SAFETY DATA SHEETS

This SDS packet was issued with item:

078929206

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078852591 078852609 078852617 078852625 078929060 078929061 078929062 078929063 078929207 078929208 078929209 21142795 21142796 21142797 21142804 78929206 78929207 78929208

Elanco

SAFETY DATA SHEET

1. Identification

Product identifier Parastar Plus for Dogs

Other means of identification

Item CodeCA5332Recommended useInsecticideRecommended restrictionsNone known.

Manufacturer/Importer/Supplier/Distributor information

Company Name Elanco Animal Health

2500 Innovation Way Greenfield, IN 46140

US

Phone: 1-877-Elanco1 (1-877-352-6261)

Emergency Telephone: Elanco Product Technical Support / Human or Animal Exposure Reporting:

1-888-545-5973

Email: elanco_sds@elanco.com

Transportation Emergency CHEMTREC: 1-800-424-9300

Telephone: (Outside U.S. 1-703-527-3887)

2. Hazard(s) identification

Physical hazards Not classified.

Health hazardsAcute toxicity, inhalationCategory 4Serious eye damage/eye irritationCategory 2

Specific target organ toxicity, repeated Category 1

exposure

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H372 Causes damage to organs (central nervous system) through prolonged or repeated exposure.

Precautionary statement

Prevention

P260 Do not breathe mist or vapor. P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response

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

P305 + P351 +

P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P312 Call a PÓISON CENTER/doctor if you feel unwell.
P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage Not available.

Disposal

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P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Fipronil		120068-37-3	9.8
Cyphenothrin		39515-40-7	5.2

Composition comments

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable levels.

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

May be harmful in contact with skin. Harmful if inhaled. Causes serious eye irritation. Prolonged or

Get medical advice/attention if you feel unwell.

Most important

symptoms/effects, acute and

delayed

Treat symptomatically.

Indication of immediate medical attention and special treatment needed

General information

NOT FOR HUMAN USE!

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.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

repeated exposure may cause: Central nervous system effects.

Specific hazards arising from the chemical

Special protective equipment

and precautions for firefighters

During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting

Specific methods

equipment/instructions

Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

In case of spills, beware of slippery floors and surfaces. Should not be released into the environment.

Large Spills: Stop the flow of material, if this is without risk. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Environmental precautions Avoid discharge into drains, water courses or onto the ground.

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7. Handling and storage

Precautions for safe handling Do not breathe mist or vapor. Use only outdoors or in a well-ventilated area. Wear appropriate

personal protective equipment. Wash hands thoroughly after handling. Observe good industrial

hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Do not

refrigerate. Store in a well-ventilated place.

8. Exposure controls/personal protection

Biological limit values

No biological exposure limits noted for the ingredient(s). Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation. or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Wear appropriate chemical resistant gloves. Hand protection

Other Chemical-resistant gloves and impermeable body covering to minimize skin contact.

In case of insufficient ventilation, wear suitable respiratory equipment. Select appropriate respirator Respiratory protection

for physical characteristics of material. Select respirator with appropriate protection factor.

Thermal hazards Not available.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Liquid. Physical state Liquid. **Form**

Colourless to light yellow. Color

Odor Faint. Pleasant. Odor threshold Not available. pН Not available. Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

> 199.9 °F (> 93.3 °C) Flash point

Evaporation rate Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

Vapor pressure 0.0000009 mm Hg (25 °C) (Cyphenothrin)

Not available. Vapor density Relative density Not available.

Solubility(ies)

Solubility (water) 0.01 mg/l (25 °C) (Cyphenothrin)

2.4 mg/l (25 °C) (Fipronil)

Partition coefficient (n-octanol/water)

Not available.

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Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Density 1.63 g/ml (20 °C) (Fipronil)

Explosive properties Not explosive.

Oxidizing properties No oxidizing properties.

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Avoid exposure to high temperatures or direct sunlight. Do not refrigerate. Contact with

incompatible materials.

Spacias

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Product

No hazardous decomposition products are known.

11. Toxicological information

Information on toxicological effects

Acute toxicity May be harmful if swallowed. May be harmful in contact with skin. Harmful if inhaled.

Troduct	Opecies	rest Results			
Parastar Plus for Dogs					
<u>Acute</u>					
Dermal					
LD50	Rat	> 2000 mg/kg (similar product)			
Oral					
LD50	Rat	2722 mg/kg (similar product)			
Components	Species	Test Results			

Test Results

Cyphenothrin (CAS 39515-40-7)

Acute Dermal

LD50 Rat > 5000 mg/kg

Inhalation

LC50 Rat 1.85 mg/l, 4 hours

Oral

LD50 Rat 318 mg/kg

Fipronil (CAS 120068-37-3)

<u>Acute</u>

Dermal

LD50 Rabbit 354 mg/kg

Inhalation

LC50 Rat 0.39 mg/l, 4 hours

Oral

LD50 Rat 97 mg/kg

Skin corrosion/irritation Rabbit: Slight irritation. (Fipronil)

Rabbit: No irritation. (Cyphenothrin) (similar substance)

Based on available data, the classification criteria are not met.

