SAFETY DATA SHEETS

This SDS packet was issued with item:

078930543

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

078929658 078929659 078930544 078930545 078930546 078930547 078930548 078930549 078930550 078930551 078930552 078930553 078930574 078945515

SAFETY DATA SHEET



1. Identification

Product identifier Simparica™ (Sarolaner) Chewable Tablets

Other means of identification

Product code 757

Synonyms Simparica * Sarolaner * PF-06450567 Chewable Tablets

Recommended useVeterinary product used as antiparasitic

Recommended restrictions Not for human use

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company Name (US) Zoetis Inc.

100 Campus Drive, P.O. Box 651

Florham Park, New Jersey 07932 (USA)

Rocky Mountain Poison

and Drug Center

1-866-531-8896

Product Support/Technical

Services

1-800-366-5288

Emergency telephone

numbers

CHEMTREC (24 hours): 1-800-424-9300

International CHEMTREC (24 hours): +1-703-527-3887

Contact E-Mail VMIPSrecords@zoetis.com

Company Name (EU) Zoetis Belgium S.A.

Mercuriusstraat 20 1930 Zaventem

Belgium

Emergency telephone

number

International CHEMTREC (24 hours): +1-703-527-3887

Contact E-Mail VMIPSrecords@zoetis.com

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment,

Category 2

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word None.

Hazard statementToxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid release to the

environment. Observe good industrial hygiene practices.

Response Collect spillage.

Storage Store away from incompatible materials.

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

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Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	onyms CAS number		
Isoxazoline (PF-06450567)		1398609-39-6	4	
Magnesium Stearate		557-04-0	<1	
Silicon dioxide, colloidal NF		7631-86-9		
Flavor		NOT ASSIGNED		
Lactose Monohydrate	64044-51-5			

Composition comments

In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

4. First-aid measures

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.

Skin contact

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

Eye contact

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation develops and persists.

Ingestion

If swallowed, do NOT induce vomiting. Rinse mouth thoroughly. Call a physician or poison control

center immediately.

Most important

symptoms/effects, acute and

delayed

Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Indication of immediate medical attention and special treatment needed

General information

Treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Apply extinguishing media carefully to avoid creating airborne dust.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. Thermal decomposition products may include oxides of carbon, nitrogen, and sulfur. May include hydrogen chloride. May include products of fluorine.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers. Move containers from fire area if you can do so without risk. During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus. Use standard firefighting procedures and consider the hazards of other involved materials.

Specific methods General fire hazards

During processing, dust may form explosive mixture in air. Fine particles (such as mists) may fuel

fires/explosions.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Ensure adequate ventilation. Ventilate the contaminated area. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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Methods and materials for containment and cleaning up

Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated surface thoroughly. Prevent release to the environment.

Small Spills: Wipe up with a damp cloth and place in container for disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

When handling, use appropriate personal protective equipment (see Section 8). Avoid contact with skin. If tablets or capsules are crushed and/or broken, avoid breathing dust and avoid contact with eyes. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash contaminated clothing before reuse. Wash thoroughly after handling. Avoid release to the environment. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight.

Conditions for safe storage, including any incompatibilities Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep away from heat, sparks and open flame. Keep away from food, drink and animal feedingstuffs. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

Zoetis	_		
Components	Туре	Value	
Isoxazoline (PF-06450567) (CAS 1398609-39-6)	TWA	110 μg/m3	
US. OSHA Table Z-3 (29 CFR 1910	.1000)		
Components	Туре	Value	
Silicon dioxide, colloidal NF (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	
US. ACGIH Threshold Limit Values	5		
Components	Туре	Value	
Magnesium Stearate (CAS 557-04-0)	TWA	10 mg/m3	
US. NIOSH: Pocket Guide to Chem	nical Hazards		
Components	Туре	Value	
Silicon dioxide, colloidal NF (CAS 7631-86-9)	TWA	6 mg/m3	

Biological limit values

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

Control banding approach 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. General ventilation normally adequate.

Individual protection measures, such as personal protective equipment

Not available.

If contact is likely, safety glasses with side shields are recommended. Eye/face protection

Skin protection

Hand protection

Wear impervious gloves if skin contact is possible.

Other

Use protective clothing (uniforms, lab coats, disposable coveralls, etc.) in both production and

laboratory areas.

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Respiratory protection No personal respiratory protective equipment normally required. Respiratory protection should be

provided in instances where exposure to dust, mists, aerosols or vapors are likely. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Not applicable. Thermal hazards

General hygiene considerations

When using, do not eat, drink or smoke. 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 Tablet Solid. Physical state Solid. **Form** Color Light brown.

Odor Not available. **Odor threshold** Not available. Not available. рH Not available. Melting point/freezing point Not available.

range

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

Flammability limit - lower

Initial boiling point and boiling

(%)

Not available.

Flammability limit - upper

(%)

Not available.

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available. Vapor pressure Not available. Not available. Vapor density

Relative density

Not available.

Solubility(ies)

Not available. Solubility (water) Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. **Decomposition temperature Viscosity** Not available.

Other information

Dust explosion properties

Minimum ignition energy (MIE) - dust

cloud

240 mJ

Electrostatic properties

Resistivity at ambient

humidity

>E+12 @ 50% rH, 24C

Explosive properties Not explosive. **Oxidizing properties** Not oxidizing.

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Heat, flames and sparks. Contact with incompatible materials. Protect from sunlight. Avoid Conditions to avoid

> dispersion as a dust cloud. Strong oxidizing agents.

Incompatible materials

Hazardous decomposition

products

Thermal decomposition products may include oxides of carbon, nitrogen, and sulfur. May include

hydrogen chloride. May include products of fluorine.

