SAFETY DATA SHEET

Regulation (EC) No 1907/2006 (REACH) (T2 Bulk)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

| 1.1 Product Identifier Trade Name | Para/Defense Advanced for Dogs |
|---|---|
| SDS Date | July 1, 2016 |
| 1.2 Relevant Identified Uses of th | e Substance or Mixture and Uses Advised Against |
| Product Use: | Topical flea protection and treatment for animals |
| Uses Advised Against: | Not for human use. |
| 1.3 Details of the Supplier of the Manufacturer: | Safety Data Sheet |
| CAP IM Supply, Inc. | |
| 303 Perimeter Center North | Suite 300 |
| Atlanta, Georgia 19103 US | , |
| 1 4 In case of emergency | |

1.4 In case of emergency Chemtrec: (800) 424-9000 Information: +1-801-512-7543

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

| Physical | Health | Environment |
|---------------|-----------------------------------|-------------------------------------|
| Not hazardous | Eye Irritation Category 2 (H319) | Aquatic Toxicity Acute Category 1 |
| | Acute Oral Toxicity Category 4 | (H400) |
| | (H302) | Aquatic Toxicity Chronic Category 1 |
| | Reproductive Toxicity Category 1B | (H410) |
| | H360D | |
| | Specific Target Organ Toxicity | |
| | Single Exposure Category 3 H335 | |



2.2 Label Elements

Warning

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H360 May damage the unborn child.

H335 May cause respiratory irritation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Phrases:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing vapors or mists.

P271 Use only outdoors or in a well-ventilated area.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves and eye protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical attention.

P301+P312 IF SWALLOWED: Call a POISON CENTER of doctor if you feel unwell.

P330 Rinse mouth.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor if you feel unwell.

P308+P313 IF exposed or concerned: Get medical advice.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards: None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

| Chemical Name | CAS Number / EINECS Number REACH Reg. Number | % (w/w) | CLP/GHS Classification (1272/2008) |
|------------------------------|---|---------|---|
| Permethrin | 52645-53-1 | 44% | Acute Oral Toxicity Category 4 H302 Acute Inhalation Toxicity Category 4 H332 Skin Sensitizer Category 1B H317 Aquatic Acute 1 H400 |
| n-Methyl-2- Pyrrolidone | 872-50-4 | <25% | Aquatic Chronic 1 H410Skin Irritation Category 2 H315Eye Irritation Category 2A H319Reproductive Toxicity Category 1BH360DSpecific Target Organ Toxicity SingleExposure Category 3 H335 |
| Imidacloprid | 138261-41-3 | 8.8% | Acute Oral Toxicity Category 4 H302 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 |
| Pyriproxyfen | 95737-68-1 | 0.44% | Acute Inhalation Toxicity Category 4 H332 Aquatic Acute 1 H400 Aquatic Chronic 1 H410 |
| Non-Hazardous Ingredients | Proprietary | 20-40% | Not Hazardous |

See Section 16 for full text of GHS Classifications.

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

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

First Aid

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.

4.2 Most Important symptoms and effects, both acute and delayed: 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.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is recommended for ingestion.

SECTION 5: FIREFIGHTING MEASURES

5.1 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.

5.2 Special Hazards Arising from the Substance or Mixture: Combustion products include oxides of nitrogen, carbon oxides, hydrogen chloride and hydrogen cyanide.

5.3 Advice 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. Prevent firefighting water from contaminating the surface or ground water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective clothing and equipment as described in Section 8. Ventilate area. Eliminate all ignition sources.

6.2 Environmental Precautions: Prevent spill from entering sewers and water courses. Report releases as required by local and national authorities.

6.3 Methods and Material 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.

6.4 Reference to Other Sections:

Refer to Section 8 for personal protective equipment and Section 13 for disposal information.

SECTION 7: HANDLING and STORAGE

7.1 Precautions for Safe Handling: Avoid contact with the eyes, skin and clothing. Avoid breathing vapors or mists. Wear suitable protective clothing. Use with adequate ventilation. Keep away from heat, sparks and flames.

7.2 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.

7.3 Specific end use(s):Industrial uses: NoneProfessional uses: Topical flea and tick protection and treatment for Dogs

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

| Chemical Name | EU IOEL | French OEL | German OEL | UK OEL |
|---------------|------------------|------------------|------------------|------------------|
| Permethrin | None Established | None Established | None Established | None Established |
| n-Methyl-2- | 10 ppm TWA, 20 | 10 ppm TWA, 20 | 20 ppm TWA, 40 | 25 ppm TWA, 75 |
| Pyrrolidone | ppm STEL | ppm STEL | ppm STEL | ppm STEL |
| Imidacloprid | None Established | None Established | None Established | None Established |
| Pyriproxyfen | None Established | None Established | None Established | None Established |

8.2 Exposure Controls:

Appropriate Engineering Controls: Use with adequate general or local exhaust ventilation to minimize exposures levels.

Personal Protective Measures

Respiratory protection: In operations 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 EN Standards and good Industrial Hygiene practice. **Skin Protection:** Impervious gloves such as rubber are recommended if needed to avoid prolonged skin contact.

Eye Protection: Chemical safety goggles should be worn where splashing is possible.

