

MATERIAL SAFETY DATA SHEET

ferti-lome Fruit Tree Spray

DATED: July 1, 2006

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Name: Voluntary Purchasing Groups, Inc., P. O. Box 460, Bonham, Texas 75418

Emergency Telephone: (903) 583-5501

For Additional Information Contact: Product Manager

Common Name (Used on Label): Ferti-lome Fruit Tree Spray

EPA# 70051-75-7401

Chemical Name: Clarified Hydrophobic Extract of Neem Oil

Chemical Formula: N/A

Formula: N/A

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENTS:	CAS. Reg. #	% (Wt.)	OSHA TLV	TWA TLV	STEL TLV
Clarified Neem Oil	5989-65-1	70.00	NA	NA	NA
Pyrethrins	8003-34-7	0.25	Not Est.	*5 mg/m ³	Not Est.
Piperonyl Butoxide	51-03-6	2.50	Not Est.	Not Est.	Not Est.
Inerts		27.25			

*Supplier Recommendation

SECTION 3 - HAZARD IDENTIFICATION - EMERGENCY OVERVIEW

This product is a pale yellow solid intended for use in formulating a pesticide to control insects on agricultural crops.

Signal Word: **CAUTION**

Potential Health Effects (Pyrethrins)

ROUTE(S) OF ENTRY: Eyes, Skin, Oral, Inhalation.

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE: None noted.

ACUTE EYE CONTACT: May cause temporary eye irritation.

CHRONIC EYE CONTACT: Chronic exposure not likely from normal use.

ACUTE SKIN CONTACT: May be irritating to skin. Repeat exposure may cause dermatitis.

CHRONIC SKIN CONTACT: May be irritating to skin. Repeat exposure may cause dermatitis.

ACUTE INGESTION: LD₅₀ > 2 g/kg

CHRONIC INGESTION: None noted.

ACUTE INHALATION: LC₅₀ > 3 mg/L

CHRONIC INHALATION: None noted.

CARCINOGENICITY

*Marginal increases in benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in the lungs of mice, following lifetime high dose exposure to pyrethrins. The significance of this observation is questionable and under review. The doses at which tumors were observed for pyrethrins greatly exceeded potential human exposures from labeled uses. Doses at which these effects were observed greatly exceed anticipated human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that this product would result in carcinogenic effects.

*Supplier Recommendations

Potential Heal Effects (Piperonyl Butoxide)

ROUTES(S) OF ENTRY:	Eyes, Skin, Oral, Inhalation.
HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:	None noted.
ACCUTE EYE CONTACT:	May cause temporary eye irritation.
CHRONIC EYE CONTACT:	Chronic exposure not likely from normal use.
ACUTE SKIN CONTACT:	LD ₅₀ > 2 g/kg
CHRONIC SKIN CONTACT:	May be irritating to skin. Repeat exposure may cause dermatitis.
ACUTE INGESTION:	LD ₅₀ > 4.5 g/kg
CHRONIC INGESTION:	None noted.
ACUTE INHALATION:	LC ₅₀ > 5.9 mg/L
CHRONIC INHALATION:	None noted.

CARCINOGENICITY

*Marginal increases in benign liver tumors in mice were observed in the following lifetime high dose exposure to Piperonyl butoxide. The significance of this observation is questionable and under review. The doses at which tumors were observed greatly exceeded potential human exposures from labeled uses. Doses at which these effects were observed greatly exceed anticipated human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that this product would result in carcinogenic effects.

MUTAGENICITY

*Piperonyl butoxide was not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

TERATOLOGY / REPRODUCTIVE EFFECTS

*There were no birth defects or adverse effects on reproductive parameters in rats or rabbits. Piperonyl butoxide is not considered to be teratogenic.

*Supplier Recommendation

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:	None Noted.
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SECTION 4 – FIRST AID

FIRST AID FOR EYES: Flush immediately with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation persists.

FIRST AID FOR SKIN: Wash with soap and water. Remove contaminated clothing. Seek medical attention if irritation persists.

FIRST AID FOR INHALATION: Remove victim to fresh air. Seek medical attention if irritation persists.

FIRST AID FOR INGESTION: Do not induce vomiting. Vomiting may cause aspiration pneumonia. Contact a physician or poison control immediately.

SECTION 5 – FIRE FIGHTING MEASURES

NEPA HAZARD CLASSIFICATION: HEALTH HAZARD 2
FIRE HAZARD 1
REACTIVITY 0

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, alcohol or polymer foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

SPECIAL FIRE FIGHTING PROCEDURES: Do not inhale smoke vapors. Evacuate non-essential personnel from the area to prevent human exposure to fire, smoke, fumes or combustion products. Prevent spread of contaminated runoff.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: Wear chemical safety glasses with side shields or chemical goggles, chemical resistant gloves, shoes and socks, long-sleeved shirt, and long pants to prevent contact with the product. Cover the spilled area with absorbent material. Sweep the absorbent material onto a shovel, and put the sweepings into a salvage drum. Wash the spill area with water containing a strong detergent. Absorb the rinsate, and sweep the absorbent into a salvage drum. Avoid runoff into storm sewers and ditches that lead to waterways.

