1. IDENTIFICATION

Trade Name: Permethrin & Pyriproxyfen Flea & Tick Squeeze On for Dogs
Product identifier: see EPA registration number
Synonym: XG7
Brand Names: Sergeant’s, Sentry, DogMD
EPA Registration #: 2517-87

Manufacturer: The Perrigo Company
515 Eastern Avenue
Allegan, MI 49010 USA
Tel: 269-673-8451
Email SDSRequest@Perrigo.com

Manufacturing Site: Sergeant’s Pet Care Products, Inc.
10077 South 134th Street
Omaha, NE 68138 USA

Emergency phone numbers
First aid or Spill: 888-464-2986 (U.S. calls)
+1 760-476-3962 Code 333304 (International calls)
Pet emergency/ Adverse event report: 1-800-781-4738

Recommended use: Flea and tick treatment for dogs
Restrictions on use: Use only as directed.

2. HAZARD(S) IDENTIFICATION

Classification:

<table>
<thead>
<tr>
<th>Physical</th>
<th>Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Liquid Category 3</td>
<td>Acute Oral Toxicity Category 4</td>
</tr>
<tr>
<td></td>
<td>Skin Irritation Category 2</td>
</tr>
<tr>
<td></td>
<td>Skin Sensitizer Category 1</td>
</tr>
<tr>
<td></td>
<td>Aspiration Toxicity Category 1</td>
</tr>
</tbody>
</table>

Label Elements: Danger!

Hazard statement(s)
Flammable liquid and vapor.
Harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
May be fatal if swallowed and enters airways.

Precautionary statement(s)
Avoid breathing vapors or mists.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Contaminated clothing must not be allowed out of the workplace.
Wear protective gloves.
If swallowed: Immediately call a poison center or physician.


**Precautionary statement(s)**

Keep away from heat, sparks, open flames and hot surfaces. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, ventilating and lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.

Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation occurs or rash: Get medical attention. Take off contaminated clothing and wash it before reuse.
In case of fire: Use water spray, carbon dioxide or alcohol-resistant foam to extinguish.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose in accordance with local and national regulations.

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**3. COMPOSITION / INFORMATION ON INGREDIENTS**

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>52645-53-1</td>
<td>45%</td>
</tr>
<tr>
<td>Pyriproxyfen</td>
<td>95737-68-1</td>
<td>1.9%</td>
</tr>
<tr>
<td>Limonene</td>
<td>5989-27-5</td>
<td>&lt;20%</td>
</tr>
<tr>
<td>Non-Hazardous and other ingredients below the disclosure limits</td>
<td>Mixture</td>
<td>Balance</td>
</tr>
</tbody>
</table>

The exact percentage (concentration) of composition has been withheld as a trade secret.

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**4. FIRST-AID MEASURES**

**Inhalation:** Remove person to fresh air. If irritation occurs or symptoms develop, get medical attention.

**Skin contact:** Wash hands with soap and water after handling. If irritation develops and persists, get medical attention.

**Eye contact:** Immediately flush eyes with water while lifting the upper and lower lids. Get medical attention if irritation persists.

**Ingestion:** Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to a person who is unconscious or convulsing. Get immediate medical attention.

**Most important symptoms/effects, acute and delayed:** Causes skin irritation. May cause eye and respiratory irritation. High concentrations of limonene vapors may cause respiratory irritation and nervous system effects such as headaches, dizziness and nausea. Ingestion may cause nausea, vomiting and nervous system effects. Prolonged or repeated skin contact may cause allergic sensitization. Aspiration hazard. May enter the lungs during swallowing or vomiting and cause severe lung damage.

**Indication of immediate medical attention and special treatment, if necessary:** Immediate medical attention is recommended for ingestion.

