



SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY INFORMATION

Trade Name (as labeled): TurfVantage® Microhance®
Common Name: Liquid Fertilizer
Distributed By: Monty's® Plant Food Co.
4800 Strawberry Lane
Louisville, KY 40209

Business Phone: Monty's® Plant Food Co. - (800) 978-6342

Date of Preparation: February 25, 2014
Date of Update: February 10, 2016

SECTION 2. HAZARD IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous according to the 2012 OSHA Hazardous Communication Standard (29 CFR 1910.1200)

Skin sensitization: Category 1B

Hazards Not Otherwise Classified (HNOC): Not applicable

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves & eyewear
Contaminated work clothing should not be allowed out of the workplace

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical attention

IF IN EYES: Flush for 15 minutes with water, lifting upper and lower eyelids occasionally. Get medical attention
Wash contaminated clothing before reuse

Precautionary Statements - Storage

Not applicable

Precautionary Statements - Disposal

Dispose of contents/container according to federal, state, and local regulations.

Label elements

EMERGENCY OVERVIEW



Warning May cause irritation to skin, eyes and respiratory tract

Appearance & Physical State: Dark Brown/Black Liquid **Odor:** Slight Ammonia Odor

SECTION 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	CAS #	%	Typical Grade %
Solution mixture of nitrogen micronutrients, ammonium sulfate, boron, chelated iron, manganese EDTA & zinc EDTA			
Total Nitrogen as N		1-5	3
Total Sulfur		0.5-2	1

Hazardous Material Information Rating System:

(0 = least; 1 = slight; 2 = moderate; 3 = high; 4 = extreme)

Health (blue) 1
Flammability (red) 0
Reactivity (yellow) 0

SECTION 4. FIRST-AID MEASURES

<u>If Inhaled:</u>	Remove to fresh air. If breathing becomes difficult, contact a medical physician. Give artificial respiration if victim is not breathing and obtain immediate medical attention.
<u>If Ingested:</u>	Call physician or Poison Control Center immediately for most current information. Dilute with large amounts of water and induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. If vomiting occurs, keep head lower than hips to prevent introduction of fluid into the lungs.
<u>In Case Of Skin Contact:</u>	Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if skin becomes irritated.
<u>In Case Of Eye Contact:</u>	Flush immediately with water for at least 15 minutes, lifting the upper and lower eyelids occasionally. Call a physician if eye irritation persists.

Victims of chemical exposure and all rescuers must be taken for medical attention. Take a copy of label and SDS to physician or health professional with victim.

Symptoms Of Over Exposure:

- Eyes:** May cause inflammation, redness, and possible damage with prolonged exposure.
- Skin:** Prolonged or repeated exposure may cause skin ulcerations and /or burns.
- Inhalation:** It may cause headaches, nausea, or weakness in case of prolonged exposure. Oxygen can be administered if breathing becomes difficult.
- Ingestion:** May result in nausea, vomiting, diarrhea, digestive disorders, or chemical burns.

SECTION 5. FIRE-FIGHTING MEASURES

- Flash Point:** Not flammable.
- Test Method:** Not flammable.
- LEL Flammable Limits:** Not flammable.
- UEL Flammable Limits:** Not flammable.
- Auto ignition Temperature:** Not flammable.
- Extinguishing Media:** Water spray, Foam, Carbon Dioxide, Dry-Chemical.
- Unusual Fire and Explosion Hazards:** Avoid high temperatures that may cause thermal decomposition or explosion, especially in confined or poorly ventilated spaces.
- Special Firefighting Procedures:** Wear positive pressure, self-contained breathing apparatus (SCBA) and goggles. Avoid exposure to smoke or fumes. Contain any liquid runoff.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Spill And Leak Response: For small or incidental spills, the minimum personal protective equipment should be rubber gloves, rubber apron, and chemical goggles. Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Respirators with ammonia canisters or SCBA gear may be required. For large spills, contain by diking with soil or other non-combustible absorbent material. Dilution with water will reduce the release of ammonia vapors. Keep material out of sewers, storm drains, and surface waters. Comply with all applicable government regulations on spill reporting, handling, and waste disposal.

SECTION 7. STORAGE AND HANDLING

- Storage Practices:** Store in a cool (above 45 °F), dry, well-ventilated area. This product should be stored in tanks constructed of stainless steel, fiberglass, polypropylene, or polyethylene. Valves should be inspected on a regular basis and replaced as needed to prevent leakage. Transfer equipment should be constructed of stainless steel or chemical-resistant plastic. Do not store in aluminum

vessels. For packaged product, do not stack pallets more than two (2) high. Do not store near food or feed.

