

# SAFETY DATA SHEET



the ferti-lome people

## Hi-Yield® Vegetable, Flower, Fruit and Ornamental Fungicide

In the event of a medical or chemical emergency contact ChemTel, Inc. North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

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

Effective Date: 26May2015

### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Vegetable, Flower, Fruit and Ornamental Fungicide  
**EPA Reg. No.:** 60063-16-7401

#### COMPANY IDENTIFICATION:

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

### 2. HAZARDS IDENTIFICATION

#### 2.1. Classification of the Substance or Mixture

##### Classification (GHS-US)

Acute Tox. 2 (Inhalation:dust,mist)	H330
Carc. 2	H351
Aquatic Acute 1	H400

#### 2.2. Label Elements

##### GHS-US Labeling

##### Hazard Pictograms (GHS-US)



##### Signal Word (GHS-US)

##### Hazard Statements (GHS-US)

##### Precautionary Statements (GHS-US)

: Danger  
: H330 - Fatal if inhaled.  
: H351 - Suspected of causing cancer.  
: H400 - Very toxic to aquatic life.  
: P201 - Obtain special instructions before use.  
: P202 - Do not handle until all safety precautions have been read and understood.  
: P260 - Do not breathe dust, fume.  
: P271 - Use only outdoors or in a well-ventilated area.  
: P273 - Avoid release to the environment.  
: P280 - Wear eye protection, protective gloves.  
: P284 - [In case of inadequate ventilation] wear respiratory protection.  
: P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.  
: P308+P313 - If exposed or concerned: Get medical advice/attention.  
: P310 - Immediately call a poison center/doctor  
: P320 - Specific treatment is urgent (see Section 4 on this label).  
: P391 - Collect spillage.  
: P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
: P405 - Store locked up.  
: P501 - Dispose of contents/container according to local, regional, national, and international regulations.

#### 2.3. Other Hazards

No additional information available

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### 2.4. Unknown Acute Toxicity (GHS-US)

~12% of the mixture consists of ingredient(s) of unknown acute toxicity. of the mixture consists of ingredients of unknown acute toxicity.

## 3. COMPOSITION, INFORMATION OF INGREDIENTS

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Chlorothalonil	(CAS No) 1897-45-6	12.5	Acute Tox. 1 (Inhalation:dust,mist), H330 Eye Dam. 1, H318 Carc. 2, H351 Aquatic Acute 1, H400
	(CAS No.) 57-55-6	<5	Not Classified

Full text of H-phrases: see section 16

## 4. FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**First-aid Measures General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**First-aid Measures After Inhalation:** When symptoms occur: go into open air and ventilate suspected area.

**First-aid Measures After Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes.

**First-aid Measures After Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**First-aid Measures After Ingestion:** Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms/Injuries:** May be fatal if inhaled.

**Symptoms/Injuries After Inhalation:** Fatal if inhaled.

**Symptoms/Injuries After Skin Contact:** May cause an allergic reaction in sensitive individuals. May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause eye irritation.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

**Chronic Symptoms:** May cause cancer.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## 5. FIRE FIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Alcohol foam, carbon dioxide, dry chemical, water spray, fog. Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. A heavy water stream may spread burning liquid.

### 5.2. Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

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### 5.3. Advice for Firefighters

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Other Information:** Do not allow run-off from fire fighting to enter drains or water courses. De-contaminate equipment or materials involved in pesticide fires.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Handle in accordance with good industrial hygiene and safety practice.

#### 6.1.1. For Non-emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Evacuate unnecessary personnel.

#### 6.1.2. For Emergency Responders

**Protective Equipment:** Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Ventilate area.

### 6.2. Environmental Precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely.

### 6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## 7. HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product.

### 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

**Incompatible Products:** Strong acids. Strong bases. Strong oxidizers.

**Storage Area:** Store locked up.

### 7.3. Specific End Use(s) No additional information available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

#### Propylene glycol (57-55-6)

AIHA	AIHA TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
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### 8.2. Exposure Controls

: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### Personal Protective Equipment

: Protective goggles. Gloves. High gas/vapor concentration: gas mask.



#### Hand Protection

: Wear chemically resistant protective gloves.

#### Eye Protection

: Chemical goggles or safety glasses.

#### Skin and Body Protection

: Use chemically protective clothing.

: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

#### Other Information

: When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Light. Gray.
Odor	: Slight.
Odor Threshold	: No data available
pH	: 6 - 8
Evaporation Rate	: No data available
Melting Point	: No data available
Freezing Point	: -5 °C (23°F) (23.00 °F)
Boiling Point	: 100 °C (212°F) (212.00 °F)
Flash Point	: Not flammable
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor Pressure	: 5.72 mPa x 10 <sup>-7</sup> torr @25°C
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: 1.24 @25°C
Specific gravity / density	: 10.3 lb/gal
Solubility	: Water: 0.6 - 0.9 ppm
Partition Coefficient: N-octanol/water	: No data available
Viscosity	: No data available

### 9.2. Other

#### Information

VOC content : 56 %

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### 10. STABILITY & REACTIVITY DATA

- 10.1. **Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. **Chemical Stability:** Product is stable.
- 10.3. **Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. **Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.
- 10.5. **Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6. **Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). sulfur oxides. Silicon oxides.