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**5. FIRE-FIGHTING MEASURES**

**Extinguishing media:** Use water spray or fog, CO2, dry chemical or alcohol-resistant foam.

**Specific hazards arising from the chemical:** Flammable liquid and vapor. Vapors are heavier than air and can flow to remote ignition sources and flash back. Vapors may be explosive in confined areas. Vapors will collect in low areas. Vapors may be ignited by static sparks.
Special protective equipment and precautions for fire-fighters: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for all fires involving chemicals. Cool fire exposed containers with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Wear appropriate protective clothing and equipment as described in Section 8. Eliminate all ignition sources and ventilate the area.

Environmental Precautions: This product is very toxic to aquatic life. Prevent spill from entering sewers and water courses. Report releases as required by local and national authorities.

Methods and materials for containment and cleaning up: Contain and collect with an inert absorbent material. Place in appropriate container for disposal. Clean area thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling. Do not eat, drink or smoke when handling this material. Avoid breathing vapors. Use only with adequate ventilation. Remove contaminated clothing and launder before re-use. Keep product away from heat, sparks and open flames.

Conditions for safe storage, including any incompatibilities: Store as indicated on product packaging.

PESTICIDE STORAGE: Do not remove tube from the pack until ready to use. Store only in original container in a cool (below 77°F/25°C), dry place out of reach of children. Do not refrigerate. Protect from direct sunlight.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

<table>
<thead>
<tr>
<th></th>
<th>Permethrin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>Perrigo OEB4 (1-10 ug/m3) TWA</td>
</tr>
<tr>
<td>Pyriproxyfen</td>
<td>None Established</td>
</tr>
<tr>
<td>Limonene</td>
<td>None Established</td>
</tr>
</tbody>
</table>

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to minimize exposures levels.

Individual protection measures:

Respiratory protection: None needed under normal use conditions. If exposure limits are exceeded, a NIOSH approved pesticide respirator is recommended. Selection of respiratory protection depends on the contaminant type, form and concentration. Select in accordance with OSHA 1910.134 and good Industrial Hygiene practice.

Skin protection: Impervious gloves recommended for bulk processing.

Eye protection: Chemical safety goggles recommended for bulk processing.

Other: None known.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Pale yellow to amber liquid

Odor: Lemon

<table>
<thead>
<tr>
<th>Odor threshold</th>
<th>Not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/freezing point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>48°C / 118.4°F (limonene)</td>
</tr>
<tr>
<td>pH</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions of use.
Chemical stability: Stable.
Possibility of hazardous reactions: None known.
Conditions to avoid: None known.
Incompatible materials: Avoid oxidizing agents.
Hazardous decomposition products: Thermal decomposition may yield carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute effects of exposure:
Inhalation: Vapors may be irritating to the respiratory tract. High concentrations of limonene vapors may cause nervous system effects such as headaches, dizziness and nausea.
Ingestion: Swallowing may cause gastrointestinal irritation and nervous system effects such as nausea, vomiting, diarrhea, tremors and nervousness. Aspiration hazard. May enter the lungs during swallowing or vomiting and cause severe lung damage.
Skin contact: May cause irritation and effects similar to ingestion. Prolonged or repeated skin contact may cause allergic sensitization.
Eye contact: Contact may cause mild irritation with redness and tearing.
Chronic Effects: None known.
Sensitization: Permethrin and limonene are skin sensitizers.
Germ Cell Mutagenicity: Components are not germ cell mutagens.
Reproductive Toxicity: Ingredients are not reproductive toxins.
Carcinogenicity: Pyriproxyfen did not cause cancer in long-term studies in mice, rats and dogs. None of the components are listed as carcinogens or suspected carcinogens by IARC, NTP, ACGIH or OSHA.

