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

1.1. Product identifier
Product name: Bonide Total Release Flea Fogger
Product code: 102116234

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: A liquefied aerosol insecticide spray

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)
- Flammable aerosol: Category 2
- Gases under pressure: Liquefied gas

2.2. Label elements
GHS-US labeling
Hazard pictograms (GHS-US): 

Signal word (GHS-US): Warning
Hazard statements (GHS-US): H233 – Flammable aerosol
H280 – Contains gas under pressure; may explode if heated

Precautionary statements (GHS-US): Prevention
- P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- P211 - Do not spray on an open flame or other ignition source
- P251 - Pressurized container: Do not pierce or burn, even after use

Response
- P321 – Specific treatment (see Section 4/ First Aid).

Storage
- P410 + P403 - Protect from sunlight. Store in a well-ventilated place
- P411 - Do not expose to temperatures exceeding 50 °C / 122 °F

Disposal
- P501 - Dispose of contents/container to in accordance with local/regional regulations

2.3. Other Information
Appearance: Milky white (Aerosol, Non-volatiles)
Physical state: Aerosol – Compressed liquefied gas.
Odor: Solvent

2.4. Hazards not otherwise classified (HNOC):
Not applicable
**SECTION 3: Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYLAR (Pyriproxyfen)</td>
<td>(CAS No) 95737-68-1</td>
<td>0.100</td>
</tr>
<tr>
<td>Pyrethrin</td>
<td>(CAS No) 8003-34-7</td>
<td>0.050</td>
</tr>
<tr>
<td>MGK®-264 Insecticide Synergist (n-Octyl bicycloheptene dicarboximide)</td>
<td>(CAS No) 113-48-4</td>
<td>0.380</td>
</tr>
<tr>
<td>Permethrin</td>
<td>(CAS No) 52645-53-1</td>
<td>0.400</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>(CAS No) 64742-47-8</td>
<td>&lt;10*</td>
</tr>
<tr>
<td>Propane</td>
<td>(CAS No) 74-98-6</td>
<td>15.015</td>
</tr>
<tr>
<td>Isobutane</td>
<td>(CAS No) 75-28-5</td>
<td>19.985</td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.
Comments: Ingredients not identified are proprietary or non-hazardous. Values are not product specifications.

**SECTION 4: First aid measures**

Aspiration pneumonia hazard : no information available

4.1. **Description of first aid measures**

Eye Contact : Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin Contact : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion : If swallowed, IMMEDIATELY call a poison control center or doctor for treatment advice. DO NOT give any liquid to the person. Do not induce vomiting unless told to do so by a poison control center or a doctor. Never give anything by mouth to an unconscious person.

Inhalation : Remove affected person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

4.2. **Self-protection of the First Responder**

Remove all sources of ignition. Use personal protective equipment as required.

4.3. **Note to physicians**

For skin effects, a highly efficient therapeutic agent for Pyrethrin/Pyrethroid exposure is topical application of tocopherol acetate (Vitamin E).

**SECTION 5: Firefighting measures**

5.1. **Extinguishing media**

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media : Caution: Use of water spray when fighting fire may be inefficient.


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

No information available

5.3 **Explosion Data**

Sensitivity to Mechanical Impact: None.
Sensitivity to Static Discharge: None.

5.3. **Protective equipment and precautions for firefighters**

In the event of fire and/or explosion do not breathe fumes.

**SECTION 6: Accidental release measures**

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

Personal precautions : Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Keep people away from and upwind of spill/leak. Use personal protective equipment as required.

Environmental precautions : Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional ecological information.
6.2. Methods and material for containment and cleaning up

Methods for containment: Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up: Dam up. Soak up with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling: Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Use with local exhaust ventilation. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate cans. Do not stick pin or any other sharp object into opening on top of can. For more information, see product label.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. For more information, see product label.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Guideline: This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
<th>Supplier OEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrethrins</td>
<td>TWA: 5 mg/m³</td>
<td>TWA: 5 mg/m³ (vacated) TWA: 5 mg/m³</td>
<td>IDLH: 5000 mg/m³ TWA: 5 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>TWA: 100 ppm TWA: 525 mg/m³</td>
</tr>
<tr>
<td>Propane</td>
<td>TWA: 1000 ppm</td>
<td>TWA: 1800 mg/m³ (vacated) TWA: 1000 ppm (vacated) TWA: 1800 mg/m³</td>
<td>IDLH: 2100 ppm TWA: 1000 ppm TWA: 1800 mg/m³</td>
<td>-</td>
</tr>
<tr>
<td>Isobutane</td>
<td>STEL: 1000 ppm</td>
<td>-</td>
<td>TWA: 800 ppm TWA: 1900 mg/m³</td>
<td>-</td>
</tr>
</tbody>
</table>

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information: Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

8.1.2 Appropriate engineering controls

Engineering Controls: Safety showers
Eyewash stations
Ventilation systems

8.2. Individual protection measures, such as personal protective equipment

Eye/face protection: Protective eyewear is recommended, but is not required.

