



MATERIAL SAFETY DATA SHEET



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Gardener's Choice Vitamin B1
EPA REG. NUMBER: N/A
PRODUCT NUMBER: 90050, 90051

MANUFACTURER: Value Garden Supply
ADDRESS: P.O. Box 585, St. Joseph, MO 64502

MANUFACTURER PHONE: (888) 603-1008
MANUFACTURER FAX PHONE: (952) 884-6149
EMERGENCY PHONE: (800) 858-7378

PRODUCT USE: For transplanting fruit trees, bare root stock, bedding plants, flowers, vegetables and cuttings.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENTS*:</u>	<u>CAS NO.</u>	<u>% WT</u>	<u>OSHA TWA</u>	<u>OSHA STEL</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>
Thiamine Hydrochloride (Vitamin B-1)	67-03-8	0.01%	NE	NE	NE	NE
Iron (Fe)	1336-80-7	0.125%	NE	NE	NE	NE
Zinc (Zn)	557-34-6	0.125%	NE	NE	NE	NE
Manganese (Mn)	7785-87-7	0.125%	NE	NE	NE	NE

* All ingredients in quantities > 1.0 % (0.1 % for carcinogens or teratogens) that are **potentially** hazardous per OSHA definitions

N/A = not applicable NE = not established

SECTION 3: HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS: This material may be slightly irritating to the eyes and skin. Personnel responding to a spill of this material would likely encounter no other substantial hazards.

CARCINOGENICITY: None listed per OSHA, NTP, or IARC

SECTION 4: FIRST AID MEASURES

IF IN EYES: 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. Call a poison control center or doctor for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call 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 the poison control center or doctor

IF INHALED: Move Person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT: N/A

AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: CO₂, dry chemical, foam, water

SPECIAL FIRE FIGHTING PROCEDURES: General

UNUSUAL FIRE AND EXPLOSION HAZARDS: N/A



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NFPA HAZARD CLASSIFICATION:	<u>HEALTH</u> 1	<u>FIRE</u> 1	<u>REACTIVITY</u> 0	<u>SPECIFIC</u> NE
NFPA HAZARD RATING CODES:	<u>INSIGNIFICANT</u> 0	<u>SLIGHT</u> 1	<u>MODERATE</u> 2	<u>HIGH</u> <u>EXTREME</u> 3 4

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Pick up liquid with Oil Dry, cat litter, clay, rags or other absorbent and place in a disposable container. (See Disposal Comments in Section 13)

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store in a cool, dry place. Avoid temperatures at or below 32° F. Keep in original container and preferably in a locked storage area inaccessible to children and domestic animals. Do not store near food or foodstuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: In typical applications no engineering controls should be needed

VENTILATION: General

RESPIRATORY PROTECTION: If industrial hygiene surveys show that occupational exposure limits may be exceeded, use NIOSH approved respirator with dust/mist cartridges

EYE PROTECTION: Recommended to avoid getting material directly into eyes

SKIN PROTECTION: Recommended

WORK HYGIENIC PRACTICES: General

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear	VAPOR PRESSURE (mmHg): NE
ODOR: Vitamin odor	VAPOR DENSITY (AIR =): NE
PHYSICAL STATE: Liquid	SPECIFIC GRAVITY: 1.00
BOILING POINT: 212°F	DENSITY: NE
MELTING POINT: N/A	PARTICAL SIZE: N/A
FREEZING POINT: NE	AUTO IGNITION: N/A
WATER SOLUBILITY: Complete	OTHER SOLUBILITIES: NE

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY (MATERIAL TO AVOID): N/A

HAZARDOUS POLYMERIZATION: Will not occur

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE ORAL EFFECTS: Acute Oral LD₅₀ = 20,000 mg/kg

ACUTE DERMAL EFFECTS: NE

CARCINOGENICITY: None listed per OSHA, NTP, or IARC



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SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: NE

ENVIRONMENTAL FATE: NE

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: This material (as packaged) is not considered a hazardous waste. Be aware that the waste owner has responsibility for final disposal. Regulations may also apply to empty containers, liners or rinsate. Laws may change or be reinterpreted; state and local regulations may be different from federal regulations. This information applies to materials as manufactured; contamination or processing may change waste characteristics and requirements.

SECTION 14: TRANSPORT INFORMATION

***DOT HAZARD DESCRIPTION:** N/A

(*) U.S Department of Transportation

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: N/A

EPA REGULATIONS: N/A

SARA TPQ: N/A

OSHA REGULATIONS: N/A

CERCLA: N/A

INDIVIDUAL STATES: States such as Pennsylvania, New Jersey, California, Vermont, Massachusetts and Rhode Island may all have components of this product listed; consult specific state regulatory requirements for additional information.

SECTION 16: OTHER INFORMATION

This information is provided in good faith, but without express or implied warranty. For additional information, refer to the American Conference of Governmental Industrial Hygienists (ACGIH) documentation of TLV's (Threshold Limit Values) for individual components and the DOT Emergency Response Guidebook.