

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identity: ABACIDE™ 2
EPA Registration No.: 7946-27

J. J. MAUGET COMPANY
5435 PECK ROAD
ARCADIA, CA 91006-5847
Tel: 626-444-1057
Fax: 626-444-7414

In Case of Emergency, Call
INFOTRAC 1-800-535-5053

2. COMPOSITION/INFORMATION ON INGREDIENTS

Active ingredient (% w/w): Abamectin (1.9%)
CAS Nos.: 65195-54-4 and 65195-55-3
Chemical Name: Mixture of Avermectins comprising mainly Avermectin B1a
Chemical Class: Systemic Miticide/Insecticide
EPA Signal Word: Warning

Table with 4 columns: Ingredient Name, OSHA PEL, ACGIH TLV, % Ingredients. Rows include Abamectin and Inert ingredients.

3. HAZARDS IDENTIFICATION

Symptoms of Exposure: May irritate upper respiratory tract (nose and throat). Causes substantial but temporary eye injury. Do not get in eyes, on skin, or on clothing. Harmful if absorbed through the skin. Prolonged or repeated exposure may cause skin irritation in some individuals. May be fatal if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting, and possible burns.

Routes of Entry: Inhalation, skin, eye contact and through ingestion.

Carcinogenicity: Not a carcinogen

Mutagenicity: Not a mutagen

Teratology (Birth defects): Not a teratogen

4. FIRST AID MEASURES

INGESTION: 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.

SKIN CONTACT: Take off contaminated clothing. Rinse skin immediately with plenty of 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.

HOT LINE NUMBER: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may contact **INFOTRAC 1-800-535-5053** for emergency treatment information.

NOTE TO PHYSICIAN: Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Toxicity following accidental ingestion of Abacide 2 can be minimized by early administration of chemical absorbents (e.g., activated charcoal). If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parental fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) 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 abamectin 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 abamectin exposure.

5. FIRE FIGHTING MEASURES

FLASH POINT: 110°C, > 230°F
METHOD USED: Pensky-Martens closed cup
FLAMMABILITY LIMITS: UEL = N/A, LEL = N/A

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical, or foam.

SPECIAL EXPOSURE HAZARDS: Use positive pressure, self-contained breathing apparatus, and full protective clothing. Evacuate nonessential personnel from area to prevent exposure to fire, smoke, fumes, or products of combustion.

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: For terrestrial uses. Product is highly toxic to fish and wildlife. Do not allow material to enter streams, sewers, or other waterways when disposing of equipment wash water or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops. Use for tree micro-injection only as post-bloom application.

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. Keep out of direct sunlight when possible. Do not contaminate water, food or feed by storage or disposal of micro-injection capsules. Do not reuse micro-injection capsules. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory: In areas with inadequate ventilation, a NOISH – approved chemical cartridge respirator with organic vapor cartridges and pesticide pre – cartridges or a self-contained apparatus may be required when working with this product.

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. Shoes plus socks. Long – sleeved shirt and long pants. Chemical resistant headgear for overhead exposure. Chemical resistant apron when cleaning equipment, mixing or loading.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Straw-amber colored liquid
Odor: None
pH: 5.1 @ 25°C
Boiling Point: N/A
Melting Point: N/A
Vapor Pressure: 7.5×10^{-8} @ 25°C, 77°F
Vapor Density: > 1 (air = 1)
Specific Gravity: 0.98
Evaporation Rate: Slow (< 0.01)
Solubility in Water: Miscible
Viscosity: 29.3mL²/s @ 25°C

10. STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions
Conditions to avoid: None
Materials to avoid: None
Hazardous decomposition products: None known
Hazardous polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

Acute oral LD50: 50 – 500 mg/kg
Acute dermal LD50: 2,000 – 5,000 mg/kg
Primary eye irritation: Causes substantial, but temporary eye injury
Primary skin irritation: Moderately irritating
Dermal sensitization: May cause allergic reaction in some individuals

12. ECOLOGICAL INFORMATION

Summary of effects:	Highly toxic to aquatic organisms. Not bioconcentratable in fish.
Fish Toxicity (Technical): 96 hour LC50, Rainbow Trout	4.3 ug a.i./L
Invertebrate Toxicity (Technical): 48 hour LC50, <i>Daphnia magna</i>	0.47 ug a.i./L
Movement and Partitioning (Technical): Low mobility to immobile in various soils	Koc = 1,494 to 12,051

13. DISPOSAL CONSIDERATIONS

Pesticide rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide 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.

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

14. TRANSPORT INFORMATIONDOT Classification

PROPER SHIPPING NAME:	Pesticides, Liquid, Toxic, N.O.S (Abamectin Solution), Marine Pollutant
HAZARD CLASS or DIVISION:	6.1
PACKING GROUP:	PG III
IDENTIFICATION NUMBER:	UN 2902

ICAO/IATA

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B/L Freight Classification

Insecticides, NOI, Poison

IMO

PROPER SHIPPING NAME:	Pesticides, Liquid, Toxic, N.O.S (Abamectin Solution), Marine Pollutant
HAZARD CLASS:	6.1, UN 2902
PACKING GROUP:	PG III

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

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 known to the State of California to cause cancer.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

SARA TITLE III HAZARD CATEGORY: For reporting under Section 311 & 312

This product is a hazardous chemical under 29 CFR 1910.1200, and is categorized as an acute and delayed health hazard. Central Nervous System effects were seen in animals with the Technical ingredient.

SARA TITLE III HAZARD CATEGORY: For reporting under Section 313
This product contains N-methylpyrrolidone (CAS No. 872-50-4)

16. OTHER INFORMATION

HAZARD RATINGS:	NFPA
Health	2 (Slight)
Flammability	1 (Slight)
Reactivity	0 (Slight)

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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.