

## 1. IDENTIFICATION

**Trade Name:** Fipronil (9.8%)+s-Methoprene (11.8%) Spot On for Cats with BHA (0.1%)  
 Fipronil (9.8%)+s-Methoprene (8.8%) Spot On for Dogs with BHA (0.1%)  
**Product identifier:** see EPA registration number  
**Synonym:** JL3, JL4  
**Brand Names:** PetArmor  
**EPA Registration #:** 2517-134 (Dogs-JL4) 2517-135 (Cats-JL3)

**Manufacturer:** The Perrigo Company  
 515 Eastern Avenue  
 Allegan, MI 49010 USA  
 Tel: 269-673-8451  
 Email [SDSRequest@Perrigo.com](mailto:SDSRequest@Perrigo.com)

**Manufacturing Site:** Sergeant's Pet Care Products, Inc.  
 10077 South 134<sup>th</sup> 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 cats and dogs  
**Restrictions on use:** Use only as directed.

## 2. HAZARD(S) IDENTIFICATION

**Classification:**

Physical	Health
Not Hazardous	Acute Oral Toxicity Category 4 Acute Inhalation Toxicity Category 4 Carcinogen Category 2 Specific Target Organ Toxicity Category 1 (nervous system, thyroid)

**Label Elements:**  
**Danger!**



**Hazard statement(s)**

Harmful if swallowed or inhaled.  
 Suspected of causing cancer.  
 Causes damage to the nervous system and thyroid through prolonged or repeated exposure.

**Precautionary statement(s)**

Do not eat, drink or smoke when using this product.  
 Use only outdoors or in a well-ventilated area.  
 Wear protective gloves.  
 If SWALLOWED: Call a poison center or physician if you feel unwell. Rinse mouth.

**Precautionary statement(s)**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe vapors or mists.  
Wash hands thoroughly after handling.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center or physician if you feel unwell.  
IF exposed or concerned: Get medical advice.  
Keep cool. Store locked up.  
Dispose in accordance with local and national regulations.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical name	CAS No.	Concentration
Fipronil	120068-37-3	9.8%
Methoprene	65733-16-6	8.8-11.8%
Diethylene Glycol Monoethyl Ether (DEGEE)	111-90-0	70-85%
Butylated Hydroxyanisole	25013-16-5	<0.5%

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

**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 or symptoms of exposure develop, 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 medical attention.

**Most important symptoms/effects, acute and delayed:** May cause eye, skin and respiratory irritation. Ingestion, skin absorption or inhalation may cause sweating, nausea, vomiting, headache, abdominal pain, dizziness, agitation, weakness, and tonic-clonic seizures.

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

**5. FIRE-FIGHTING MEASURES**

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

**Specific hazards arising from the chemical:** Not classified as flammable or combustible but will burn under fire conditions.

**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 or mists. Use only with adequate ventilation. Remove contaminated clothing and launder before re-use. Keep product away from excessive heat 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 in a cool (below 77°F/25°C) dry place inaccessible to children and pets. Do not refrigerate. Protect from direct sunlight.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure guidelines:

Fipronil	Perrigo OEB4 (1 ug/m3) TWA
Methoprene	None Established
Diethylene Glycol Monoethyl Ether	25 ppm TWA AIHA WEEL
Butylated Hydroxyanisole	Perrigo OEB2 (100 ug/m3) TWA

**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 liquid

**Odor:** Characteristic

<b>Odor threshold:</b> Not determined	<b>pH:</b> Not determined
<b>Melting point/freezing point:</b> Not determined	<b>Boiling Point:</b> Not determined
<b>Flash point:</b> >93.33°C / 200°F closed cup	<b>Evaporation rate:</b> Not determined
<b>Flammability (solid, gas):</b> Not applicable	<b>VOC:</b> 0% (DEGEE is LVP-VOC)
<b>Flammable limits: LEL:</b> 1.2% (DEGEE)	<b>UEL:</b> 23.5% (DEGEE)
<b>Vapor pressure:</b> 0.09 mmHg @20°C (DEGEE)	<b>Vapor density:</b> >1 (air=1)
<b>Relative density:</b> 1.00-1.04	<b>Solubility(ies):</b> Soluble in water
<b>Partition coefficient: n-octanol/water:</b> Not available	<b>Auto-ignition temperature:</b> Not available
<b>Decomposition temperature:</b> Not available	<b>Viscosity:</b> Not available

## 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, strong acids and strong bases.

**Hazardous decomposition products:** Thermal decomposition may yield carbon and sulfur oxides and chlorine and fluoride compounds.

## 11. TOXICOLOGICAL INFORMATION

### Acute effects of exposure:

**Inhalation:** Inhalation of mists or aerosols may cause effects similar to ingestion.

**Ingestion:** Swallowing may cause may cause sweating, nausea, vomiting, headache, abdominal pain, dizziness, agitation, weakness, and tonic-clonic seizures.

