



SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity:	DINOCIDE™ Systemic Insecticide
Synonym:	None
Product Use:	Systemic insecticide for tree injection only
EPA Registration No.:	7946-35 and 7946-34
Product Type:	Liquid
Company Name:	J. J. MAUGET COMPANY
Company Address:	5435 PECK ROAD ARCADIA, CA 91006-5847
Tel:	626-444-1057
Emergency Contact:	INFOTRAC 1-800-535-5053 911

2. HAZARDS IDENTIFICATION



Classification:

Eye Irritation: GHS Category 2B
Reproductive Toxicity: GHS Category 1B
Aquatic Toxicity (Acute): GHS Category 1
Aquatic Toxicity (Chronic): GHS Category 1
Combustible liquid: GHS Category 4
Skin corrosion/irritation (Acute): GHS Category 4
Respiratory Toxicity (Acute): GHS Category 3

Signal Word

DANGER

Hazard Statements:

H227 – Combustible liquid.
H316 - Causes mild skin irritation.
H320 – Causes eye irritation.
H335 – May cause respiratory irritation.
H360 – May damage fertility or the unborn child.
H410 – Very toxic to aquatic life with long lasting effects (shrimp)

Precautionary Statements - Prevention:

P203 – Obtain, read, and follow all safety instructions before use
P210 – Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking
P261 – Avoid breathing dust or spray
P264 – Wash hands thoroughly after handling
P271 – Use only outdoors or in a well-ventilated area
P273 – Avoid release to the environment
P280 – Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response:

P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P318 – If exposed or concerned, get medical advice
P319 – Get medical help if you feel unwell
P332+P337+P317 – If skin irritation occurs or eye irritation persists: Get medical help
P391 – Collect spillage

Precautionary Statements - Storage:

P403+P233 – Store in a well-ventilated place, Keep container tightly closed
P405 – Store locked up

Precautionary Statements - Disposal:

Product Name: Dinocide™

Emergency Overview

May cause irritation to the eyes, skin, and respiratory tract. May cause harm to the unborn child. May be harmful if swallowed, inhaled, or absorbed through the skin. Light sensitive. Combustible liquid and vapor. Hygroscopic.

HMIS Rating:

Health – 1 Flammability – 1 Physical Hazard – 1 PPE – User supplied

NOTE: HMIS ratings use a numbering scale that ranges from 0 - 4 to indicate the degree of hazard. A value of zero means the chemical presents no hazard while a value of four indicates a high hazard. These ratings are based on the inherent properties of this chemical under expected conditions of normal use and are not intended to be used in emergency situations. PPE is determined by the user based on their needs and conditions.

3. COMPOSITION/INFORMATION ON INGREDIENTS

	CAS NO.	OSHA PEL	ACGIH TLV	% Ingredient
Dinotefuran	165252-70-0	N/A	N/A	12
N-Methylpyrrolidone	872-50-4	N/A	N/A	20-30
Other Ingredients		N/A	N/A	Trade Secret

Ingredients not listed are considered a trade secret and are withheld under 29 CFR 1910.1200(i)

4. FIRST AID MEASURES

INGESTION:	Call a poison control center or doctor immediately for treatment advice. Have person rinse mouth with water. 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.
SKIN CONTACT:	Take off contaminated clothing. Rinse skin immediately with plenty of soap and water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice.
EYE CONTACT:	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.
INHALATION:	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

Most important symptoms and effects

Symptoms:	Irritating to eyes, skin, and respiratory system. May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting, and diarrhea.
Chronic Effects:	Substances known to cause developmental toxicity in humans. Tumorigenic effects have been reported in experimental animals. Experiments have shown reproductive toxicity effects on laboratory animals. May cause adverse liver effects. May cause adverse kidney effects.

NOTE TO PHYSICIAN: There is no specific antidote available. Treat patient symptomatically.

5. FIRE FIGHTING MEASURES

FLASH POINT: No flash point observed; Fire Point at 99.0°C.

