

# 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: January 9, 2009

## Ferti-lome® Triple Action Plus RTU

### 1. PRODUCT AND COMPANY IDENTIFICATION:

**PRODUCT:** Ferti-lome® Triple Action Plus RTU  
**CHEMICAL NAME:** Neem Oil/Pyrethrum  
**CHEMICAL FAMILY:** Lipid  
**EPA No.:** 70051-74-7401  
**SIGNAL WORD:** CAUTION

#### COMPANY IDENTIFICATION:

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### 2. INGREDIENTS:

COMPONENT	CAS No.	Wt. %	OSHA PEL	TWA TLV	STEL TLV
Clarified hydrophobic extract of Neem oil (Neem oil TGA1)	947173-77-5	0.90	NA	NA	NA
Pyrethrins	8003-34-7	0.02	Not Est.	*5mg/m3	Not Est.
Piperonyl Butoxide Inerts	51-03-6	0.20	Not Est.	Not Est.	Not Est.

\*Supplier Recommendation

### 3. HAZARDOUS IDENTIFICATION:

#### EMERGENCY OVERVIEW

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

#### 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:** LD<sub>50</sub> > 2 g/kg

**Chronic Ingestion:** None noted.

**Acute Inhalation:** LC<sub>50</sub>>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

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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 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<sub>50</sub> > 2 g/kg

**Chronic Skin Contact:** May be irritating to skin. Repeat exposure may cause dermatitis.

**Acute Ingestion:** LD<sub>50</sub> > 4.5 g/kg

**Chronic Ingestion:** None noted.

**Acute Inhalation:** LC<sub>50</sub> > 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 exceed 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

## 4. FIRST AID MEASURES:

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

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

**INHALATION:** Remove victim to fresh air. Seek medical attention if irritation persists.

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

### 5. FIRE FIGHTING MEASURES:

**NFPA 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:** No 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.

### 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.

### 7. HANDLING AND STORAGE:

**Storage Temperature (Min./Max.)** 0° / 95°F 0° / 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.

### 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 are recommended.

**Respiratory/Ventilation Requirements:** To avoid inhalation, the use of a NIOSH approved chemical cartridge respirator with organic particle mask is required.

**Exposure Limits:** NA

### 9. PHYSICAL AND CHEMICAL PROPERTIES:

<b>PHYSICAL FORM</b>	Liquid
<b>COLOR</b>	White
<b>ODOR</b>	Garlic Citrus
<b>BOILING POINT RANGE</b>	>200°C

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MELT POINT/FREEZE POINT	0°C
FLASH POINT	N/A
AUTO IGNITION	N/A
UPPER EXPLOSIVE LIMITS (UEL)	Not determined
LOWER EXPLOSIVE LIMITS (LEL)	Not determined
pH	7.83
SOLUBILITY IN WATER	N/A
SPECIFIC GRAVITY	8.3 lb. / gal.
BULK DENSITY	N/A
% VOLATILE BY WEIGHT	Not determined
VAPOR PRESSURE AT 20°C	Not determined
VAPOR DENSITY	Not determined

### 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.

### 11. TOXICOLOGICAL INFORMATION:

#### Potential Health Effects (Pyrethrins)

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Chronic Eye Contact: Chronic exposure not likely from normal use.

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Acute Ingestion: LD<sub>50</sub> > 2 g/kg

Chronic Ingestion: None noted.

Acute Inhalation: LC<sub>50</sub> > 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.

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#### Potential Health Effects (Piperonyl Butoxide)

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**Chronic Ingestion:** None noted.

**Acute Inhalation:** LC<sub>50</sub> > 5.9 mg/L

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### **Carcinogenicity:**

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### **MUTAGENICITY:**

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### **TERATOLOGY/REPRODUCTIVE EFFECTS:**

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\*Supplier Recommendation

## **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.

## **13. DISPOSAL CONSIDERATIONS:**

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

## **14. TRANSPORTATION 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

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### 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 311/31: 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 product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For detail on your regulatory requirements you should contact the appropriate agency in your state.

#### **COMPONENT NAME/**

**CAS NUMBER                      CONCENTRATION    STATE CODE**

To the best of our knowledge, the information contained herein is accurate. However, neither Voluntary Purchase Groups Inc. 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.