**Skin contact:** May cause irritation and effects similar to ingestion. Fipronil is absorbed through the skin.

**Eye contact:** Contact may cause mild irritation with redness and tearing.

**Chronic Effects:** Prolonged or repeated exposure may cause neurotoxicity and effects on the thyroid and liver.

**Sensitization:** Components are not skin sensitizers. Fipronil was not sensitizing when tested in guinea pigs.

**Germ Cell Mutagenicity:** Components are not germ cell mutagens. Fipronil was not genotoxic either in vitro or in vivo assays conducted to investigate gene mutations, DNA damage, and chromosomal aberrations. It was negative in Salmonella (Ames test), Chinese hamster V79 cells (HGPRT Assay), human lymphocytes (in vitro cytogenetics assay), or mouse micronuclei (bone marrow micronucleus assay).

**Reproductive Toxicity:** Ingredients are not reproductive toxins. The fipronil developmental toxicity NOELs in the rat and rabbit were 20 mg/kg/day (highest dose tested; HDT) and 1 mg/kg/day (HDT), respectively. Maternal toxicity was observed in the rat at the HDT as evidenced by decreased body weight gain and food efficiency. In the rabbit, the maternal toxicity NOAEL was less than 0.1 mg/kg/day, based on reduced body weight gain and food efficiency at all dose levels tested.

**Carcinogenicity:** Butylated hydroxyanisole is classified by IARC as a group 2B carcinogen and by NTP as reasonably anticipated to be a carcinogen. None of the other components are listed as carcinogens or suspected carcinogens by IARC, NTP, ACGIH or OSHA. Fipronil cause only species-specific tumours in studies with rats and mice.

**Acute Toxicity Values:** Acute toxicity estimate (ATE) calculated: Oral 870 mg/kg; Dermal 2703 mg/kg;  
Inhalation: 4 mg/L/4 hr

Fipronil: LD50 oral rat 97 mg/kg; LD50 dermal rabbit 354 mg/kg; LC50 rat 0.39-0.682 mg/L/4 hr

Methoprene: LD50 oral rat >34000 mg/kg; LD50 dermal rabbit >5000 mg/kg; LC50 inhalation rat 5.19 mg/L

Diethylene Glycol Monoethyl Ether: LD50 oral rat 6031 mg/kg; LD50 dermal rabbit 9143 mg/kg

## 12. ECOLOGICAL INFORMATION

This product is very toxic to aquatic life with long lasting effects. Avoid release to the environment.

**Ecotoxicity values:** Fipronil: LC50 lepomis macrochirus 0.085 mg/L/96 hr; NOEC *CyprinodonVariegatus* 0.0029 mg/L/35 d. EC50 *Chironomus dilutus* 0.0000325 mg/L/96 hr. NOEC *Mysidopsis bahia* 0.0000077 mg/L/28 d.

Classified as Acute Aquatic Toxicity Category 1 (M=1000), Chronic Aquatic Toxicity Category 1 (M=10000)  
S-Methoprene: LC50 fish 4.26 mg/L/96 hr, EC50 daphnia 0.22 mg/L/48 hr, NOEC daphnia 0.019 mg/L; ErC50 algae 2.264 mg/L/72 hr.

Classified as Acute Aquatic Toxicity Category 1 (M=1), Chronic Aquatic Toxicity Category 1 (M=1)

**Persistence and degradability:** Fipronil is not readily biodegradable (47% in 28 days OECD 301B).

**Bioaccumulative potential:** BCF value for leptomis macrochirus of approx 321 suggests bioconcentration of fipronil in aquatic organisms is low.

**Mobility in soil:** No data is available.

**Other adverse effects:** None known.

### 13. DISPOSAL CONSIDERATIONS

Dispose in accordance with all local, state and federal regulations. CONTAINER DISPOSAL: If empty: Non-refillable container. Do not reuse or refill this container. 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

	UN Number	Proper shipping name	Hazard Class	Packing Group	Environmental Hazard
<b>DOT</b>		Not Regulated in non-bulk packages			
<b>TDG</b>		Not Regulated			
<b>IMDG</b>	UN3082	Environmentally Hazardous Substance, liquid, n.o.s. (Fipronil, Methoprene)	9	III	Marine Pollutant
<b>IATA</b>	UN3082	Environmentally Hazardous Substance, liquid, n.o.s. (Fipronil, Methoprene)	9	III	Yes

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; ICAO Special Instruction A197). Shipment may be regulated 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.** Harmful if swallowed. Causes eye irritation. Avoid contact with skin, eyes or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. **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, Chronic Health

**EPA SARA 313:** This product contains the following chemicals regulated under SARA Title III, section 313:  
Diethylene glycol monoethyl ether (glycol ether) 70-85%

**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 = 1      Instability = 0  
**HMIS Rating:** Health = 2\*      Flammability = 1      Physical Hazard = 0

**SDS Revision History:** New SDS

**Date of Preparation:** August 4, 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).