



Material Safety Data Sheet

MIN-jet Manganese

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Product No.: 1 Gal. 030-4070

Arborjet, Inc.

99 Blueberry Hill Rd

Woburn, MA 01801

In Case of Emergency, CHEM-TEL 1-800-255-3924

Product information: 1-781-935-9070

Section 1: Product Identification

Product Trade Name: MIN-jet Manganese
EPA Signal Word: Not a Pesticide
Active Ingredient (% w/w): 0.50% Mn, 0.50% Fe, 0.25% Zn, 0.10% B, 0.10% Cu
Chemical Name: Manganese, Iron, Zinc, Boron, and Copper

Section 2: Composition/Information on Ingredients

Material:	CAS No.:	Percent:	Exposure Limits:
Manganese (Mn)*	NA	0.50%	NA
Iron (Fe)*	NA	0.50%	NA
Zinc (Zn)*	NA	0.25%	NA
Boron (B)*	NA	0.10%	NA
Copper (Cu)*	NA	0.10%	NA
Other**	NA	98.55%	NA

*Active Ingredient(s)

**Other ingredients are any substances other than an active ingredient contained in this product. Other ingredients are either non-hazardous or remain proprietary. Hazards that may be associated with other ingredients are addressed in this document.

Section 3: Hazards Identification

EMERGENCY OVERVIEW

Symptoms of Acute Exposure:

Eye: This product may cause slight eye irritation and redness. The extent of the injury will depend upon the amount and duration of contact, and the speed and thoroughness of the first aid treatment.

Skin: This product may cause slight irritation to the skin. The extent of the injury will depend upon the amount and duration of contact, and the speed and thoroughness of the first aid treatment.

Ingestion: Small amounts unlikely to have harmful effects to health.

Inhalation: No signs of harmful effects to health.

Symptoms of Chronic Exposure: With prolonged contact to the eye, irritation and redness can occur. With prolonged exposure to skin, it can cause dry and /or red, itchy skin. MIN-jet Manganese is not a known carcinogen.

Potentially Aggravated Condition: None Known

Section 4: First Aid Measures

Eye Contact: Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. If irritation persists, seek medical attention.

Skin Contact: If on skin, wash with soap and water thoroughly.

Ingestion: Do NOT induce vomiting. Small quantities of this material may cause no harm. If large amounts are swallowed, give two glasses of water or milk to drink and contact a physician or poison control center immediately.

Inhalation: If inhaled and signs of throat or nose irritation are observed, remove person the fresh air.

Note to physician: There is no specific antidote for this material, and treatment of over exposure should be directed at the control of symptoms and the clinical condition.

Section 5: Fire Fighting Measures

Fire and Explosion:

Flash Point: NA
Method: NA
Auto ignition: NA
Flammable Limits (% in air): Lower: NA Upper: NA
Extinguishing Media: CO₂, dry chemical, foam and water fog. Use media that is appropriate for surrounding materials.

NFPA Ratings: Health 1; Flammability 0; Reactivity 0; Special None;

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4) These values are obtained using professional judgment. Values were not available in the guidelines or published evaluations prepared by the national Fire Protection Association, NFPA.

Fire Fighting Instructions: A self-contained breathing apparatus should be worn by fire-fighters.

Hazardous Combustion Products: MIN-jet Manganese is non-flammable.

Section 6: Accidental Release Measures

In Case of Spill or Leak: Control the spill or leak at the source. If product is leaking from a pressurized device, shut off the pressure to slow the source of the leak. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage, drainage systems, or any body of water. High quantities of MIN-jet Manganese in the soil may cause damage to trees or vegetation. For liquid spills, cover entire spill with absorbent material, and place into appropriate disposal container. Contaminated absorbent and wash water should be disposed of according to local, state and federal regulations.

Section 7: Handling and Storage

For commercial and/or farm applications:

User must read and observe all precautions on the product label.

Store the material in a cool, dry place, in closed container, protected from light. Maintain maximum integrity of this product by handling shelved bottles in a first-in, first-out basis. Do not store food, beverages, or tobacco products in the material storage area. Read entire label before using.

Section 8: Exposure Controls/Personal Protection

For commercial and/or farm applications:

User must read and observe all precautions on the product label.

Eye Protection: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear. Splash goggles are recommended. Applicators should have an eyewash bottle available while injecting. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.

Skin Protection: Avoid prolonged or frequent skin contact with this material. Skin contact can be minimized by wearing protective gloves. Chemically resistant gloves should be worn at all times when handling this material. Wear chemical resistant gloves, such as polyethylene, butyl rubber, neoprene rubber or viton.

Respiratory Protection: No special respiratory protection is required. However, maintain good ventilation when using material.

Ingestion Protection: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash hands with soap and water thoroughly after use to prevent possible ingestion of this product.

Section 9: Physical and Chemical Properties

Appearance: Brownish-green liquid
Odor: Slight Odor
Solubility: Completely soluble in water.
Melting Point: NA
Boiling Point: 212°F
Specific Gravity: 1.07 g/ml
Evaporation: NA
Vapor Pressure: NA
Molecular Weight: NA
Density: NA
pH: 4.0-4.5

Section 10: Stability and Reactivity

Chemical Stability: Product is stable at normal ambient temperature.
Conditions to Avoid: None known.
Incompatibility (Materials to Avoid): Strong acids or alkali materials and strong oxidizers.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide.
Hazardous Polymerization: Polymerization will not occur.

Section 11: Toxicology Information

Acute: (Active Ingredient Specific Information)

Eye Irritation: NA

Skin Irritation: NA

Dermal Toxicity: NA

Oral Toxicity: NA

Inhalation Toxicity: NA

Skin sensitization: NA

Sub-chronic Toxicity Studies: NA

Chronic/Carcinogenicity: NA

Reproductive/Developmental Effects: NA

Section 12: Ecological Information

(Active Ingredient Specific Information)

Summary of Ecological Effects: NA

Avian Toxicity: NA

Aquatic Organism Toxicity: NA

Other Non-Target Organism Toxicity: NA

Section 13: Disposal Considerations

Applicators must dispose of any unused product as the label indicates.

Disposal Methods: Dispose of product containers, waste containers, and residues according to local, state, and federal health and environmental regulations.

Section 14: Transport Information

DOT Shipping Name: NA
Technical Shipping Name: NA
DOT Hazard Class: NA
DOT Identification Number: NA
Remarks: NA

Section 15: Regulatory Information

Regulations Under FIFRA: None

Other U.S. Federal Regulations:

OSHA: NA
CERCLA RQ: NA
RCRA: NA

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NA

State Regulations: Some state standards may be stricter than the federal government, therefore users should consult state or local authorities since this section cannot provide a complete list of all state regulations.

Section 16: Other Information

For any non-emergency questions about this product call: 1-781-935-9070

Original Issued Date: 03/09/2004

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