

# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identity:** ParaDefense Advanced for Dogs

**Recommended use of the chemical:** Topical flea protection and treatment for animals

**Restrictions on use:** Not for human use

**Supplier:** CAP IM Supply, Inc.  
2825 E. Cottonwodd Pkwy, Suite 500  
Salt Lake City, Utah 84121 USA  
Information: 1-801-512-7543

**EPA Reg. No:** 91384-3

**Emergency Phone:** Chemtrec: (800) 424-9000

## 2. HAZARDS IDENTIFICATION

**GHS Classification:**

Physical:	Health:	Environmental
Flammable Liquid Category 4	Eye Irritation Category 2 Acute Oral Toxicity Category 4 Reproductive Toxicity Category 1B Specific Target Organ Toxicity Single Exposure Category 3	Aquatic Toxicity Acute Category 1 Aquatic Toxicity Chronic Category 1

**GHS Label Elements:**  
DANGER!



**Statements of Hazard**

Combustible liquid.  
Harmful if swallowed.  
Causes serious eye irritation.  
May damage fertility or the unborn child.  
May cause respiratory irritation.  
Very toxic to aquatic life with long lasting effect

**Prevention**

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from flames and hot surfaces. No smoking.  
Avoid breathing vapors or mists.  
Use only outdoors or in a well-ventilated area.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Avoid release to the environment.

**Prevention**

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
**IF eye irritation persists:** Get medical attention.  
**IF SWALLOWED:** Call a POISON CENTER or doctor if you feel unwell.  
Rinse mouth.  
**IF INHALED:** Remove person to fresh air and keep comfortable for breathing.  
Call a POISON CENTER or doctor if you feel unwell.  
**IF exposed or concerned:** Get medical advice.  
Collect spillage.  
**IN CASE OF FIRE:** Use water fog, alcohol foam, carbon dioxide or dry chemical to extinguish.  
Store in a well-ventilated place. Keep container tightly closed.  
Store locked up. Store in a well-ventilated place. Keep cool.  
Dispose of contents and container in accordance with local and national regulations.

Wear protective gloves and eye protection.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Amount
Permethrin	52645-53-1	44%
n-Methyl-2-Pyrrolidone	872-50-4	<25%
Imidacloprid	138261-41-3	8.8%
Pyriproxyfen	95737-68-1	0.44%
Non-Hazardous Ingredients	Proprietary	20-40%

The exact concentration and/or specific chemical identity are being withheld as a trade secret.

### 4. FIRST AID MEASURES

**Eye:** Immediately flush eyes with plenty of water for 15-20 minutes while holding the eyelids apart. Remove contact lenses, if present and easy to do after the first 5 minutes. Continue flushing. Get medical attention if irritation persists.

**Skin:** Remove contaminated clothing. Wash skin with soap and water. Get medical attention if irritation or other symptoms occur. Launder clothing before re-use.

**Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. If conscious, rinse mouth with a small amount of water and give one glass of water to dilute. Never give anything by mouth to an unconscious or drowsy person. Call a poison center or doctor for treatment advice.

**Inhalation:** Remove to fresh air. Get medical attention if symptoms of exposure persist.

**Most Important Symptoms:** May cause moderate eye irritation. May cause mild skin irritation. Inhalation of vapors or mists may cause mucous membrane and respiratory irritation. If swallowed, may cause intestinal irritation and discomfort and other toxic effects such as dizziness, headache, nausea, and muscle twitching. Contains n-methyl-2-pyrrolidone which may cause adverse reproductive effects.

**Indication of immediate medical attention/special treatment:** Immediate medical attention is recommended for ingestion.

### 5. FIRE FIGHTING MEASURES

**Suitable (and Unsuitable) Extinguishing Media:** Use water fog, alcohol foam, carbon dioxide or dry chemical to extinguish a fire involving this product. Do not use solid water stream as this may spread the fire.

**Specific hazards arising from the chemical:** Combustible liquid and vapor. This product will burn in a fire or when heated above the flashpoint. Combustible vapors may collect in low areas. Combustion products include oxides of nitrogen, carbon oxides, hydrogen chloride and hydrogen cyanide.

