
1. Product and Company Identification

Product name PetArmor Plus IGR for Dogs
Synonym(s) EPA # 53883-312-2517
CAS # Mixture
Product use Flea and tick control
Manufacturer information Sergeant's Pet Care Products, Inc.
10077 South 134th Street
Omaha, NE 68138-3710 US
Phone: 1-800-224-7387
Emergency Phone: 1-800-781-4738
CHEMTREC 1-800-424-9300

2. Hazards Identification

Emergency overview CAUTION
COMBUSTIBLE LIQUID AND VAPOR.
MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

Potential short term health effects

Routes of exposure Eye, Skin contact, Skin absorption, Inhalation, Ingestion.
Eyes May cause irritation.
Skin May cause irritation.
Inhalation May cause respiratory tract irritation.
Ingestion May cause stomach distress, nausea or vomiting.

Target organs Eyes. Skin.

Chronic effects Prolonged or repeated exposure can cause drying, defatting and dermatitis. See Section 11.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

OSHA regulatory status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects See section 12.

3. Composition/Information on Ingredients

Components	CAS #	Percent
Acetic acid, 2-ethylhexyl ester	103-09-3	40 - 60
2-Pyrrolidinone, 1-methyl-	872-50-4	20 - 40
Novaluron	116714-46-6	20 - 40
Fipronil	120068-37-3	5 - 15

4. First Aid Measures

First aid procedures

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. Obtain medical attention if irritation develops or persists.

Skin contact Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Have person sip a glass of water if able to do so. Do not give anything by mouth to an unconscious person.

Notes to physician Treat patient symptomatically.

General advice Keep away from sources of ignition. No smoking. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. KEEP OUT OF REACH OF CHILDREN

5. Fire Fighting Measures

Flammable properties Combustible by OSHA criteria.

Extinguishing media

Suitable extinguishing media Dry chemical. Foam. Carbon dioxide. Water spray.

Unsuitable extinguishing media Not available

Protection of firefighters

Specific hazards arising from the chemical Not available

Protective equipment and precautions for firefighters Firefighters should wear full protective clothing including self contained breathing apparatus.

Hazardous combustion products May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

Explosion data

Sensitivity to mechanical impact Not available.

Sensitivity to static discharge Not available.

6. Accidental Release Measures

Personal precautions Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Environmental precautions Do not discharge into lakes, streams, ponds or public waters.

Methods for containment Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas. Use water spray to reduce vapors or divert vapor cloud drift, capturing water spray with appropriate diking.

Methods for cleaning up Remove sources of ignition. Before attempting clean up, refer to hazard data and use appropriate personal protective equipment (PPE). Wet down with water to reduce vapors as needed, and dike for later disposal. Absorb with non-reactive absorbent and place in suitable, covered, labeled containers using non-sparking equipment. Never return spills to original container for re-use. After removal flush contaminated area thoroughly with water. Contact emergency services and supplier for advice, if needed.

7. Handling and Storage

Handling Use good industrial hygiene practices in handling this material.
Avoid contact with eyes and skin.
Wash thoroughly after handling.

Storage KEEP OUT OF REACH OF CHILDREN.
Store away from heat, flames, sparks, and all other sources of ignition.
Store in a cool (below 25°C/77°F) dry place inaccessible to children and pets.
Do not refrigerate.
Protect from sunlight.

8. Exposure Controls/Personal Protection

Exposure limits There are no established ACGIH or OSHA PEL exposure limits for the hazardous chemicals listed in section 3 of the MSDS.

Engineering controls General ventilation normally adequate.

Personal protective equipment

Eye / face protection Wear safety glasses with side shields.

Hand protection Rubber gloves. Confirm with a reputable supplier first.

Skin and body protection As required by employer code.

Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clear
Color	Light amber
Form	Liquid
Odor	None
Odor threshold	Not available.
Physical state	Liquid.
pH	Not available.
Freezing point	Not available.
Boiling point	Not available.
Pour point	Not available.
Evaporation rate	Not available
Flash point	189.50 °F (87.50 °C)
Auto-ignition temperature	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	Not available.
Partition coefficient (n-octanol/water)	Not available.
Solubility (water)	Not available.
Relative density	1.062 g/ml @ 20°C
Viscosity	5.75 cSt @20°C
VOC	Not available
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	None known.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Heat, open flames, static discharge, sparks and other ignition sources. Do not mix with other chemicals.
Incompatible materials	Caustics. Acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

11. Toxicological Information

Toxicological data

Product	Species	Test Results
Fip-Nov Squeeze-On for Dogs (CAS Mixture)		
Acute		
<i>Dermal</i>		
LD50	Rat	2730 mg/kg
<i>Inhalation</i>		
LC50	Rat	4 mg/l/4h

Product	Species	Test Results
<i>Oral</i> LD50	Rat	781 mg/kg
Components	Species	Test Results
2-Pyrrolidinone, 1-methyl- (CAS 872-50-4)		
Acute		
<i>Dermal</i> LD50	Rabbit	2000 mg/kg
	Rat	2000 mg/kg
<i>Inhalation</i> LC50	Rat	3.1 mg/l/4h
<i>Oral</i> LD50	Mouse	5130 mg/kg
	Rat	3598 mg/kg
Acetic acid, 2-ethylhexyl ester (CAS 103-09-3)		
Acute		
<i>Dermal</i> LD50	Rabbit	>= 5000 mg/kg
<i>Inhalation</i> LC50	Rat	>= 732 mg/l/4h
<i>Oral</i> LD50	Rat	3000 mg/kg
Fipronil (CAS 120068-37-3)		
Acute		
<i>Dermal</i> LD50	New Zealand white rabbit	354 mg/kg
	Rat	2000 mg/kg
<i>Inhalation</i> LC50	Rat	0.7 mg/l/4h
<i>Oral</i> LD50	Mouse	98 mg/kg
	Rat	92 mg/kg
Novaluron (CAS 116714-46-6)		
Acute		
<i>Dermal</i> LD50	Rat	>= 2000 mg/kg
<i>Inhalation</i> LC50	Rat	>= 5.2 mg/l/4h
<i>Oral</i> LD50	Rat	>= 5000 mg/kg

