



SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

1. IDENTIFICATION

PRODUCT NAME: Madari 4 F
DESCRIPTION: A liquid insecticide
EPA Reg. No.: 93930-24
COMPANY IDENTIFICATION: Avalaire, LLC
1705 Towanda Ave
Bloomington, IL 61701

2. HAZARD IDENTIFICATION



WARNING

Harmful if inhaled (H332)
May be harmful if swallowed (H303)
Very toxic to aquatic life with long lasting effects (H400+H410)

HAZARD CLASSIFICATION

Health Hazards

Acute toxicity, inhalation
Acute toxicity, oral

Category

4

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Physical Hazards

None

Category

-

Environmental Hazards

Hazardous to the aquatic environment, short-term
Hazardous to the aquatic environment, long-term

Category

1

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HAZARDS NOT REQUIRING CLASSIFICATION

Harmful to honeybees by direct contact.

Do not mix or allow to come into contact with oxidizing agents. Hazardous chemical reaction may occur.

PRECAUTIONARY STATEMENTS

Avoid breathing mist/vapors/spray. Use only outdoors in a well-ventilated area. (P261+P271)

Avoid release to the environment not in accordance with the product label. (P273)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help. (P304+P340+P317)

IF SWALLOWED: Get medical help (P301+P317)

Collect spillage. (P391)

Dispose of contents / container in accordance with local regulations. Refer to the product label for specific disposal instructions. (P501)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS #	Composition
Imidacloprid	1-[(6-Chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine	138261-41-3	39.5-42.0%

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration. 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.

NOTE TO PHYSICIAN: No specific antidote is available. Treat the patient symptomatically.



5. FIREFIGHTING MEASURES

Flash Point (CC): N/A

Flammable Limits (LFL-UFL): Not Determined

Fire and Explosion Hazards: None known

Extinguishing Medium: Medium appropriate to surrounding fire. Water spray, foam, fog, CO₂, alcohol foam or dry chemical.

Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / fire-fighting water; do not allow to enter drains or waterways. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

Hazardous Decomposition Products: Normal combustion can produce oxides of carbon.

NFPA Ratings: Health – 1 / Flammability – 1 / Reactivity – 0

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately observing the precautions in Section 8 of this SDS. Isolate the hazard area and keep unnecessary and unprotected personnel from entering.

Spill cleanup: Prevent material from further release into soil, surface water and ground water. Absorb spill with inert material (such as dry sand, clay or earth), then place in an appropriate container for disposal. Wash area with soap and water. Pick up wash liquid with suitable absorbent material and place in container for disposal. Stop or reduce contamination of any water. Isolate contaminated water.

7. HANDLING AND STORAGE

Handling: Avoid breathing vapor or spray mist. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Storage: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Applicators and other handlers must wear: long sleeved shirt and long pants; chemical resistant gloves made of nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, barrier laminate ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils or Viton ≥ 14 mils; and shoes plus socks.

General: Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	light brown liquid
Odor:	mild bitter
Melting/freezing point:	not available
Boiling point/Boiling range:	not available
Flammability:	not available
Flammability limits (upper/lower):	not available
Flash point:	not available
Auto-ignition temperature:	not available
Decomposition temperature:	not available
pH:	7.18
Kinematic viscosity:	non-Newtonian fluid
Solubility:	soluble in water
Partition coefficient:	not available
Vapor pressure:	not available
Density:	9.85-9.95 lbs/gal
Relative vapor density:	not available
Particle characteristics:	not available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Extreme temperatures and direct sunlight.

CHEMICAL STABILITY: Stable under all normal use and storage conditions.

HAZARDOUS DECOMPOSITION PRODUCTS: None when stored and handled as prescribed.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizing agents.

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

There is no toxicological information available for this product. The information provided is based on substantially similar product formulation.

ORAL TOXICITY (rat LD₅₀): 4,960 mg/kg

DERMAL TOXICITY (rat LD₅₀): > 5,050 mg/kg

INHALATION TOXICITY (rat LC₅₀): 2.1 mg/L (4-hour)

EYE IRRITATION: Minimal irritation

SKIN IRRITATION: Non-irritating

SKIN SENSITIZATION: Not a contact sensitizer.

CARCINOGENICITY:

IARC: Not listed

EPA: Group E – Not likely to be carcinogenic to humans (Imidacloprid)

ACGIH: Not listed

MUTAGENIC TOXICITY: No evidence of mutagenic effects during *in vivo* and *in vitro* assays.

REPRODUCTIVE TOXICITY: Not known to cause reproductive or birth defects at normal exposure levels.



12. ECOLOGICAL INFORMATION

This pesticide is highly toxic to aquatic invertebrates and bees exposed to direct treatment or residues on blooming crops/plants or weeds. This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water.

The following is for the active ingredient, imidacloprid:

AQUATIC TOXICITY

Fish (Rainbow Trout) (96-hour LC_{50}): 211 mg/kg

Daphnia Magna (Water Flea) (48-hour EC_{50}): 85 mg/L

Midge (24-hour EC_{50}): 0.0552 mg/L; (28 days EC_{10}): 2.09 µg/L

Algae (72-hour EC_{25}): >10 mg/L

AVIAN TOXICITY

Bobwhite quail (LD_{50}): 152 mg/kg

Mallard duck (LC_{50}): > 5,000 mg/kg (tech.)

OTHER TOXICITY

Honey bee: Harmful to honeybees by direct contact, but no problems expected when not sprayed into flowering crops or when used as a seed treatment.

13. DISPOSAL CONSIDERATIONS

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: Non-refillable container. Do not reuse this container. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

US-DOT: Not regulated

IMDG:

Containers ≤ 1.3 gal. (5 L) in strong outer packaging: Not regulated

Containers > 1.3 gal. (5 L): UN3082, Environmentally hazardous substance, liquid, N.O.S. (imidacloprid), 9, PG III, Marine Pollutant
Shipped internationally by vessel:

IATA: UN3082, Environmentally hazardous substance, liquid, N.O.S. (imidacloprid), 9, PG III, Marine Pollutant
Shipped by air:

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

FIFRA –

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

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid breathing vapor or spray mist.

See inside label booklet for additional precautionary statements.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops/plants or weeds if bees are foraging. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

This chemical demonstrates the properties and characteristics associated with chemicals detected in ground water. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

PHYSICAL OR CHEMICAL HAZARDS

Do not mix or allow to come in contact with oxidizing agents. Hazardous chemical reaction may occur.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide.

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

Immediate

SARA Title III – Section 312 Threshold Planning Quantity

Not listed

SARA Title III – Section 313 Reportable Ingredients

None

CERCLA –

Not listed

CALIFORNIA PROP 65 STATUS –

This product does not contain any chemical known to the state of California to cause cancer or reproductive harm.

CANADA

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.



16. OTHER INFORMATION

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.

To the extent consistent with applicable law, neither Avalaire, LLC nor Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF AVALAIRE, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF AVALAIRE, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

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