Other: Impervious protective clothing as needed to avoid prolonged skin contact.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties

Appearance (physical state, color, etc.): Yellow-brownish liquid **Odor:** Mild characteristic odor

| Odor threshold: Not determined | pH: 3.0 – 5.5 at 100 g/l |
|---|---|
| Melting point/freezing point: <-60°C | Boiling Point: Not determined |
| Flash point: 185°F (85°C) | Evaporation rate: Not determined |
| Flammability (solid, gas): Not applicable | VOC: Not determined |
| Flammable limits: LEL: Not determined | UEL: Not determined |
| Vapor pressure: Not determined | Vapor density: Not determined |
| Relative density : 1.13 | Solubility(ies): Insoluble in water |

| Partition coefficient: n-octanol/water: Not available | Auto-ignition temperature: Not Determined |
|--|---|
| Decomposition temperature: Not available | Viscosity: Not available |
| Explosive Properties: Not applicable | Oxidizing Properties: Not oxidizing |

9.2 Other Information: None available

SECTION 10: STABILITY and REACTIVITY

10.1 Reactivity: Not reactive under normal conditions of use.

10.2 Chemical Stability: Stable.

10.3 Possibility of Hazardous Reactions: None known.

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

10.5 Incompatible Materials: Avoid peroxides, bases and Strong acids.

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

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:

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.

Skin corrosion/irritation: Non-irritating in rabbits.

Eye damage/ irritation: Moderately irritating in rabbit eyes.

Respiratory Irritation: No data available. Expected to cause irritation.

Respiratory Sensitization: No data available. Components are not respiratory sensitizers.

Skin Sensitization: This material is not known to cause sensitization. The results of a LLNA test in mice were negative.

Germ Cell Mutagenicity: No adverse effects are expected. Components are not germ cell mutagens.

Carcinogenicity: None of the components of this product are listed as carcinogens by IARC or the EU CLP.

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

Specific Target Organ Toxicity:

Single Exposure: n-Methyl-2-pyrrolidone causes transient respiratory irritation.

Repeat Exposure: Components are not classified for target organ toxicity.

Aspiration Toxicity: Components are not aspiration hazards.

Acute Toxicity Values:

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

SECTION 12: ECOLOGICAL INFORMATION

General Advice: Do not allow to enter surface water of groundwater.

12.1 Toxicity:

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 Daphina 212 µg/l; 48 hr EC50 Daphina 37 µg/l

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

12.2 Persistence and degradability: Imidacloprid, Permethrin and Pyriproxyfen are not readily biodegradable.

12.3 Bioaccumulative Potential: Imidacloprid potential for bioaccumulation is low

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

12.5 Results of PBT and vPvB assessment: Components do not meet criteria for PBT or vPvB.

12.6 Other Adverse Effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods: Dispose in accordance with all local, state and federal regulations. No specific disposal method is recommended. It is the responsibility of the user, at the time of disposal, to determine whether the product meets the criteria for hazardous waste.

| SECTION 14: TRANSPORTATION INFORMATIO | Ν |
|---------------------------------------|---|
|---------------------------------------|---|

| | 14.1 UN Number | 14.2 UN Proper Shipping Name | 14.3 Hazard Class(s) | 14.4 Packing Group | 14.5 Environmental Hazards |
|----------------------|-------------------|--|----------------------------|--------------------------|----------------------------------|
| US DOT (non-bulk) | | Not Regulated in non-bulk containers. | | | |
| US DOT (bulk) | NA1993 | Combustible Liquid, n.o.s. (n-Methyl-2- pyrrolidone) | Comb Liq | Ш | No |
| Canadian TDG | | Not Regulated | | | |
| EU ADR/RID | UN3082 | Environmentally hazardous substances, liquid, n.o.s. (Imidacloprid, Permethrin) | 9 | PGIII | Yes |
| IMDG | UN3082 | Environmentally hazardous substances, liquid, n.o.s. (Imidacloprid, Permethrin) | 9 | PGIII | Marine Pollutant |
| IATA/ICAO | UN3082 | Environmentally hazardous substances, liquid, n.o.s. (Imidacloprid, Permethrin) | 9 | PGIII | 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, if it is packaged in either single packages or inner packaging 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.

14.6 Special Precautions for User: None known.

14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code: Not applicable – product is transported only in packaged form.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

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

US EPA Emergency Planning and Community Right to Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) – Supplier notification Required

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

EU Regulations:

This SDS was prepared in accordance with EC No. 1907/2006 as amended. Classification under EC No. 1272/2008 as amended following the mixture rules.

REACH: This product contains a Substance of Very High Concern; n-Methyl-2-pyrrolidone

15.2 Chemical safety assessment: Not required

SECTION 16: OTHER INFORMATION

CLP/GHS Classification and H Phrases for Reference (See Section 3) Aquatic Acute 1 Aquatic Acute Toxicity Category 1 Aquatic Chronic 1 Aquatic Chronic Toxicity Category 1 H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation H332 Harmful if inhaled. H335 May cause respiratory irritation. H360 May damager fertility or the unborn child. H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects.

SDS Revision History: New SDS **Date of preparation:** July 17, 2016 **Date of previous revision:** New SDS