear suitable, impervious gloves.

Skin/Body: Wear suitable protective clothing. Long-sleeved clothing.

Respiratory: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General Hygiene Considerations: Do not eat, drink or smoke when using this product. Do not allow contaminated work clothing out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

9 PHYSICAL AND CHEMICAL PROPERTIES

Auto-ignition temperature:	N/D	Partition coefficient: n-octanol/water:	N/D
Color:	Yellow	pH:	2.6-3.6 (1% solution)
Decomposition temperature:	N/D	Physical state:	Liquid
Evaporation rate:	N/D	Relative density:	8.01 lbs/gal
Flammability (solid,gas):	N/A	Solubility(ies):	N/D
Flash point:	161°F	Upper/lower explosive limits:	N/D
Freezing point:	N/D	Upper/lower flammability limits:	N/D
Initial boiling point and range:	N/D	Vapor pressure:	N/D
Melting point:	N/A	Viscosity:	N/D
Odor:	N/D	N/A = Not Applicable	N/D = Not Determined

10 STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: None under normal processing.

Hazardous Polymerization: Does not occur.

Conditions to Avoid: Heat, flames and sparks. Excessive heat. Incompatible Materials: Strong acids, bases, oxidizing agents. Hazardous Decomposition Products: Carbon oxides.

11 TOXICOLOGICAL INFORMATION

Product Information:

Inhalation: Specific test data for the mixture is not available. Fatal if inhaled, based on components. May cause irritation of respiratory tract.

Eye Contact: Specific test data for the mixture is not available. Irritating to eyes, based on components. Causes serious eye irritation.

Skin Contact: Specific test data for the mixture is not available. Causes skin irritation, based on components.

Ingestion: Specific test data for the mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Toxic if swallowed, based on components.

Component Information

Chemical Name / CAS Number	Oral LD50	Dermal LD50	Inhalation LD50
BHT / 128-37-0	= 890 mg/kg (rat)	> 2000 mg/kg (rat)	-
1-Methyl-2-pyrrolidone / 872-50-4	= 3914 mg/kg (rat)	= 8 g/kg (rabbit)	> 5.1 mg/L (rat) 4h
Abamectin / 65195-55-3	-	= 400 mg/kg (rat)	-
		= 400 mg/kg (rabbit)	
Mineral oil / 64741-88-4	> 5000 mg/kg (rat)	> 2000 mg/kg (rabbit)	= 2.18 mg/L (rat) 4h

Information on Toxicological Effects:

Symptoms: Coughing and/or wheezing. Difficulty in breathing. Redness. May cause redness and tearing of eyes.

Delayed and immediate effects as well as chronic effects from short and long-term exposure: Skin corrosion/irritation: Classification based on data available for ingredients. Irritating to skin.

Serious eye damage/eye irritation: Classification based on data available for ingredients. Irritating to eyes.

Respiratory or skin sensitization: No information available.

Germ cell mutagenicity: No information available.

Carcinogenicity: Classification based on data available for ingredients. Contains a known or suspected carcinogen. The table below indicates

whether each agency has listed any ingredient as a carcinogen:

Chemical Name / CAS Number	ACGIH	IARC	NTP	OSHA
BHT / 128-37-0	-	Group 3	-	-
Mineral oil / 64741-88-4	A2	Group 1	Known	Х

ACGIH: American Conference of Governmental Industrial Hygienists; IARC: International Agency for Research on Cancer; NTP: National Toxicology Program; OSHA: Occupational Safety and Health Administration. ACGIH A2: Suspected human carcinogen; IARC Group 1: Carcinogenic to humans; Group 3: Not classifiable as to carcinogenicity in humans. OSHA "X": Present.

Reproductive Toxicity: Classification based on data available for ingredients. Contains a known or suspected reproductive toxin.

STOT-single exposure: May cause respiratory irritation.

STOT-repeated exposure: Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard: No information available.

Numerical Measures of Toxicity – Acute Toxicity:

The following values are calculated based on Chapter 3.1 of the GHS document:

ATEmix (oral): 206.00 mg/kg ATEmix (dermal): 3,463.00 mg/kg ATEmix (inhalation-gas): 10.00 mg/L ATEmix (inhalation-dust/mist): 0.01 mg/L ATEmix (inhalation-vapor): 0.05 mg/L

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12 ECOLOGICAL INFORMATION (NON-MANDATORY)

Exotoxicity

Very toxic to aquatic life with long-lasting effects.

Chemical Name / CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia magna (water flea)
BHT / 128-37-0	72h EC50=6 mg/L (Pseudokirchneriella subcapitata) 72h EC50 > 0.42 mg/L (Desmodesmus subspicatus)	48h LC50=5 mg/L (<i>Oryzias latipes</i>)	EC50=7.82 mg/L 5 min EC50=8.57 mg/L 15 min EC50=8.98 mg/L 30 min	-
1-Methyl-2-pyrrolidone / 872-50-4	72h EC50 > 500 mg/L (Desmodesmus subspicatus)	96h LC50=832 mg/L (Lepomis macrochirus) 96h LC50=1072 mg/L (Pimephales promelas) 96h LC50=1400 mg/L (Poecilia reticulata) 96h LC50=4000 mg/L (Leuciscus idus)	-	48h EC50=4897 mg/L
Mineral oil / 64741-88-4	-	96h LC50=5000 mg/L (Oncorhynchus mykiss)	-	48h EC50=1000 mg/L

Persistence and Degradability: No information available.