Skin and body protection: Protective gloves are recommended, but are not required.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations: When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Aerosol – Compressed Liquefied gas
Appearance: Milky white (Aerosol non-volatiles)
Color (Gardner Scale): No information available
Odor: Solvent
Odor threshold: No information available
pH: 7.02 Comment: Test was performed on aerosol non-volatile's.
Melting point/Freezing point: No data available
Boiling point/Boiling range: No data available
Flash point: > 93.3 °C/ > 200 °F Tag Closed Cup; test was performed on aerosol non-volatile's.
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
Specific Gravity: 0.969 @ 20.0 °C (aerosol non-voliles)
Solubility: Immiscible in water.
Log Pow: No data available
Log Kow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: 26.7 cPs @ 23.5 °C Test was performed on aerosol non-volatile's.
Explosive properties: No data available
Oxidizing properties: No data available
Explosive limits: No data available

9.2. Other information
VOC Content (%): 40.0

9.3. Miscibility/ Solubility:
Water: Immiscible
Alcohol: Miscible
Aromatic solvents: Miscible
Petroleum distillates: Partially miscible

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
None under normal processing. Hazardous polymerization does not occur.

10.4. Conditions to avoid
Heat flames and sparks.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Hydrogen chloride, Carbon monoxide, Carbon dioxide (CO2)

SECTION 11: Toxicological information

11.1. Numerical measures of toxicity - Product Information
Oral LD50: >5,000 mg/kg (rat)
Dermal LD50: >2,000 mg/kg (rabbit)
Inhalation LC50: >5.12 mg/L (rat; 4 hours)
Eye contact: Irritation clearing in 24 hours. (rabbit).
Skin Contact: Slight irritation at 72 hours. (rabbit).
Skin Irritation Index: 1.04
Sensitization: Negative. (guinea pig).
Carcinogenicity: This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Reproductive toxicity: No information available.
Developmental Toxicity: No information available.
Teratogenicity: No information available.
STOT - single exposure: No information available.
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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

STOT - repeated exposure: No information available.
Chronic toxicity: Avoid repeated exposure.
Target Organ Effects: Central nervous system

SECTION 12: Ecological information

12.1. Ecotoxicity
No information available

12.2. Persistence and degradability
No information available

12.3. Bioaccumulative potential
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient; n-Octanol/ Water:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>6.5</td>
</tr>
<tr>
<td>52645-53-1</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>2.3</td>
</tr>
<tr>
<td>74-98-6</td>
<td></td>
</tr>
<tr>
<td>Isobutane</td>
<td>2.88</td>
</tr>
<tr>
<td>75-28-5</td>
<td></td>
</tr>
</tbody>
</table>

12.4. Environmental Hazards (EPA)
Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

12.5. Other adverse effects
Other information: No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Disposal of wastes: Disposal should be in accordance with applicable regional, national and local laws and regulations. For more information, see product label.
Contaminated packaging: For more information, see product label.

SECTION 14: Transport information

DOT (Department of Transportation)
UN/ID Number: UN1950
Proper Shipping Name: Aerosols, flammable
Hazard Class: 2.1

SECTION 15: Regulatory information

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 pesticide label also includes other important information, including directions for use. The hazard information required on the pesticide label is reproduced below:

CAUTION
Breathing spray mist may be harmful.
Harmful if absorbed through the skin.
Causes moderate eye irritation.

15.1. US Federal regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute health hazard</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Fire hazard</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
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CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)
Pyrethrins (8003-34-7) CWA – Reportable Quantities – 1 pound

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the
Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund
Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the
local, regional, or state level pertaining to releases of this material.
Reportable Quantity (RQ): Pyrethrins (8003-34-7) 1 lb - RQ 1 lb final RQ, RQ 0.454 kg final RQ

15.2. US State regulations
California Proposition 65 : This product does not contain any Proposition 65 chemicals

SECTION 16: Other information
Other information : None.

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.