SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: PrimeraOne® Chlorothalonil 720 SFT Fungicide
Other means of identification: Group 3 Fungicide; EPA Reg. No. 60063-7

1.2. Intended Use of the Product
Use of the substance/mixture: Fungicide

1.3. Name, Address, and Telephone of the Responsible Party
Manufacturer
Sipcam Agro USA, Inc.
2525 Meridian Parkway, Suite 350
Durham, NC 27713
T 919-226-1195

1.4. Emergency Telephone Number
Emergency Number: (800) 424-9300 CHEMTREC (transportation and spills) (800) 900-4044 Poison Control Center (human health) (800) 345-4735 ASPCA (animal health)

SECTION 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): Danger
Hazard Statements (GHS-US):
H330 - Fatal if inhaled.
H351 - Suspected of causing cancer.
H400 - Very toxic to aquatic life.

Precautionary Statements (GHS-US):
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

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.
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier (CAS No)</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorothalonil</td>
<td>1897-45-6</td>
<td>54.0</td>
<td>Acute Tox. 1 (Inhalation: dust, mist), H330, Eye Dam. 1, H318, Carc. 2, H351, Aquatic Acute 1, H400</td>
</tr>
<tr>
<td>Propylene glycol</td>
<td>57-55-6</td>
<td>&lt;5</td>
<td>Not Classified</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 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.

SECTION 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.

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.

SECTION 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).

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.

SECTION 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 no 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.
Storage Area: Store locked up.

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>AIHA TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol (57-55-6)</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

8.2. Exposure Controls

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


Hand Protection: Wear chemically resistant protective gloves.
Eye Protection: Chemical goggles or safety glasses.
Skin and Body Protection: Use chemically protective clothing.
Respiratory Protection: 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Light. Gray.</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>-5 °C (23°F) (23.00 °F)</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>100 °C (212°F) (212.00 °F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>5.72 mPa x 10 -7 torr @25°C</td>
</tr>
<tr>
<td>Relative Vapor Density at 20 °C</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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

SECTION 10: STABILITY AND REACTIVITY
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.

SECTION 11: TOXICOLOGICAL INFORMATION
11.1. Information On Toxicological Effects
Acute Toxicity: Fatal if inhaled.

<table>
<thead>
<tr>
<th>PrimeraOne® Chlorothalonil 720 SFT Fungicide</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE (Dust/Mist)</td>
</tr>
<tr>
<td>Chlorothalonil (1897-45-6)</td>
</tr>
<tr>
<td>LD50 Oral Rat</td>
</tr>
<tr>
<td>LD50 Dermal Rat</td>
</tr>
<tr>
<td>LD50 Dermal Rabbit</td>
</tr>
<tr>
<td>LC50 Inhalation Rat</td>
</tr>
<tr>
<td>ATE (Vapors)</td>
</tr>
<tr>
<td>ATE (Dust/Mist)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Propylene glycol (57-55-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Oral Rat</td>
</tr>
<tr>
<td>LD50 Dermal Rabbit</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Chlorothalonil (1897-45-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
</tr>
<tr>
<td>National Toxicity Program (NTP) Status</td>
</tr>
</tbody>
</table>

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.

SECTION 12: ECOLOGICAL INFORMATION
12.1. Toxicity

<table>
<thead>
<tr>
<th>Chlorothalonil (1897-45-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Fish 1</td>
</tr>
</tbody>
</table>
**PrimeraOne® Chlorothalonil 720 SFT Fungicide**

Safety Data Sheet
According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th><strong>EC50 Daphnia 1</strong></th>
<th>0.0342 - 0.143 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LC50 Fish 2</strong></td>
<td>0.0076 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th><strong>LC50 Fish 1</strong></th>
<th>51600 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EC50 Daphnia 1</strong></td>
<td>10000 mg/l (Exposure time: 24 h - Species: Daphnia magna)</td>
</tr>
<tr>
<td><strong>LC50 Fish 2</strong></td>
<td>41 - 47 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])</td>
</tr>
<tr>
<td><strong>EC50 Daphnia 2</strong></td>
<td>1000 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])</td>
</tr>
</tbody>
</table>

### 12.2. Persistence and Degradability

**PrimeraOne® Chlorothalonil 720 SFT Fungicide**

**Persistence and Degradability** Not established.

### 12.3. Bioaccumulative Potential

**PrimeraOne® Chlorothalonil 720 SFT 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.

### SECTION 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.

### SECTION 14: TRANSPORT 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, N.O.S.

- **Hazard Class**: 6
- **Identification Number**: UN3381
- **Label Codes**: 6.1
- **ERG Code (IATA)**: 6L

### SECTION 15: REGULATORY INFORMATION

#### 15.1 US Federal Regulations

**PrimeraOne® Chlorothalonil 720 SFT Fungicide**

- **SARA Section 311/312 Hazard Classes**: Immediate (acute) health hazard, Delayed (chronic) health hazard

**EPA FIFRA Pesticide Product Notice**: 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.

EPA FIFRA Signal Word

Warning

EPA FIFRA Precautionary Statements

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.

Chlorothalonil (1897-45-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting

0.1 %

Propylene glycol (57-55-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag

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

Chlorothalonil (1897-45-6)

U.S. - California - Proposition 65 - Carcinogens List

WARNING: This product contains chemicals known to the State of California to cause cancer.

Chlorothalonil (1897-45-6)

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

Propylene glycol (57-55-6)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

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)