

MATERIAL SAFETY DATA SHEET



For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300
For Medical Emergencies Only, Call: 1-877-325-1840

Voluntary Purchasing Groups, Inc.
230 FM 87
Bonham, Texas 75418

Effective Date: December 19, 2008

Ferti-lome® Brush Killer Stump Killer

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: Ferti-lome® Brush Killer Stump Killer
EPA #62719-226-7401

COMPANY IDENTIFICATION:

Voluntary Purchasing Groups, Inc.
230 FM 87
Bonham, TX. 75418

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Amber liquid with slight, sweet odor. May cause eye irritation or corneal injury. May cause skin irritation. Combustible. Toxic to aquatic organisms and avian.

3. COMPOSITION/INFORMATION ON INGREDIENTS:

<u>COMPONENT</u>	<u>CAS NUMBER</u>	<u>W/W%</u>
Triclopyr BEE	64700-56-7	96.3
Balance		3.7

4. FIRST AID:

EYES: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

SKIN: Wash skin with plenty of water.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: move person to fresh air; if effects occur, consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES:

FLASH POINT: None (tested to 200°F)

METHOD USED: TOC, TCC

FLAMMABLE LIMITS

LFL: Not determined

UFL: Not determined

EXTINGUISHING MEDIA: Water fog, alcohol-resistant foam, CO₂, and dry chemical.

FIRE & EXPLOSION HAZARDS: Irritating vapors under fire conditions.

FIRE-FIGHTING EQUIPMENT: wear a positive pressure self-contained breathing apparatus.

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6. ACCIDENTAL RELEASE MEASURES:

ACTION TO TAKE FOR SPILLS/LEAKS: Contain spills. Keep out of streams and domestic water supplies. Report large spills to Voluntary Purchasing Groups. Absorb small spills in inert materials, such as sand, sawdust, or Zorball.

7. HANDLING AND STORAGE:

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

HANDLING: keep out of reach of children. Harmful if swallowed, inhaled, or absorbed through skin. Causes eye irritation. Prolonged or frequently repeated skin contact may cause allergic skin reactions in some individuals. Avoid contact with eyes, skin and clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

STORAGE: store product in original container. Keep container tightly closed when not in use. Do not store with acids, bases or oxidizing materials. See product label for handling/storage precautions relative to the end use of this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

These precautions are suggested for conditions where the potential for exposure exists. Emergency conditions may require additional precautions.

EXPOSURE GUIDELINE(S):

Triclopyr: Voluntary Purchasing Groups, Inc. Hygiene Guide is 2 mg/ M³ as acid equivalent, D-SEN.

A D-Sen notation following the exposure guideline refers to the potential to produce dermal sensitization, as confirmed by human or animal data.

ENGINEERING CONTROLS: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines.

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

RESPIRATORY PROTECTION: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. Wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. The following should be effective types of air-purifying respirators: organic vapor cartridge.

SKIN PROTECTION: wear clean, body-covering clothing.

HAND PROTECTION: Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Examples of preferred glove barrier materials include: Butyl rubber, Chlorinated polyethylene, Polyethylene, Ethyl vinyl alcohol laminate (EVAL). Examples of acceptable glove barrier materials include: Natural rubber (latex), Neoprene, Nitrile/butadiene rubber (Nitrile or NBR), Polyvinyl chloride (PVC or Vinyl), Viton.

EYE/FACE PROTECTIONS: Use safety glasses.

APPLICATORS AND ALL OTHER HANDLERS: refer to the product label for personal protective clothing and equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES:

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Boiling Point: 698°F (370C); Decomp.
VAPOR PRESSURE: .00001 MMHg#33c
VAPOR DENSITY: 12.3 (AIR=1)
SOLUBILITY IN WATER: 23mg/L
SPECIFIC GRAVITY: 1.306@68°F
APPEARANCE: Amber liquid
ODOR: Very slight sweet, non-offensive odor

10. STABILITY AND REACTIVITY:

STABILITY: (CONDITIONS TO AVOID) **combustible.**
Stable under normal storage conditions.

INCOMPATIBILITY: (SPECIFIC MATERIALS TO AVOID)
Acids, bases and oxidizing materials

HAZARDOUS DECOMPOSITION PRODUCTS:
Nitrogen oxides, hydrogen chloride, and phosgene may result under fire conditions.

HAZARDOUS POLYMERIZATION:
Not known to occur.

11. TOXICOLOGICAL INFORMATION:

POTENTIAL HEALTH EFFECTS: This section includes possible
Adverse effects., which could occur if this material is not handled in the recommended manner.

EYE: May cause moderate eye irritation. Corneal injury is unlikely.

SKIN: Brief contact may cause skin irritation with local redness.
Prolonged skin contact is unlikely to result in absorption of harmful
amounts. The LD₅₀ for skin absorption is >2000 mg/kg (rabbits) and >5000 mg/kg (rats). Has caused allergic skin reactions when tested in guinea pigs.

INGESTION: Low toxicity if swallowed. The oral LD₅₀ for rats is 803 mg/kg. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

INHALATION: Prolonged exposure is not expected to cause adverse effects.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: In animals, effects have been reported on the following organs; blood, kidney and liver.

CANCER INFORMATION: Triclopyr did not cause cancer in laboratory animals.

TERATOLOGY (BIRTH DEFECTS): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

REPRODUCTIVE EFFECTS: For triclopyr, in laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals.

MUTAGENICITY: In-vitro and animal genetic toxicity studies were negative.

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12. ECOLOGICAL INFORMATION:

ENVIRONMENTAL FATE:

MOVEMENT AND PARTITIONING:

Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5). Potential for mobility in soil is medium (Koc between 150 and 500).

DEGRADATION AND PERSISTENCE:

Chemical degradation (Hydrolysis) is expected in the environment. Material is expected to biodegrade only very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

ECOTOXICOLOGY:

Material is highly toxic to aquatic organisms on an acute basis (LC₅₀ between 0.1 and 1 mg/L in most sensitive species). Material is slightly toxic to birds on an acute basis (LD₅₀ between 501 and 2000 mg/kg). Material is practically non-toxic to birds on a dietary basis (LC₅₀ >5000ppm).

Acute oral LD₅₀ in honeybee (*Apis mellifera*) is >110 ug/bee.

Acute contact LD₅₀ in honeybee (*Apis mellifera*) is >100 ug/bee.

13. DISPOSAL CONSIDERATIONS:

DISPOSAL METHOD: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or regulatory authorities. This information presented below only applied to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes waste, follow all applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION:

U.S. DEPARTMENT OF TRANSPORTATION INFORMATION:

For all modes of transportation:

This material is not regulated for transport.

15. REGULATORY INFORMATION:

NOTICE: The information herein is present in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, State or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.

U.S. REGULATIONS

SARA 313 INFORMATION:

To the best of our knowledge, this product contains no Chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY:

This product has been reviewed according to the EPA "Harard

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Categories" promulgated under Section 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet The following categories:

An immediate health hazard
A delayed health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA Inventory or are not required to be listed on the TSCA inventory.

OSHA HAZARD COMMUNICATION STANDARD: This Product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA or SUPERFUND): To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

THE INFORMATION HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESS OR IMPLIED, IS MADE. CONSULT VPG, INC. FOR FURTHER INFORMATION.