EXTINGUISHING MEDIA: Water spray, carbon dioxide, dry chemical, or foam

FLAMMABILITY LIMITS: UEL = Not determined, LEL = Not determined

SPECIAL EXPOSURE HAZARDS: As in any fire, use self-contained breathing apparatus, and full protective clothing. Use water spray to cool nearby containers and structures exposed to fire.

PRODUCTS OF COMBUSTION AND DECOMPOSITION: See Section 10 – Stability and Reactivity

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: See Section 8 – Exposure Controls/Personal Protection

Environmental Precautions: Product is highly toxic to aquatic invertebrates. Do not allow material to enter streams, sewers, or other waterways. This product is toxic to bees exposed to direct treatment or residues on blooming crops. Use for tree micro-

injection only as post-bloom application. See Section 15, Regulatory Information for additional Environmental Hazard precautions.

Spill or leak procedures: Small Spills – Clean up spills immediately, observing precautions in Section 8. Absorb spill with absorbent material such as pet litter. After removal, flush contaminated area thoroughly with water containing a strong detergent. Sweep up and place in a chemical container. Seal the container and dispose of in accordance with all State and Federal regulations. Large Spills – Keep out of streams and domestic water supplies. Dike area to prevent contamination of local water sources.

7. HANDLING AND STORAGE

Store capsules in an upright position in a closed container. Store in a cool, dry place out of the reach of children. Do not contaminate water, food or feed by storage or disposal of micro-injection capsules. Do not reuse micro-injection capsules or bottles. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory: Not normally needed.

Eye: Wear protective eyewear (e.g., goggles or full-face shield)

Ventilation: Use where adequate ventilation is available.

Other Protective Devices and Procedures: Wear chemical resistant gloves, such as barrier laminate or butyl rubber ≥ 14 mils, neoprene rubber, or viton. Wear long-sleeved shirt and long pants, shoes plus socks.

General Hygiene Considerations: Personal hygiene is an important work practice. Exposure control measures and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Blue colored liquid
Odor:	None
pH:	4.44 @ 25° C
Boiling Point:	Not determined
Melting Point:	Not determined
Flash Point:	Not determined
Evaporation Rate:	Slow (<0.01)
Flammability (Solid, Gas):	Liquid-not applicable
Upper Flammability Limits:	Not determined
Lower Flammability Limit:	Not determined
Vapor Pressure:	Not determined
Vapor Density:	Not determined
Specific Gravity:	1.104
Solubility in Water:	Miscible
Solubility in other solvents:	Not determined
Partition Coefficient:	Not determined
Auto-ignition Temperature:	Not determined
Decomposition Temperature:	Not determined
Kinematic Viscosity:	Not determined
Dynamic Viscosity:	Not Determined
Explosive Properties:	Not Determined
Oxidizing Properties:	Not Determined

10. STABILITY AND REACTIVITY

Stability: Stable under normal use and storage conditions.

Conditions to avoid: Heat, sparks, or open flame

Materials to avoid: Avoid contact with water or oxidizing agents

Hazardous decomposition products: Thermal decomposition products may include, but are not limited to, carbon monoxide and carbon dioxide.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological Data: Data from laboratory studies on this product are summarized below:

Acute oral LD50: 416 mg/kg

Acute dermal LD50: 2,000 – 5,000 mg/kg (females); >5,000 mg/kg (males)
Primary eye irritation: Moderately irritating
Primary skin irritation: Slightly irritating
Dermal sensitization: Not a skin sensitizer

Reproductive Toxicity: N-Methylpyrrolidone (CAS No. 872-50-4) may cause birth defects or other reproductive harm.

Not carcinogenic

12. ECOLOGICAL INFORMATION

Summary of effects: Dinotefuran Technical is practically nontoxic to fish and ranges from practically nontoxic to highly toxic to aquatic invertebrate species. This pesticide is toxic to shrimp. Dinotefuran Technical is highly toxic to bees.