Serious eye damage/eye

irritation

Causes eye irritation. (similar substance)

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Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer. (Cyphenothrin)

Based on available data, the classification criteria are not met.

Skin sensitization Guinea pig: Not a skin sensitizer. (similar substance) (Fipronil) (Cyphenothrin)

Based on available data, the classification criteria are not met.

Germ cell mutagenicity Result in genetic toxicity assays (in vitro and in vivo): Negative (Fipronil) (Cyphenothrin)

Based on available data, the classification criteria are not met.

Carcinogenicity Not listed by IARC, NTP, ACGIH or OSHA.

No effects identified in animal studies. (Cyphenothrin)

In carcinogenicity studies, no tumors in mice observed, thyroid tumors reported in rat. These results are thought to be a rat-specific effect that is not relevant for humans. (Fipronil)

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity In laboratory animal studies, effects on reproduction have been seen only at doses that produced

significant toxicity to the parent animals. (Fipronil)
No effects identified in animal studies. (Cyphenothrin)
Based on available data, the classification criteria are not met.
No significant target organ toxicity reported. (Active ingredient(s

Specific target organ toxicity -

single exposure

No significant target organ toxicity reported. (Active ingredient(s)) Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure

May cause damage to organs (central nervous system) through prolonged or repeated exposure. A chronic feeding study on fipronil in rats produced seizures, including seizures resulting in death, decreased body weight gain, decreased food consumption, decreased hematology measures, alterations in clinical chemistry, alterations in thyroid hormones, alterations in urine chemistry, changes on gross necropsy, increase in liver and thyroid weights, and kidney effects.

Aspiration hazard Not an aspiration hazard.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Product		Species	Test Results
Parastar Plus for Dogs	S		
Aquatic			
Fish	LC50	Fish	0.7517 mg/l, 96 hours
Components		Species	Test Results
Cyphenothrin (CAS 39	9515-40-7)		
Aquatic			
Algae	IC50	Algae	> 0.014 mg/l, 72 hours
Crustacea	EC50	Daphnia	0.0004 mg/l, 48 hours
		Water flea (Daphnia magna)	0.0012 mg/l, 48 hours
Fish	LC50	Fish	0.0003 mg/l, 96 hours
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.0004 mg/l, 96 hours
Fipronil (CAS 120068-	-37-3)		
	EC50	Midge (Chironomus dilutus)	0.0325 μg/l, 96 hours
	NOEC	Midge (Chironomus riparius)	0.12 μg/l, 28 days
		Scenedesmus subspicatus (Chodat))	40 μg/l
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	190 μg/l, 48 hours
			12.9 µg/l, 48 hours
	LC50	Opossum shrimp (Americamysis bahia)	0.14 μg/l, 96 hours
	NOEC	Opossum shrimp (Americamysis bahia)	0.06 μg/l, 28 days

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Components		Species	Test Results
			0.007 μg/l, 28 days
		Water flea (Daphnia magna)	9.8 μg/l, 21 days
Fish	LC50	Bluegill (Lepomis macrochirus)	85.2 μg/l, 96 hours
		Carp (Cyprinus carpio)	430 μg/l, 96 hours
		Channel catfish (Ictalurus punctatus)	560 μg/l, 96 hours
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	248 μg/l, 96 hours
		Sheepshead minnow (Cyprinodon variegatus)	130 μg/l, 96 hours
	NOEC	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	15 μg/l, 90 days
		Sheepshead minnow (Cyprinodon variegatus)	2.9 μg/l, 35 days

Persistence and degradability Fipronil biodegrades slowly in the environment and is not expected to bioaccumulate.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Fipronil 4.01

Mobility in soilNo data available.Other adverse effectsNot available.

13. Disposal considerations

Disposal instructionsDispose of contents/container in accordance with local/regional/national/international regulations.

14. Transport information

General information Effective January 1, 2015 by Special Provision, UN3077 and UN3082 when packaged in inner

packages of 5L / 5 KG or less are not subject to the dangerous goods regulations.

DOT

Not regulated as dangerous goods.

IATA

UN number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Fipronil)

Transport hazard class(es)

Class 9
Subsidiary risk Packing group III
Environmental hazards Yes
ERG Code 9L

Special precautions for user Not available.

Other information

Passenger and cargo Allowed with restrictions.

aircraft

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN308

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FIPRONIL)

Transport hazard class(es)

Class 9
Subsidiary risk Packing group III

Environmental hazards

Marine pollutant Yes
EmS F-A, S-F
Special precautions for user Not available.

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

IATA; IMDG



Marine pollutant



15. Regulatory information

US federal regulations

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

One or more components are not listed on TSCA.

Toxic Substances Control Act (TSCA)

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

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

Not regulated.

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

Not regulated.

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)NoCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryNo

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

07-13-2017 Issue date **Revision date** 02-13-2019

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Disclaimer As of the date of issuance, we are providing available information relevant to the handling of this

material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature

which may accompany the finished product.

For additional information contact:

Elanco Animal Health 0011+1-877-352-6261 0011+1-800-428-4441

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