Handling Practices: Keep away from incompatible materials. Do not breathe mists. Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Wash with soap and water after handling.

Work/Hygiene Practices: **Avoid getting chemicals ON YOU or IN YOU.** Wash hands with soap and water after handling chemicals. Do not eat or drink around or while handling chemicals. Keep out of reach of children.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Chemical Name	Exposure Limits In Air	
	ACGIH TVL (ppm)	OSHA PEL (ppm)
Solution mixture of nitrogen micronutrients, ammonium sulfate, boron, chelated iron, manganese EDTA & zinc EDTA	15 mg/m ³	NE
NE = Not Established		NA = Not Available

Ventilation/Engineering Controls: Use with adequate ventilation to keep airborne levels below recommended exposure limits.

Respiratory Protection: If work conditions generate vapors or mist, wear a NIOSH approved respirator appropriate for those emission levels. Appropriate respirator may be a full facepiece respirator, an SCBA in the pressure demand mode, or a supplied-air respirator.

Eye Protection: Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, contact lenses should not be worn when working with chemicals because they contribute to the severity of an eye injury.

Hand Protection: Rubber gloves with gauntlets.

Body Protection: Use body protection appropriate for task. Chemical-resistant coveralls and rubber aprons are generally acceptable.

Other Protective Measures: An eyewash and safety shower should be nearby and ready for use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Appearance:</u>	Clear Green Liquid	<u>Boiling Point:</u>	>212 °F.
<u>Odor:</u>	Slight ammonia odor	<u>Freezing Point:</u>	32 °F.
<u>pH:</u>	6.0 to 6.5	<u>Vapor Pressure:</u>	NA.
<u>Water Solubility:</u>	100%.	<u>Vapor Density (air = 1):</u>	NA.
<u>Density:</u>	9.00 lbs./gallon	NA = Not Available.	
<u>Specific Gravity (H₂O = 1)</u>	1.078		

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions and pressure.
Conditions To Avoid: High Temperatures.
Incompatibility: Brass, steel, strong oxidizing agents.
Hazardous Polymerization: Will not occur.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity Data: Not Available

Acute Effects:

Eyes: Moderate irritant. May cause redness, burning, inflammation, and/or damage.

Skin: Moderate irritant, especially with prolonged exposure. May cause skin ulceration and/or burns.

Ingestion: May cause severe gastrointestinal irritation, vomiting, stomach cramps, and diarrhea. May interfere with circulation and oxygen carrying capacity of blood with prolonged exposure.

Inhalation: May cause irritation to mucous membranes, coughing, or breathing difficulties. If exposed to decomposition gases remove from area immediately.

Chronic Effects: Repeated overexposure may cause dermatitis, conjunctivitis or cataracts.

SECTION 12. ECOLOGICAL INFORMATION

Effect Of Material On Plants/Animals: May be harmful to fish, livestock, and wildlife. Dissolved mineral salts may cause irritation of the digestive tract. Non-persistent. Non-cumulative when applied using normal agricultural practices.

Effect Of Material On Aquatic Life: Not known

SECTION 13. DISPOSAL CONSIDERATIONS

Do not contaminate lakes, streams, ponds, estuaries, oceans, or other waters by discharge of waste effluents or equipment rinsate. Dispose of waste effluents according to federal, state, and local regulations. Chemical additions or other alterations of this product may invalidate any disposal information in this SDS.

SECTION 14. TRANSPORTATION INFORMATION

Not D.O.T Regulated

Other Shipping Description: Fertilizing Compounds (Manufactured), Liquid, NMFC Item 68140, NMFC Item 68140 Sub 6, LTL Class 70

SECTION 15. REGULATORY INFORMATION

CERCLA: None

SARA Reporting Requirements: SARA, TITLE III, SECTION 313: This product does not contain toxic chemicals above de minimis concentrations subject to the reporting requirements of Section 313, Title III of the Superfund Amendments and Reauthorization Act of 1986.

California Proposition 65: WARNING. This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

SECTION 16. OTHER INFORMATION

The information and recommendations herein are taken from data contained in independent, industry recognized references including NIOSH, OSHA, ANSI, and NFPA. This information is, as of date listed above, true and accurate to the best of Monty's® Plant Food Co. knowledge. It is intended for use by persons possessing technical knowledge and at their own discretion and risk. Since actual use is beyond our control, no guarantee, express or implied, and no liability is assumed by Monty's® Plant Food in conjunction with the use of this information. Actual conditions of use and handling may require consideration of information other than, or in addition to, that which is provided herein.

Judgment as to the suitability of the information herein for purchaser's purposes is necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Monty's® Plant Food Co. extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purpose or for the consequences of its use.