Acute Toxicity Values: Acute toxicity estimate (ATE) calculated: Oral 1064 mg/kg; Dermal >2000 mg/kg; Permethrin: LD50 oral rat 480-554 mg/kg; LD50 dermal rabbit >2000 mg/kg; LC50 rat >4.638-23.5 mg/L Pyriproxyfen: LD50 oral rat >5000 mg/kg; LD50 dermal rabbit >2000 mg/kg Limonene: LD50 oral rat 5000 mg/kg, LD50 dermal rabbit >5000 mg/kg

12. ECOLOGICAL INFORMATION

This product is very toxic to aquatic life with long lasting effects. Avoid release to the environment.
Ecotoxicity values: Permethrin: LC50 Oreonectes immumis (Crayfish) 0.00031 mg/L/48 hr; LC50 pimephales promelas 0.003 mg/L/96 hr. Classified as Acute/Chronic Aquatic Toxicity Category 1 (M=1000) Pyriproxyfen: LC50 daphnia carinata 0.08 mg/L/48 hr
Persistence and degradability: The biodegradation half-life of permethrin in a sediment-seawater solution was less than 2.5 days.
Bioaccumulative potential: BCF values for rainbow trout and sheepshead minnow of approx 560 and 480, respectively, suggest bioconcentration of permethrin in aquatic organisms is high.
Mobility in soil: No data is available.
**Other adverse effects:** This product is extremely toxic to fish. Do not apply directly to or near water. Drift and run-off may be hazardous to fish in water adjacent to treated areas. Do not contaminate water when disposing of equipment washwater or rinsate. See Directions for Use for additional precautions and requirements. Treated dogs should not be allowed to go swimming for 12 hours following treatment.

### 13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations. **CONTAINER DISPOSAL:** Nonrefillable container. Do not reuse or refill this container. **If empty:** Place in trash or offer for recycling if available. **If partly filled:** Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

### 14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>UN Number</th>
<th>Proper shipping name</th>
<th>Hazard Class</th>
<th>Packing Group</th>
<th>Environmental Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>UN1993</td>
<td>Flammable liquid, n.o.s. (limonene)</td>
<td>3</td>
<td>III</td>
</tr>
<tr>
<td>TDG</td>
<td>UN1993</td>
<td>Flammable liquid, n.o.s. (limonene)</td>
<td>3</td>
<td>III</td>
</tr>
<tr>
<td>IMDG</td>
<td>UN1993</td>
<td>Flammable liquid, n.o.s. (limonene)</td>
<td>3</td>
<td>Marine Pollutant (Permethrin)</td>
</tr>
<tr>
<td>IATA</td>
<td>UN1993</td>
<td>Flammable liquid, n.o.s. (limonene)</td>
<td>3</td>
<td>No</td>
</tr>
</tbody>
</table>

Note: This product is classified as a Marine Pollutant (Environmentally Hazardous Substance) in accordance with the IMDG Code and the UN Model Regulations. However, it is packaged in either single packages or inner packagings in combination packages containing net quantities of less than 5 kg/5 L (IMDG Code 2.10.2.7). Shipment may be regulated as marine pollutants if contents are removed from inner packaging and combined into containers exceeding 5 L or 5 kg.

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** Not applicable – product is transported only in packaged form.

**Special precautions:** None known.

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

**FIFRA Labeling:**
HAZARDS TO HUMANS. CAUTION. KEEP OUT OF REACH OF CHILDREN.

Safety, health, and environmental regulations specific for the product in question.

**CERCLA:** This product is not subject to release reporting. Many states have more stringent release reporting requirements. Report spills as required under federal, state and local regulations.
SARA Hazard Category (311/312): Acute Health, Fire Hazard
EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:
   Permethrin 45%

EPA TSCA Inventory: This product is a pesticide and not subject to TSCA.

CANADA:  
Canadian CEPA: This product is a pest control product and not subject to CEPA regulations.

16. OTHER INFORMATION

    NFPA Rating: Health = 2    Flammability = 2    Instability = 0
    HMIS Rating: Health = 2    Flammability = 2    Physical Hazard = 0

SDS Revision History: Correct transport and SARA 311 (Sections 14 and 15).
Date of Preparation: May 28, 2016

Disclaimer: This SDS has been prepared for occupational exposure. Consumers: Refer to the package insert or product label for appropriate consumer-specific information about this product when used according to manufacturer’s directions. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy of the information contained therein, and assume no responsibility regarding the suitability of this information for the user’s intended purposes or for the consequence of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).