Effects of acute exposure

Eye contact	May cause irritation.
Skin contact	May cause irritation.
Inhalation	May cause respiratory tract irritation.
Ingestion	May cause stomach distress, nausea or vomiting.
Sensitization	Non-hazardous by OSHA criteria.
Chronic effects	Non-hazardous by OSHA criteria.
Carcinogenicity	Non-hazardous by OSHA criteria.

Mutagenicity	Non-hazardous by OSHA criteria.
Reproductive effects	Contains a potential reproductive toxin.
Teratogenicity	Non-hazardous by OSHA criteria.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity Components of this product have been identified as having potential environmental concerns.

Ecotoxicological data

Product	Species	Test Results
Fip-Nov Squeeze-On for Dogs (CAS Mixture)		
Fish	LC50	Fish
		0.3 mg/l
Components		
2-Pyrrolidinone, 1-methyl- (CAS 872-50-4)		
Algae	IC50	Algae
		500 mg/L, 72 Hours
Crustacea	EC50	Daphnia
		4897 mg/L, 48 Hours
Fipronil (CAS 120068-37-3)		
	LD50	Mallard duck
		> 2150 mg/kg
Crustacea	LC50	Daphnia
		19 ug/l
Fish	LC50	Fish
		0.3 mg/l
Novaluron (CAS 116714-46-6)		
Crustacea	EC50	Daphnia
		0.3 ug/l, 48 Hours
Fish	LC50	Rainbow Trout
		> 1 mg/l, 96 Hours

Persistence and degradability Not available.

Bioaccumulation / Accumulation Not available

Mobility in environmental media Not available.

Environmental effects Not available.

Aquatic toxicity Not available.

Partition coefficient

2-Pyrrolidinone, 1-methyl-	-0.54
Fipronil	4
Novaluron	5.27

Chemical fate information Not available.

13. Disposal Considerations

Disposal instructions Review federal, state and local government requirements prior to disposal. Typically municipal landfill will be appropriate.

Waste from residues / unused products Review federal, state and local government requirements prior to disposal.

Contaminated packaging Review federal, state and local government requirements prior to disposal.

14. Transport Information

U.S. Department of Transportation (DOT)

Not regulated as dangerous goods.

IATA/ICAO (Air)

Basic shipping requirements:

UN number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Fipronil)
Hazard class	9
Packing group	III
Limited quantity	Max net quantity 30kg G
Packaging instructions	Y964

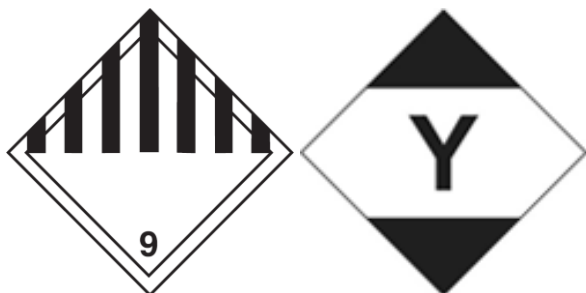
Excepted quantity code E1
Special Provisions A97, A158
ERG code 9L

IMDG (Marine Transport)

Basic shipping requirements:

UN number UN3082
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fipronil)
Hazard class 9
Packing group III
Limited quantity 5L
Packing Instructions P001, LP01
Special provisions 274, 335
Stowage location Category A
Ems codes F-A, S-F

IATA; IMDG



15. Regulatory Information

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 Yes
hazardous chemical

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components of this product are either on the TSCA Inventory, or are exempt from TSCA Inventory.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) 1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes Fire
Hazard - Yes Pressure
Hazard - No Reactivity
Hazard - No

State regulations

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

US - Minnesota Haz Subs: Listed substance

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

US - New Jersey RTK - Substances: Listed substance

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

US - Texas Effects Screening Levels: Listed substance

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

Acetic acid, 2-ethylhexyl ester (CAS 103-09-3) Listed.

Fipronil (CAS 120068-37-3) Listed.

US - Washington Chemical of High Concern to Children: Listed substance

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

US. Massachusetts RTK - Substance List

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

Acetic acid, 2-ethylhexyl ester (CAS 103-09-3) Listed.

US. Pennsylvania RTK - Hazardous Substances

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

Acetic acid, 2-ethylhexyl ester (CAS 103-09-3) Listed.

US. Rhode Island RTK

2-Pyrrolidinone, 1-methyl- (CAS 872-50-4) Listed.

Country(s) or region

Inventory name

On inventory (yes/no)*

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

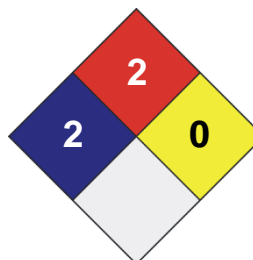
Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	* 2
FLAMMABILITY	2
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Issue date

24-September-2013

Effective date

01-September-2013

Prepared by

Dell Tech Laboratories, Ltd. Phone: (519) 858-5021

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.

Revision date

Sections revised

Supersedes MSDS dated