**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. Prevent fire-fighting water from contaminating the surface or ground water.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Wear appropriate protective clothing and eye protection. Ventilate area. Eliminate all ignition sources.

**Methods and Materials for Containment and Cleaning Up:** Contain and absorb with an inert, non-combustible material such as earth, sand, inert binder or vermiculite. Do not allow product to be released to surface waters. Place in a suitable container for disposal. Report releases as required by local, state and federal authorities.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid contact with the eyes, skin and clothing. Avoid breathing vapors or mists. Keep away from heat, sparks and flames. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Do not contaminate feed or food by storage or disposal.

**Conditions for Safe Storage, Including Any Incompatibilities:** Do not contaminate water, food or feed by storage or disposal. Store in a cool, dry place inaccessible to children and pets. Protect from freezing.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines:

Permethrin	None Established
n-Methyl-2-Pyrrolidone	2 ppm TWA skin AIHA WEEL
Imidacloprid	None Established
Pyriproxyfen	None Established
Non-Hazardous Ingredients	None Established

**Engineering Controls:** No special ventilation needed for normal use. For bulk processing, use with adequate general or local exhaust ventilation to minimize exposure levels.

**Respiratory Protection:** None required for normal use. For bulk processing where exposure levels are excessive or irritation is experienced, an approved organic vapor respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

**Skin Protection:** None required for normal use. Avoid skin contact and wash with soap and water after handling. For bulk processing, impervious gloves are required.

**Eye Protection:** None required for normal use. Chemical safety goggles should be worn for bulk processing where splashing is possible.

**Other:** None required for normal use. Impervious protective clothing as needed to avoid prolonged skin contact is recommended for bulk processing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance and Odor:** Yellow-brownish liquid with a mild characteristic odor.

<b>Physical State:</b> Liquid	<b>Odor Threshold:</b> Not available
<b>Vapor Density:</b> Not applicable	<b>Initial Boiling Point/Range:</b> Not available
<b>Solubility In Water:</b> Insoluble	<b>Vapor Pressure:</b> Not available
<b>Relative Density:</b> 1.13	<b>Evaporation Rate:</b> Not available
<b>Melting/Freezing Point:</b> <-60°C	<b>pH:</b> 3.0 – 5.5 at 100 g/l
<b>VOC Content:</b> Not available	<b>Octanol/Water Coefficient:</b> Not available
<b>Solubility:</b> Insoluble in water	<b>Decomposition Temperature:</b> Not available
<b>Viscosity:</b> Not available	<b>Flammability (solid, gas):</b> Not applicable
<b>Flashpoint:</b> 185°F (85°C)	<b>Autoignition Temperature:</b> Not available

<b>Flammable Limits: LEL:</b> Not available <b>UEL:</b> Not available	
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## 10. STABILITY AND REACTIVITY

**Reactivity:** Not normally reactive.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reactions:** Reaction with oxidizers may generate heat and cause fire.

**Conditions to Avoid:** Keep away from high temperatures and open flames.

**Incompatible Materials:** Avoid peroxides, bases and strong acids.

**Hazardous Decomposition Products:** Thermal decomposition may generate oxides of nitrogen, carbon oxides, hydrogen chloride and hydrogen cyanide.

## 11. TOXICOLOGICAL INFORMATION

### HEALTH HAZARDS:

**Eye:** May cause moderate irritation with redness and tearing.

**Skin:** May cause minor irritation.

**Ingestion:** Swallowing may cause gastrointestinal upset and other adverse effects such as dizziness, headache, nausea, and muscle twitching. Moderately toxic by ingestion in animal studies.

**Inhalation:** Inhalation of vapors or mists may cause irritation of the nose, throat and upper respiratory tract and effects similar to ingestion.

**Chronic Effects:** None known.

**Sensitization:** This material is not known to cause sensitization. Negative in the LLNA in mice.

**Carcinogenicity:** None of the components are listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, or OSHA or are classified as carcinogens under the GHS.

