

MATERIAL SAFETY DATA SHEET

Product Name: Munger Horticultural Vinegar Plus

1. IDENTIFICATION

Product name:	Munger Horticultural Vinegar Plus (PCP Reg. No. 29405)
Chemical name of active ingredient(s):	Acetic Acid
Registrant:	Munger Landscape Distribution 4231 Concession 4, RR # 4 Harrow, ON N0R 1G0 Phone: 519-738-2571
For fire, spill, and/or leak emergencies, contact	Phone: 1-519-738-2571
For medical emergencies and health and safety inquiries, contact	Phone: 1-519-738-2571

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Acetic Acid	64-19-7	20	10 ppm (25mg/m ³)	10 ppm (25mg/m ³) (8 hours)	15ppm (37mg/m ³) (STEL, 15mins.) 50ppm (125 mg/m ³) (IDHL, > 30mins.)	NA

NA=not available

3. HAZARDS IDENTIFICATIONS

PHYSICAL PROPERTIES

Appearance: Clear and colourless non-viscous liquid

Odor: Free from any off odours

EMERGENCY OVERVIEW: KEEP OUT OF REACH OF CHILDREN. CAUTION-Skin Irritant. Corrosive to the eye. Do not get in eye. May irritate skin. Avoid inhaling. Avoid contact with skin and clothing. Wash immediately after use. Avoid all contact with desirable plants. Overspray or drift will injure contacted foliage.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

PRIMARY ROUTES OF EXPOSURE: Eye contact and inhalation.

POTENTIAL HEALTH EFFECTS

Eye: Eye contact will cause eye irritation.

Inhalation: Prolonged inhalation of vapours may cause irritation to respiratory tract.

4. FIRST AID MEASURES

FIRST AID:

If swallowed: Call a poison control centre 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 centre or doctor. Do not give anything by mouth to an unconscious person.

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

If inhaled: 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 centre or doctor for further treatment advice.

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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 eye. Call a poison control centre or doctor for treatment advice.

Take the container label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION

Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLASH POINT: No flash when 10% vinegar sample test in tag closed cup tester.

FLAMMABLE LIMITS:

LFL/UFL: Not applicable

EXTINGUISHING MEDIA: Will not burn.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Will not occur.

FIRE-FIGHTING PROCEDURES: Not applicable.

6. ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: If vinegar is spill, water may be used to dilute. Dispose of waster material in accordance with local, provincial/state and federal requirements.

7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid contact with eyes and inhaled. Where contact with this material is likely, eye protection is recommended.

PRECAUTIONS TO BE TAKEN IN STORAGE: To prevent contamination store this product way from food or feed. Keep from freezing. Store in original container out of reach of children.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Wear safety goggles or full-face shield.

SKIN PROTECTION: Rubber gloves, long sleeve shirt, rubber boots and slacks.

VENTILATION: General ventilation.

EXPOSURE GUIDELINES: Refer to Section 2.

ENGINEERING CONTROLS: Minimize airborne concentrations.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear and colourless non-viscous liquid

ODOR: Free from any off odours

FLASH POINT: No flash when 10% vinegar sample test in tag closed cup tester.

pH: 2-3

DENSITY: 1.022 – 1.032 @20°C

WATER SOLUBILITY: Complete

VAPOR PRESSURE: 16.9 mmHg @68°F (10% acetic acid)

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BOILING POINT: 214°F @760 mmHg (10% acetic acid)
FREEZING POINT: 26°F (10% acetic acid)(calculated)
OCTANOL/WATER PARTITION COEFFICIENT: Not available

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal use and storage conditions.

INSTABILITY CONDITIONS AND MATERIALS TO AVOID: Strong oxidizing agents, strong bases. Avoid application to reactive metals such as aluminum, tin, iron, or items such as fencing or lawn furniture in order to prevent staining, mottling, or otherwise interfering with finished metal surfaces.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES

Acute Oral LD50 (Rat): >5,000 mg/kg

Acute Dermal LD50 (Rat): >5,000 mg/kg

Acute Inhalation LC50 (Rat): Prolonged inhalation of product vapors may cause respiratory tract irritation

Eye Irritation (Rabbit): Eye irritant

Dermal Irritation (Rabbit): Skin irritant

Dermal Sensitization (Guinea Pig): Not a skin sensitizer

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This product may be toxic to aquatic organisms. Do not apply or allow runoff to reach lakes, streams and ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

PESTICIDE DISPOSAL: For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and in accordance with provincial requirements.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

14. TRANSPORT INFORMATION

UN 2790, Acetic acid solution, 8, PGIII

15. REGULATORY INFORMATION

CANADIAN REGULATIONS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the CPR.

Acetic acid (CAS # 64-19-7) is included on the Canadian Ingredient Disclosure List.

U.S. FEDERAL REGULATIONS:

REGULATIONS UNDER FIFRA: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

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SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.
Section 311/312: Acute health hazard (immediate)
Section 313: Not applicable.

CA PROPOSITION 65: Not applicable.

CERCLA RQ: Acetic acid RQ = 5000 lbs.

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt

16. OTHER INFORMATION

NFPA HAZARD RATINGS	NFPA		
HEALTH:	1	0	MINIMAL
FLAMMABILITY:	0	1	SLIGHT
REACTIVITY:	0	2	MODERATE
		3	HIGH
		4	SEVERE

MSDS DATE: Draft 9-22-09.

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