Fish Toxicity (Technical): greater than 100 mg./L
96 hour LC50, Rainbow Trout, Bluegill Sunfish, and Common Carp

Mysid Shrimp Toxicity (Technical): 0.79 mg/L
96 hour LC50

Mysid Shrimp Chronic Toxicity: 0.089mg/L
Lifecycle NOEC

Algae (Technical): greater than 100 mg/L
0-72 hour ErC50

Bee Toxicity (Technical): 0.056 ug/bee oral LD50
0.022 ug/bee contact LD50

13. DISPOSAL CONSIDERATIONS

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR Part 261. For disposal of wastes generated during use or if the material as supplied becomes a waste, dispose as directed on the label. Do not reuse container.

Observe all federal, state, and local laws concerning health and environment.

14. TRANSPORT INFORMATION

UN NO None

DOT Classification

PROPER SHIPPING NAME: Pesticides, Liquid, Non-regulated
HAZARD CLASS or DIVISION: Not regulated
PACKING GROUP: N/A

ICAO/IATA

PROPER SHIPPING NAME: Pesticides, Liquid, Non-regulated
HAZARD CLASS or DIVISION: Not regulated
IDENTIFICATION NUMBER: N/A

B/L Freight Classification Pesticides, Liquid, Non-regulated

IMO

PROPER SHIPPING NAME: Pesticides, Liquid, Non-regulated
HAZARD CLASS or DIVISION: Not regulated
PACKING GROUP: N/A

For further information relative to spills resulting from transportation incidents, refer to the latest Department of Transportation (DOT) Emergency Response Guidebook for Hazardous Materials Incidents.

15. REGULATORY INFORMATION

OSHA: This product is considered hazardous under the criteria of the OSHA Hazard Communication Standard 29 CFR Part 1910.1200.

TSCA: The product is exempt from TSCA regulation under FIFRA Section 3(2)(B)(ii) when used as a pesticide.

CERCLA: Reportable Quantity not applicable.

RCRA: It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

EPA Pesticide Registration Number

7946-34 and 7946-35

EPA Statement

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. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

Following is the hazard information as required on the pesticide label:

Caution

Hazards to Humans and Domestic Animals:

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing and wash before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Physical or Chemical Hazards:

Do not mix or allow contact with water or oxidizing agents. Hazardous chemical reactions may occur. Do not use or store near heat or open flame.

Environmental Hazards:

This pesticide is toxic to aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not dispose equipment washwaters or rinsate into a natural drain or water body.

This product is toxic to honeybees. The persistence of residues and potential residual toxicity of Dinotefuran in nectar and pollen suggests the possibility of chronic toxic risk to honeybee larvae and the eventual instability of the hive.

This product is toxic to bees exposed to treatment for more than 38 hours following treatment.

Do not apply this product to blooming, pollen-shedding or nectar-producing parts of plants if bees may forage on the plants during this time period, unless the application is made in response to a public health emergency declared by appropriate state or federal authorities.

Dinotefuran and its degradate, MNG, have the properties and characteristics associated with chemicals detected in ground water. The high-water solubility of dinotefuran, and its degradate, MNG, coupled with its very high mobility, and resistance to biodegradation indicates that this compound has a strong potential to leach to the subsurface under certain conditions as a result of label use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Periodic monitoring of shallow groundwater in the use area is recommended.

California Addendum (Proposition 65) Safe Drinking Water and Toxic Enforcement Act of 1986.

The following specific warnings are hereby given relative to substances that the State of California has identified as carcinogens and/or reproductive hazards under Proposition 65:

■ **WARNING:** This product contains a chemical, n-Methylpyrrolidone (CAS No. 872-50-4), known to the State of California to cause birth defects or other reproductive harm.

SARA TITLE III HAZARD CATEGORY: For reporting under Section 313

This product contains n-Methylpyrrolidone (CAS No. 872-50-4).

16. OTHER INFORMATION

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.