



1-866- ARBORJT (272-6758)  
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[www.arborjet.com](http://www.arborjet.com)

MIN-jet Manganese is formulated for Maple and other diffuse porous hardwood trees to provide the essential micro-elements to alleviate leaf Chlorosis (yellowing). MIN-jet Manganese is water-soluble and compatible with plant sap. MIN-jet Manganese is formulated from organic chelates and contains the highest quality plant-derived minerals. These minerals are immediately available for use by the tree for growth and development. MIN-jet Manganese helps to promote development and function of roots, stem and foliage. MIN-jet Manganese supplies 5,000ppm of Manganese and 5,000ppm of Iron to alleviate symptoms of leaf yellowing.

**Guaranteed Analysis:**

Iron (Fe)..... 0.50%  
 Manganese (Mn)..... 0.50%  
 Zinc (Zn)..... 0.25%  
 Boron (B)..... 0.10%  
 Copper (Cu)..... 0.10%

**NET CONTENTS: 1 GAL**  
**NET WEIGHT: 9.4 LBS**

**RESTRICTIONS**

- ✓ Do not inject trees more than once annually.
- ✓ Not recommended for newly planted trees.
- ✓ Do not inject drought stressed trees.
- ✓ Do not treat trees that are damaged by herbicides.
- ✓ Do not inject trees within two weeks of any other spray or soil chemical treatment.
- ✓ Do not inject trees during temperature extremes (<40F or >90F)
- ✓ Do not inject trees during leaf expansion.

**Note:** This product is NOT a pesticide.

**APPLICATION & USES**

MIN-jet Manganese is formulated for plants growing in poor or high pH soils. Use MIN-jet Manganese to stimulate healthy, green leaves without the addition of Nitrogen. This formulation may be used undiluted; however it is completely miscible in water. The recommended dilution is 1 part MIN-jet Manganese to 3 parts water. Note that stressed trees will take up slowly. To enhance uptake in stressed trees, dilute the formulation in a ratio of 1 part MIN-jet Manganese in 10 to 100 parts water. Use half the amount of MIN-jet Manganese if trees have small canopies. Treat when the foliage has matured or in the fall for next season response. To assure optimum effectiveness, this product must be injected or Micro-infused into the active sapwood (xylem).

**APPLICATION RATES**

**High Volume (Micro-Infusion™) Rates for MIN-jet Manganese**

**Recommended for Moderate to Severe Yellowing of Hardwood Shade Trees:**

Such as Beech, Birch, Cherry, Elm, Eucalyptus, Horse Chestnut, Linden, Maple, Oak, Poplar, Sycamore, Tulip Poplar and Willow.

**May be used as formulated or dilute 1 part MIN-jet Manganese to 1 to 3 parts water.**

Tree DBH"	MIN-jet Manganese (mL)/ Tree	Water (mL)/ Tree	Total Mix Volume (mL)/ Tree	Number of Tree I.V.s	**Number of Injection Sites or # Arborplugs™
6-10"	40-80	80	120-160	1	4
11-15"	80-160	160	240-320	1	4
16-20"	115-225	225	340-450	1*	6*
21-25"	175-345	345	520-690	2	8
26-30"	210-420	420	630-840	2*	10
31-35"	300-590	590	890-1180	3	12
36-40"	335-665	665	1000-1330	3	12

\* Use Tree I.V. Expansion Kit (010-7016) or use an additional Tree I.V.

Note: Evenly distribute Total Mix Volume when using multiple Tree I.V.'s. Tank mix only what you intend to use per tree, or use within 24 hours of mixing

\*\*Calculate number of Arborplugs using DBH"/3 for TREE I.V.

**Low Volume (Micro-Injection) Rates for MIN-jet Manganese:**

**Recommended for:** Conifers, Ornamental and Flowering Trees including Ash, Catalpa, Dogwood,, Honey Locust, Live Oak, Magnolia, and Maple.

