SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: Bonide Fruit Tree and Plant Guard Concentrate
Product code: 4488

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Fungicide, Insecticide

1.3. Details of the supplier of the safety data sheet

Bonide Products, Inc.
6301 Sutliff Road
Oriskany, NY 13424
T (315) 736-8231
www.bonide.com

1.4. Emergency telephone number

Emergency number: CHEMTREC - 1 (800) 424-9300 and/or 1 (703) 527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
Acute Tox. 4 (Inhalation:dust,mist) H332
Skin Sens. 1 H317

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US): 

Signal word (GHS-US): Warning
Hazard statements (GHS-US): H317 - May cause an allergic skin reaction, H332 - Harmful if inhaled
Precautionary statements (GHS-US): P261 - Avoid breathing mist, P271 - Use only outdoors or in a well-ventilated area, P272 - Contaminated work clothing should not be allowed out of the workplace, P280 - Wear protective gloves and eye protection, P302+P352 - IF ON SKIN: Wash with plenty of soap and water, P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing, P312 - Call a POISON CENTER/doctor/physician if you feel unwell, P321 - Specific treatment (see first aid section on this label), P333+P313 - If skin irritation or rash occurs: Get medical advice/attention, P362+P364 - Take off contaminated clothing and wash it before reuse, P501 - Dispose of contents/container to in accordance with local/national regulations

SECTION 3: Composition/information on ingredients

Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boscaldid</td>
<td>(CAS No) 188425-85-6</td>
<td>5.622</td>
<td>Not classified</td>
</tr>
<tr>
<td>Lambda-cyhalothrin</td>
<td>(CAS No) 91465-08-6</td>
<td>0.50</td>
<td>Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Acute Tox. 2 (Inhalation:dust,mist), H330 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>
Bonide Fruit Tree and Plant Guard Concentrate
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

### Name

<table>
<thead>
<tr>
<th>Pyraclostrobin</th>
<th>1,2-benzisothiazol-3(2H)-one, conc = 20%, in water</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(CAS No) 175013-18-0</td>
<td>3.06 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Irrit. 2, H315 Aquatic Acute 1, H400 Aquatic Chronic 1, H410</td>
</tr>
<tr>
<td>(CAS No) 2634-33-5</td>
<td>0.17 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400</td>
</tr>
</tbody>
</table>

### 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**: Assure fresh air breathing. Allow the person to rest. Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

**First-aid measures after skin contact**: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If irritation occurs and persists see a doctor. Wash contaminated clothing before reuse.

**First-aid measures after eye contact**: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

**First-aid measures after ingestion**: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

**Symptoms/injuries after inhalation**: Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause an allergic skin reaction.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media


**Unsuitable extinguishing media**: Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

No additional information available

#### 5.3. Advice for firefighters

**Firefighting instructions**: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.

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

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

**Emergency procedures**: Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

**Protective equipment**: Equip cleanup crew with proper protection.

**Emergency procedures**: Ventilate area.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up**: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
**SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

- **Precautions for safe handling**: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Use only outdoors or in a well-ventilated area.

- **Hygiene measures**: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

- **Storage conditions**: Keep container closed when not in use.
- **Incompatible products**: Strong bases. Strong acids.
- **Incompatible materials**: Sources of ignition.

**SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

- **Personal protective equipment**: Avoid all unnecessary exposure.
- **Hand protection**: Wear protective gloves.
- **Eye protection**: Chemical goggles or safety glasses.
- **Respiratory protection**: Wear approved mask.
- **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

- **Physical state**: Liquid
- **Appearance**: Viscous tan opaque liquid.
- **Color**: Tan opaque.
- **Odor**: Aromatic
- **Odor threshold**: No data available
- **pH**: 6 - 8.5
- **Relative evaporation rate (butyl acetate=1)**: No data available
- **Melting point**: No data available
- **Freezing point**: No data available
- **Boiling point**: No data available
- **Flash point**: No data available
- **Self ignition temperature**: No data available
- **Decomposition temperature**: No data available
- **Flammability (solid, gas)**: No data available
- **Vapor pressure**: No data available
- **Relative vapor density at 20 °C**: No data available
- **Relative density**: No data available
- **Solubility**: Dispersable in water
- **Log Pow**: No data available
- **Log Kow**: No data available
- **Viscosity, kinematic**: No data available
- **Viscosity, dynamic**: No data available
- **Explosive properties**: No data available
- **Oxidizing properties**: No data available
- **Explosive limits**: No data available

**SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No additional information available
### 10.2. Chemical stability
Stable under normal conditions.

### 10.3. Possibility of hazardous reactions
Not established.

### 10.4. Conditions to avoid
No additional information available

### 10.5. Incompatible materials
Strong acids. Strong bases.

### 10.6. Hazardous decomposition products
Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Harmful if inhaled.</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8.5</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8.5</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Potential Adverse human health effects and symptoms</td>
<td>Based on available data, the classification criteria are not met. Harmful if inhaled. May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>Symptoms/injuries after inhalation</td>
<td>Danger of serious damage to health by prolonged exposure through inhalation. Harmful if inhaled. May cause an allergic skin reaction.</td>
</tr>
</tbody>
</table>

## SECTION 12: Ecological information

### 12.1. Toxicity
No additional information available

### 12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonide Fruit Tree and Plant Guard Concentrate</td>
<td>Not established.</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one, conc = 20%, in water (2634-33-5)</td>
<td>Biodegradable in water.</td>
</tr>
<tr>
<td>Lambda-cyhalothrin (91465-08-6)</td>
<td>Not established.</td>
</tr>
</tbody>
</table>

### 12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonide Fruit Tree and Plant Guard Concentrate</td>
<td>Not established.</td>
</tr>
<tr>
<td>1,2-benzisothiazol-3(2H)-one, conc = 20%, in water (2634-33-5)</td>
<td>Low potential for bioaccumulation (Log Kow &lt; 4).</td>
</tr>
<tr>
<td>Log Pow</td>
<td>0.6 (Calculated)</td>
</tr>
<tr>
<td>Lambda-cyhalothrin (91465-08-6)</td>
<td>Not established.</td>
</tr>
</tbody>
</table>
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 in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information
Not regulated for transport by DOT

SECTION 15: Regulatory information

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 2 (Inhalation:dust,mist)</td>
<td>Acute toxicity (inhalation:dust,mist) Category 2</td>
</tr>
<tr>
<td>Acute Tox. 3 (Inhalation:dust,mist)</td>
<td>Acute toxicity (inhalation:dust,mist) Category 3</td>
</tr>
<tr>
<td>Acute Tox. 3 (Oral)</td>
<td>Acute toxicity (oral) Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4 (Dermal)</td>
<td>Acute toxicity (dermal) Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Inhalation:dust,mist)</td>
<td>Acute toxicity (inhalation:dust,mist) Category 4</td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral) Category 4</td>
</tr>
<tr>
<td>Aquatic Acute 1</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 1</td>
</tr>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 1</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Skin sensitization Category 1</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H312</td>
<td>Harmful in contact with skin</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H330</td>
<td>Fatal if inhaled</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled</td>
</tr>
<tr>
<td>H332</td>
<td>Harmful if inhaled</td>
</tr>
<tr>
<td>H400</td>
<td>Very toxic to aquatic life</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012) - Pesticides

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.