Bioaccumulation

Chemical Name / CAS Number	Log Pow		
BHT / 128-37-0	4.17		
1-Methyl-2-pyrrolidone / 872-50-4	-0.46		

Mobility: No information available.

Other Adverse Effects: No information available.

13 DISPOSAL CONSIDERATIONS (NON-MANDATORY)

Waste Treatment Disposal Methods:

Waste from Residues/Unused Products: Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated Packaging: Do not reuse empty containers.

14 TRANSPORT INFORMATION (NON-MANDATORY)

DOT, TGD, MEX, ICAO, IATA, IMDG/IMO, RID, ADR and ADN: Not regulated.

15 REGULATORY INFORMATION (NON-MANDATORY)

International Regulations:

Ozone-depleting substances: Not applicable.
Persistent Organic Pollutants: Not applicable.
Export Notification Requirements: Not applicable.

International Inventories:

TSCA: Contact supplier for inventory compliance status.

DSL/NDSL: Contact supplier for inventory compliance status.

EINECS/ELINCS: Contact supplier for inventory compliance status.

ENCS: Contact supplier for inventory compliance status. **KECL:** Contact supplier for inventory compliance status. **PICCS:** Contact supplier for inventory compliance status. **AICS:** Contact supplier for inventory compliance status.

TSCA: United States Toxic Substances Control Act Section 8(b) Inventory; DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List; EINECS/ELINCS: European Inventory of Existing Chemical Substances; ENCS: Japan Existing and New Chemical Substances; KECL: Korean Existing and Evaluated Chemical Substances; PICCS: Philippines Inventory of Chemicals and Chemical Substances; AICS: Australian Inventory of Chemical Substances.

U.S. Federal Regulations:

SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 ("SARA"). This product contains the following chemical that is subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS Number	Percent	SARA 313 Threshold Value %
1-Methyl-2-pyrrolidone	872-50-4	27	1.0

SARA 313.312 Hazard Categories:

Acute Health Hazard: Yes **Chronic Health Hazard:** Yes

Fire Hazard: Yes

Sudden Release of Pressure Hazard: No

Reactive Hazard: No

CWA (Clean Water Act): This product does not contain any substances regulated as pollutants pursuant to the CWA (40 CFR §§ 122.21 and 122.420).

CERCLA (Comprehensive Environmental Response Compensation and Liability Act): This material, as supplied, does not contain any substances regulated as hazardous substances under CERCLA (40 CFR Part 302) or SARA (40 CFR Part 355). There may be specific reporting requirements at the local, regional or state level pertaining to releases of this material.

FIFRA (Federal Insecticide, Fungicide and Rodenticide Act, as Amended): This chemical is a pesticide product registered by the United States 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 ("SDSs") and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including Directions for Use.

Precautionary Statements

Hazards to Humans & Domestic Animals

WARNING: May be fatal if swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if inhaled or absorbed through the skin. Avoid contact with skin. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals. Avoid breathing vapors.

Personal Protective Equipment (PPE)

Some materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category B on an EPA chemical-resistance category selection chart. Applicators and other handlers must wear:

- Long-sleeved shirt and long pants;
- Chemical-resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils;
- Socks plus shoes;
- Protective eyewear.

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

User Safety Recommendations

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Immediately remove contaminated clothing if pesticide gets inside; then wash thoroughly and put on clean clothing.

Environmental Hazards

This pesticide is toxic to fish and wildlife. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Apply only post bloom.

Physical or Chemical Hazards

Do not use or store near heat or open flame.

U.S. State Regulations:

California Proposition 65: This product contains 1-Methyl-2-pyrrolidone (CAS Number 872-50-4) that is known to the state of California to cause developmental toxicity.

U.S. State Right-to-Know Regulations

Chemical Name / CAS Number	Illinois	Massachusetts	New Jersey	Pennsylvania	Rhode Island
BHT / 128-37-0		Х	Χ	Х	
1-Methyl-2-pyrrolidone / 872-50-4		Х	Χ	Χ	Χ
Mineral oil / 64741-88-4	Χ				

16 OTHER INFORMATION

NFPA:

Health Hazards: 4 Flammability: 2 Instability: 0

Physical and Chemical Hazards-Personal Protection: X

HMIS:

Health Hazards: 4* Flammability: 2 Physical Hazard: 0

Physical and Chemical Hazards-Personal Protection: X

*Chronic health hazard

SDS Information:

Date Prepared: 01/09/2023

Version: 2

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DISCLAIMER

This Safety Data Sheet ("SDS") serves different purposes than, and DOES NOT REPLACE OR MODIFY, THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course. Use, storage and disposal of pesticide products are regulated by the EPA under the authority of FIFRA (Federal Insecticide, Fungicide and Rodenticide Act, as Amended) through the product labeling. All necessary and appropriate precautionary, use, storage and disposal information is set forth on that labeling. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Although the information and recommendations set for herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, ArborSystems makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for the purposes prior to use. To the extent consistent with applicable law, in no event will ArborSystems be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABIITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR TO THE PRODUCT TO WHICH INFORMATION REFERS.