**May be used as formulated or dilute 1 part MIN-jet Iron with 1 to 3 parts water.**

Apply 5 to 10 mLs of MIN-jet Manganese per injection site every 6" of tree circumference (DBH"/2).

## GENERAL DIRECTIONS

MIN-jet Manganese is designed for use with Arborjet Tree Injection Systems, or with injection devices that meet the application and label requirements.

Tree diameter at breast height (DBH) must be measured to determine application rate, and number of injection sites. Use one every 6-8" of stem circumference as a guide to determine the number of application sites to apply.

Recommended application timing: from leaf maturity (in spring) to fall (minimum soil temperatures, 40 F). Application to newly expanding leaves or in dry, hot conditions may result in foliar burn. Conditions that favor transpiration (e.g., moist soil) are optimal for injection uptake. Irrigate trees prior to treatment for optimal product uptake.

## ARBORJET MICRO-INFUSION™ PROCEDURES

Inject into the trunk tissue immediately above the trunk flare, typically within 12" of the soil. Fully read equipment training manuals before performing Micro-infusions.

### **VIPER Method (uses Arborplugs™)**

Use a 3/8" diameter drill bit. Drill through bark, then 5/8" deep into the xylem (sapwood). Drill bits should be clean and sharp. Set the Arborplugs™. Insert the VIPER needle, start application, and remove the VIPER needle upon completion. The Arborplug™ will remain in the tree.

### **STINGER Method (no Arborplugs™)**

Use a 7/32" diameter drill bit. Drill through bark, then 5/8" deep into the xylem (sapwood). Push STINGER needles into holes, start application, and remove the STINGER needles upon completion. The STINGER Method requires no Arborplugs™.

### **Resinous Conifers (ex. Pine, Spruce) Only VIPER Method**

In resinous conifers, it's important to fill, pressurize, and prime your Tree I.V. prior to setting Arborplugs™. Set each Arborplug™ and immediately insert VIPER needle and turn valve on to apply pressure. If there is a delay between setting each Arborplugs™ and inserting each VIPER needles, then the resin flow may reduce uptake speed.

### **Hardwoods (ex. Oak, Ash, Maple) VIPER or STINGER Method**

In hardwoods, it's recommended that you fill, pressurize, and prime your Tree I.V. prior to setting Arborplugs™. Then set all Arborplugs™, insert VIPER needles, and open all valves to begin Micro-infusion.

## CLEAN-UP

**IMPORTANT!** It is critical to rinse the Arborjet Tree Injection System thoroughly after use. Use **CLEAN-jet** or isopropyl alcohol. Residues left in the device may gum, clog or corrode the internal components.

## COMPATIBILITY

MIN-jet Manganese is formulated to be used alone. MIN-jet Manganese cannot be mixed with IMA-jet. Use MICRO-jet Mixable nutrition for IMA-jet compatibility. The physical compatibility of MIN-jet Manganese should be tested before use with other products.

To determine the physical compatibility of MIN-jet Manganese with other products, use a jar test as described below.

1. Add proportionate amounts of the two products to 1 pint of water, and thoroughly mix.
2. Wait at least 5 minutes. If the combination remains mixed it is physically compatible. If precipitates form, it's not.
3. If compatible, use the same procedure for adding required ingredients to the formulation tank.

**NOTE:** The safety of all potential tank mixes on all trees listed on this label may not have been tested. Before applying any tank mixture not specifically recommended on this label, the safety to the target tree should be tested. It is not advisable to apply pesticides via trunk injection or infusion applications that do not completely dissolve or disperse in solution. Application of liquid flowables, suspension concentrates, or dispersible granules that do not completely dissolve is NOT recommended.

## RESTRICTIONS

Keep away from children  
Keep away from heat and open flame

## STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal  
Keep from freezing  
Store in a cool, dry place

**DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL:** Dispose of empty bottles in a sanitary landfill or by incineration if approved by State and Local authorities.

### **NOTICE OF WARRANTY**

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.



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