### 11. TOXICOLOGICAL INFORMATION

#### 11.1. Information On Toxicological Effects

**Acute Toxicity:** Fatal if inhaled.

Vegetable, Flower, Fruit and Ornamental Fungicide	
ATE (Dust/Mist)	0.05 mg/l/4h
Chlorothalonil (1897-45-6)	
LD50 Oral Rat	3260 mg/kg
LD50 Dermal Rat	2020 mg/kg
LD50 Dermal Rabbit	10 g/kg
LC50 Inhalation Rat	0.1 mg/l/4h
ATE (Vapors)	310.00 mg/l/4h
ATE (Dust/Mist)	0.05 mg/l/4h
Propylene glycol (57-55-6)	
LD50 Oral Rat	20 g/kg
LD50 Dermal Rabbit	20800 mg/kg

**Skin Corrosion/Irritation:** Not classified

**pH:** 6 - 8

**Serious Eye Damage/Irritation:** Not classified

**pH:** 6 - 8

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Suspected of causing cancer.

Chlorothalonil (1897-45-6)	
IARC group	2B
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity.

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Fatal if inhaled.

**Symptoms/Injuries After Skin Contact:** May cause an allergic reaction in sensitive individuals. May cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause eye irritation.

**Symptoms/Injuries After Ingestion:** May be harmful if swallowed.

**Chronic Symptoms:** May cause cancer.

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### 12. ECOLOGICAL INFORMATION

#### 12.1. Toxicity

Chlorothalonil (1897-45-6)	
LC50 Fish 1	0.012 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
EC50 Daphnia 1	0.0342 - 0.143 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	0.0076 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
Propylene glycol (57-55-6)	
LC50 Fish 1	51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)
LC 50 Fish 2	41 - 47 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

#### 12.2. Persistence and Degradability

Vegetable, Flower, Fruit and Ornamental Fungicide	
Persistence and Degradability	Not established.

#### 12.3. Bioaccumulative Potential

Vegetable, Flower, Fruit and Ornamental Fungicide	
Bioaccumulative Potential	Not established.
Chlorothalonil (1897-45-6)	
Log Pow	2.9 (at 22 °C)
Propylene glycol (57-55-6)	
BCF fish 1	< 1
Log Pow	-0.92

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment.

### 13. DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, and international regulations.

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### 14. TRANSPORTATION INFORMATION

#### 14.1. In Accordance with DOT

**Proper Shipping Name** : TOXIC BY INHALATION LIQUID, N.O.S. with an LC50 lower than or equal to 200 ml/m3 and saturated vapor concentration greater than or equal to 500 LC50

**Hazard Class** : 6.1

**Identification Number** : UN3381

**Label Codes** : 6.1

**Packing Group** : I



#### 14.2. In Accordance with IMDG

**Proper Shipping Name** : TOXIC BY INHALATION LIQUID, N.O.S.

**Hazard Class** : 6.1

**Identification Number** : UN3381

**Packing Group** : I

**Label Codes** : 6.1

**EmS-No. (Fire)** : F-A

**EmS-No. (Spillage)** : S-A



#### 14.3. In Accordance with IATA

**Proper Shipping Name** : TOXIC BY INHALATION LIQUID,

**Identification Number** : N.O.S. UN3381

**Hazard Class** : 6

**Label Codes** : 6.1

**ERG Code (IATA)** : 6L



### 15. REGULATORY INFORMATION

#### 15.1 US Federal Regulations

Vegetable, Flower, Fruit and Ornamental Fungicide	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard Delayed (chronic) health hazard
<b>EPA FIFRA Pesticide Product Notice</b>	This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
<b>EPA FIFRA Signal Word</b>	Warning

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<b>EPA FIFRA Precautionary Statements</b>	May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Do not breathe spray mist.
<b>Chlorothalonil (1897-45-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
<b>SARA Section 313 - Emission Reporting</b>	0.1 %
<b>Propylene glycol (57-55-6)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
<b>EPA TSCA Regulatory Flag</b>	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### 15.2 US State Regulations

<b>Chlorothalonil (1897-45-6)</b>	
<b>U.S. - California - Proposition 65 - Carcinogens List</b>	WARNING: This product contains chemicals known to the State of California to cause cancer.

<b>Chlorothalonil (1897-45-6)</b>	
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List	
<b>Propylene glycol (57-55-6)</b>	
U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List	

### 16. OTHER INFORMATION

**Other Information**

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

**GHS Full Text Phrases:**

Acute Tox. 1 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 1
Acute Tox. 2 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 2
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
H318	Causes serious eye damage
H330	Fatal if inhaled
H351	Suspected of causing cancer
H400	Very toxic to aquatic life

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. SDS US (GHS HazCom)*