11. Toxicological information

Information on likely routes of exposure

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Skin contact No adverse effects due to skin contact are expected.

Isoxazoline (PF-06450567) Species: Rabbit

Severity: Non-irritating

Eve contact Direct contact with eyes may cause temporary irritation.

Isoxazoline (PF-06450567) Species: Rabbit

Severity: Minimal

Expected to be a low ingestion hazard. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing,

redness, swelling, and blurred vision.

Information on toxicological effects

Acute toxicity

Product Test Results Species

Simparica™ (Sarolaner) Chewable Tablets

Acute Oral

LD50 > 10000 mg/kg (Calculated ATE)

Components **Species Test Results**

Isoxazoline (PF-06450567) (CAS 1398609-39-6)

Acute

Dermal

Rat LD50 > 2020 mg/kg

Oral

LD50 Rat 783 mg/kg

Subacute

Oral

NOAFI Rat 2.5 mg/kg/day, 14 days (Adrenal gland)

2.2 mg/kg/day, 30 days (Adrenal gland,

Ovary, Liver)

Subchronic

Oral

NOAEL Rat 25 mg/kg/day, 90 days (Adrenal gland,

Ovary, Pancreas)

Lactose Monohydrate (CAS 64044-51-5)

Acute

Oral

LD50 Rat 29700 mg/kg

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Components Species Test Results

Magnesium Stearate (CAS 557-04-0)

Chronic Oral

LOAEL Rat 1092 g/kg, 13 weeks Liver

Silicon dioxide, colloidal NF (CAS 7631-86-9)

Acute Oral

LD50 Mouse > 15000 mg/kg

Rat > 22500 mg/kg

Skin corrosion/irritation Not expected to cause skin irritation.

Irritation Corrosion - Skin

Isoxazoline (PF-06450567)

Result: Non-irritant

Species: Rabbit

Serious eye damage/eye

Direct contact with eyes may cause temporary irritation.

irritation

Eye Contact

Isoxazoline (PF-06450567) Species: Rabbit

Severity: Minimal

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Skin sensitization

Isoxazoline (PF-06450567) LLNA

Species: Mouse Severity: Negative

Germ cell mutagenicity No data av

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Mutagenicity

Isoxazoline (PF-06450567) Bacterial Mutagenicity (Ames)

Result: Negative

Species: Salmonella, E. coli

Lactose Monohydrate In Vitro Bacterial Mutagenicity (Ames)

Species: Salmonella, E. coli

Isoxazoline (PF-06450567)

In Vitro Chromosome Aberration

Result: Negative

Species: Human Lymphocytes

In Vitro Micronucleus Result: Negative

Species: Chinese Hamster Ovary (CHO) cells

In Vivo Micronucleus Result: Negative Species: Rat

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Silicon dioxide, colloidal NF (CAS 7631-86-9)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Developmental effects

Isoxazoline (PF-06450567) 3 mg/kg/day Embryo / Fetal Development, Maternal Toxicity

Not Teratogenic Result: NOAEL Species: Rabbit Organ: Oral

3.2 mg/kg/day Embryo / Fetal Development, Maternal toxicity

Not teratogenic Result: NOAEL Species: Rat Organ: Oral

Specific target organ toxicity -

single exposure

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

Specific target organ toxicity -

repeated exposure

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

Not an aspiration hazard. **Aspiration hazard**

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

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects. Releases to the environment should be avoided.

Components **Species Test Results**

Isoxazoline (PF-06450567) (CAS 1398609-39-6)

EC50 Daphnia magna (Water Flea) 0.27 ma/L. 48 Hours

Pseudokirchneriella subcapitata (Green > 0.27 mg/L, 72 Hours (ErC50)

Alga)

Aquatic

Fish LC50 Fish > 0.54 mg/L, 96 Hours

Persistence and degradability No data is available on the degradability of this product. Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

Isoxazoline (PF-06450567) 3.25

No data available. Mobility in soil

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Avoid release to the environment Collect and reclaim or dispose in sealed containers at licensed

> waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

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IATA

UN number UN3077

Environmentally Hazardous Substance, Solid, n.o.s (Isoxazoline) **UN proper shipping name**

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Transport hazard class(es)

Class 9 Subsidiary risk Packing group Ш **Environmental hazards** Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN3077 **UN number**

UN proper shipping name Transport hazard class(es) Environmentally Hazardous Substance, Solid, n.o.s (Isoxazoline), MARINE POLLUTANT

Class 9 Subsidiary risk Ш Packing group **Environmental hazards**

Marine pollutant Yes

EmS Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

IATA; IMDG



Marine pollutant



General information

As of January 1, 2015, materials offered for transport that are classified for transportation only as Marine Pollutants and which are packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 Liters or less for liquids or having a net mass per single or inner packaging of 5 kilograms or less for solids are NOT subject to ICAO/IATA, IMDG, or ADR transport regulations provided the general packaging requirements of those regulations are met. Refer to ICAO/IATA A197, IMDG 2.10.2.7, ADR SP 375. Please refer to the applicable dangerous goods regulations for additional information. Transport according to the requirements of the appropriate regulatory body.

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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.

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OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - No **Hazard categories**

> Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

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.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Silicon dioxide, colloidal NF (CAS 7631-86-9)

US. New Jersey Worker and Community Right-to-Know Act

Silicon dioxide, colloidal NF (CAS 7631-86-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Silicon dioxide, colloidal NF (CAS 7631-86-9)

US. Rhode Island RTK

Not regulated.

US. 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).

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

^{*}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

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

Issue date

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List of abbreviations ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

Disclaimer Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while

it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time. The information in the sheet was written based on the best knowledge and experience currently

available.

Revision informationThis document has undergone significant changes and should be reviewed in its entirety.

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