SECTION 7 – HANDLING AND STORAGE

STORAGE TEMPERATURE (MIN. / MAX.): N/A 95° F N/A 35° C

SHELF LIFE: Stable for upwards of 1 year at ambient conditions.

SPECIAL SENSITIVITY: Avoid temperature extremes, direct sunlight.

HANDLING AND STORAGE PRECAUTIONS: Keep container tightly closed when not in use. Store in a cool, dry place away from feed and foodstuffs.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION REQUIREMENTS: To avoid eye contact, the use of safety goggles is recommended.

SKIN PROTECTION REQUIREMENTS: To avoid skin contact, the use of chemical resistant gloves, shoes and socks, long-sleeved shirt, and long pants is recommended.

RESPIRATORY / VENTILATION REQUIREMENTS: To avoid inhalation, the use of a NIOSH approved chemical cartridge respirator with organic particle mask is required.

EXPOSURE LIMITS: N/A

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM: Liquid
COLOR: Yellow / Red
ODOR: Garlic Citrus
BOILING POINT RANGE: >200° C
MELT POINT / FREEZE POINT: 3° C
FLASH POINT: 74° C
AUTO IGNITION: N/A
UPPER EXPLOSIVE LIMITS (UEL) Not determined
LOWER EXPLOSIVE LIMITS (LEL): Not determined
pH: 3.37 in 1% emulsion
SOLUBILITY IN WATER: N/A
SPECIFIC GRAVITY: 7.494 lb / gal
BULK DENSITY: N/A
% VOLATILE BY WIEGHT: Not determined
VAPOR PRESSURE at 20° C: Not determined
VAPOR DENSITY: Not determined

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable.
HAZARDOUS POLYMERIZATION: Will not occur.
INCOMPATIBILITIES: None known.
DECOMPOSITION PRODUCTS: None known.
CONDITIONS TO AVOID: Keep away from direct flame.

SECTION 11 – TOXICOLOGICAL INFORMATION

Potential Health Effects (Pyrethrins)

ROUTE(S) OF ENTRY: Eyes, Skin, Oral, Inhalation.

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:	None noted.
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CHRONIC INGESTION:	None noted.
ACUTE INHALATION:	LC ₅₀ > 3 mg/L
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*Supplier Recommendation

Potential Health Effects (Piperonyl Butoxide)

ROUTE(S) OF ENTRY	Eyes, Skin, Oral, Inhalation.
HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:	None noted.
ACUTE EYE CONTACT:	May cause temporary eye irritation.
CHRONIC EYE CONTACT:	Chronic exposure not likely from normal use.
ACUTE SKIN CONTACT:	LD ₅₀ > 2 g/kg
CHRONIC SKIN CONTACT:	May be irritating to skin. Repeat exposure may cause dermatitis.
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TERATOLOGY / REPRODUCTIVE EFFECTS

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*Supplier Recommendation

SECTION 12 – ECOLOGICAL INFORMATION

This product may be hazardous to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or in areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of water.

SECTION 13 – DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by disposal.

WASTE DISPOSAL METHOD: Rinse water must be disposed of on-site or in an approved waste disposal facility.

SECTION 14 – TRANSPORT INFORMATION

D.O.T. PROPER SHIPPING NAME: N/A
TECHNICAL SHIPPING NAME: Insecticides, Other than Poison.
D.O.T. HAZARD CLASS: N/A
U.N. / N.A. NUMBER: N/A
PRODUCT RQ (lbs.): N/A
D.O.T. LABEL: N/A
D.O.T. PLACARD: N/A

SECTION 15 – REGULATORY INFORMATION

OSHA STATUS: N/A
TSCA STATUS: N/A
CERCLA REPORTABLE QUANTITY: N/A
SARA TITLE III:
SECTION 302 EXTREMELY
HAZARDOUS SUBSTANCES: N/A

SECTION 311/312
HAZARD CATEGORIES: N/A
SECTION 313
TOXIC CHEMICALS: N/A
RCRA STATUS: N/A

STATE REGULATORY INFORMATION:

The following chemicals are specifically listed by individual states; other products specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

SECTION 16 – OTHER INFORMATION

REASON FOR ISSUE: Update specific gravity.
APPROVAL DATE: 1/28/05
SUPERSEDES DATE: 6/15/01
MSDS NUMBER: 70051-TU

To the best of our knowledge, the information contained herein is accurate. However, neither *Voluntary Purchasing Groups* nor any of its subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All material may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.