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

1.1. Product identifier
Product name: Bonide Flea & Roach Household Insect Spray
Product code: 4478

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: 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)
Not classified

2.2. Label elements
GHS-US labeling
No labeling applicable

2.3. Other hazards
No additional information available

2.4. Unknown acute toxicity (GHS-US)
No data available

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>Permethrin</td>
<td>(CAS No) 52645-53-1</td>
<td>0.25</td>
<td>Not classified</td>
</tr>
<tr>
<td>Nylar</td>
<td>(CAS No) 95737-68-1</td>
<td>0.01</td>
<td>Aquatic Acute 1, H400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 1, H410</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.
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.
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: Not expected to present a significant hazard under anticipated conditions of normal use.

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.

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.

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
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in original container. Keep container closed when not in use.
Incompatible products: Strong bases. Strong acids.
Incompatible materials: Sources of ignition.

7.3. Specific end use(s)
No additional information available

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: Opaque/white.
Color: Opaque/white.
### Odor
Slight Insecticide type odor.

### Odor threshold
No data available

### pH
7 - 8

### Relative evaporation rate (butyl acetate=1)
No data available

### Melting point
No data available

### Freezing point
No data available

### Boiling point
190 °F

### Flash point
No data available

### Self ignition temperature
No data available

### Decomposition temperature
No data available

### Flammability (solid, gas)
Will not flash or burn

### Vapor pressure
No data available

### Relative vapor density at 20 °C
No data available

### Relative density
1

### Solubility
Soluble 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

### 9.2. Other information
No additional information 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
Extremely high or low temperatures.

### 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

#### Acute toxicity
Not classified

<table>
<thead>
<tr>
<th>Permethrin (52645-53-1)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 383 mg/kg (Rat)</td>
</tr>
<tr>
<td>LD50 dermal rat</td>
<td>4000 mg/kg (Rat)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 2000 mg/kg (Rabbit)</td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
Not classified

**pH:** 7 - 8

**Serious eye damage/irritation**
Not classified

**pH:** 7 - 8

**Respiratory or skin sensitization**
Not classified

**Germ cell mutagenicity**
Not classified
Bonide Flea & Roach Household Insect Spray
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Carcinogenicity: Not classified

**Permethrin (52645-53-1)**
- IARC group: 3 - Not Classifiable

Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified
Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Permethrin (52645-53-1)**
- LC50 fish 1: 0.0025 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
- EC50 Daphnia 1: 0.00043 mg/l (48 h; Daphnia magna; Enzyme effect)
- LC50 fish 2: 0.016 mg/l (96 h; Pimephales promelas)
- EC50 Daphnia 2: 0.290 mg/l (24 h; Lymnaea sp.)

#### 12.2. Persistence and degradability

**Bonide Flea & Roach Household Insect Spray**
Persistence and degradability: Not established.

#### 12.3. Bioaccumulative potential

**Bonide Flea & Roach Household Insect Spray**
Bioaccumulative potential: Not established.

**Permethrin (52645-53-1)**
- BCF fish 1: 560 Salmo gairdneri (Oncorhynchus mykiss)
- BCF fish 2: 480 (Cyprinodon variegatus)
- BCF other aquatic organisms 1: 0.1 mg/l (>24 h; Algae)
- BCF other aquatic organisms 2: 1900 (Ostreidae)
- Log Pow: 3.48 - 6.5
- Bioaccumulative potential: High potential for bioaccumulation (Log Kow > 5).

#### 12.4. Mobility in soil

**Permethrin (52645-53-1)**
Ecology - soil: Toxic to bees.

#### 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

In accordance with DOT
No dangerous good in sense of transport regulations

**Additional information**
Other information: No supplementary information available.
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 absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

15.1. US Federal regulations

No additional information available

15.2. International regulations

No additional information available

15.3. US State regulations

No additional information available

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

<table>
<thead>
<tr>
<th>H-Phrase</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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>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.