**Germ Cell Mutagenicity:** Components are not germ cell mutagens.

**Reproductive Toxicity:** n-Methyl-2-pyrrolidine is classified as a reproductive toxin based on evidence from animal studies.

### Numerical Measures of Toxicity:

Product: Oral rat LD50 1040 mg/kg; Acute Dermal rat LD50 >5000 mg/kg.

Ingredient Inhalation Toxicity Data:

Permethrin: LC50 inhalation rat >4.638 - 23.5 mg/L/4 hr mist

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity:

Imidacloprid: 96 hr LC50 Fathead minnow 16.4 mg/L; 48 hr; EC50 Daphnia 10.44 mg/L/48 hr; EC50 Hyalella Azteca 0.055 mg/L/96 hr. EC50 green algae >100 mg/L/72 hr.

Permethrin: 24 hr EC50 Daphnia 212 µg/l; 48 hr EC50 Daphnia 37 µg/l

Pyriproxyfen: EC50 Daphnia 0.4 mg/L/48 hr; EC50 green algae 0.064 mg/L/72 hr.

**Persistence and Degradability:** Imidacloprid, Permethrin and Pyriproxyfen are not readily biodegradable.

**Bioaccumulative Potential:** Imidacloprid potential for bioaccumulation is low.

**Mobility in Soil:** Permethrin binds to soil. Imidacloprid has a moderate binding affinity to soil.

**Other Adverse Effects:** This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Do not add directly to water. Do not contaminate water when disposing of product or packaging.

### 13. DISPOSAL CONSIDERATIONS

**Pesticide Disposal and Container Handling:** Non refillable container. **If empty:** Do not reuse this container. 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

**DOT Hazardous Materials Description (non-bulk):**

**Proper Shipping Name:** Not Regulated in non-bulk containers

**UN Number:** None

**Hazard Class/Packing Group:** None

**Labels Required:** None

**DOT Hazardous Materials Description (bulk):**

**Proper Shipping Name:** Combustible Liquid, n.o.s. (n-Methyl-2-pyrrolidone)

**UN Number:** NA1993

**Hazard Class/Packing Group:** Combustible liquid, III

**Labels Required:** N

**IMDG Shipping Name:** Environmentally hazardous substances, liquid, n.o.s. (Imidacloprid, Permethrin)

**UN Number:** UN3082

**IMDG Hazard Class/Packing Group:** 9, III

**IMDG Hazard Labels Required:** Class 9

**IATA Shipping Name:** Environmentally hazardous substances, liquid, n.o.s. (Imidacloprid, Permethrin)

**UN Number:** UN3082

**IATA Hazard Class/Packing Group:** 9, III

**IATA Hazard Labels Required:** Class 9

Note: This product is classified as a Marine Pollutant (Environmentally Hazardous Substance) in accordance with the IMDG Code and the UN Model Regulations. However, if 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, 49CFR 171.4(c)(2)), it can be shipped as non-regulated.

### 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:**

**PRECAUTIONARY STATEMENTS**

**HAZARDS TO HUMANS**

WARNING. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if swallowed. Prolonged or frequently repeated skin contact may cause allergic reactions in some

individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

**ENVIRONMENTAL HAZARDS**

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Do not add directly to water. Do not contaminate water when disposing of product or packaging.

**FIFRA Status:** This product is an EPA registered pesticide under FIFRA. EPA Registration No. 91384-3

**US Toxic Substance Control Act:** This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

**CERCLA 103 Reportable Quantity:** This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**Hazard Category for Section 311/312:** Acute Health, Chronic Health, Fire Hazard

**Section 313 Toxic Chemicals:** This product contains the following chemicals subject to SARA Title III Section 313 Reporting requirements:

<u>Component</u>	<u>Weight %</u>	<u>CAS-No.</u>
Permethrin	44%	52643-53-1
n-Methyl-2-pyrrolidone	<25%	872-50-4

**Section 302 Extremely Hazardous Substances (TPQ):** None

**16. OTHER INFORMATION**

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

**SDS Date of Preparation/Revision:** October 12, 2016

**Revision Summary:**

10/12/2016: New US SDS  
11/15/16: Para|Defense Advanced Brand name added