

Revision date: 28-Sep-2015

Version: 3.5

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier

Material Name: Isoxazoline (PF-06450567) Chewable Tablet

Trade Name: Synonyms: Chemical Family: Simparica PF-06450567 Chewable Tablets Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against Intended Use: Veterinary formulation Restrictions on Use: Not for human use

Details of the Supplier of the Safety Data Sheet

Zoetis Inc.Zoe100 Campus Drive, P.O. Box 651MerFlorham Park, New Jersey 07932 (USA)1930Rocky Mountain Poison and Drug Center Phone: 1-866-531-8896BelgProduct Support/Technical Services Phone: 1-800-366-5288Product Support/Technical Services Phone: 1-800-366-5288

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Contact E-Mail: VMIPSrecords@zoetis.com Zoetis Belgium S.A. Mercuriusstraat 20 1930 Zaventem Belgium

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

2. HAZARDS IDENTIFICATION

Appearance:

Light brown tablet

Classification of the Substance or Mixture GHS - Classification

> Acute aquatic toxicity: Category 2 Chronic aquatic toxicity: Category 2

Label Elements

Signal Word:Not requiredHazard Statements:H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements:

P273 - Avoid release to the environment

P391 - Collect spillage

P501 - Dispose of contents/container in accordance with all local and national regulations



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Other Hazards Short Term: Australian Hazard Classification (NOHSC):

Note:

May cause mild eye irritation. Non-Hazardous Substance. Non-Dangerous Goods.

This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	GHS Classification	%
PF-06450567	1398609-39-6	Not Listed	Acute Tox. 4 (H302) Aq. Acute 1 (H400) Aq. Chronic 1 (H410)	4
Silicon dioxide, colloidal NF	7631-86-9	231-545-4	Not Listed	<1
Magnesium Stearate	557-04-0	209-150-3	Not Listed	<1

Ingredient	CAS Number	EU EINECS/ELINCS List	GHS Classification	%
Lactose Monohydrate	64044-51-5	Not Listed	Not Listed	*
Flavor	NOT ASSIGNED	Not Listed	Not Listed	*

Additional Information:

* Proprietary

Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety. In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

For the full text of the CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of First Aid Measures Eye Contact:	Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention immediately.	
Skin Contact:	Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.	
Ingestion:	Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately.	
Inhalation:	Remove to fresh air and keep patient at rest. Seek medical attention immediately.	
Most Important Symptoms and Effects, Both Acute and Delayed Symptoms and Effects of For information on potential signs and symptoms of exposure, See Section 2 - Hazards Exposure: Identification and/or Section 11 - Toxicological Information.		

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Medical Conditions Aggravated by Exposure:	None known	
Indication of the Immediate Medical Notes to Physician:	Attention and Special Treatment Needed None	
	5. FIRE-FIGHTING MEASURES	
Extinguishing Media:	Extinguish fires with CO2, extinguishing powder, foam, or water.	
Special Hazards Arising from the Su Hazardous Combustion Products:	Ibstance or Mixture Formation of toxic gases is possible during heating or fire. May include oxides of carbon and nitrogen and products of sulfur chlorine and fluorine	
Fire / Explosion Hazards:	During processing, dust may form explosive mixture in air. Fine particles (such as dust and mists) may fuel fires/explosions.	
Advice for Fire-Fighters During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.		
6. ACCIDENTAL RELEASE MEASURES		

Personal Precautions, Protective Equipment and Emergency Procedures

Avoid dust formation. Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Environmental Precautions

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to avoid environmental release.

Methods and Material for Containment and Cleaning Up

Measures for Cleaning / Collecting:	Contain the source of the spill if it is safe to do so. Collect spilled material by a method that controls dust generation. Use non-combustible absorbent material to wipe up spill and place in a sealed container for disposal. Clean contaminated surface thoroughly.
Additional Consideration for Large Spills:	Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding procedures. Avoid generating airborne dust. Collect spill with a non-combustible absorbent material and transfer to labeled container for disposal. Clean spill area thoroughly. Non-essential personnel should be evacuated from affected area. Report emergency situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

Precautions for Safe Handling

When handling, use appropriate personal protective equipment (see Section 8). If tablets or capsules are crushed and/or broken, avoid breathing dust and avoid contact with eyes, skin, and clothing. Minimize dust generation and accumulation. Wash thoroughly after handling. Releases to the environment should be avoided.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions: Store at room temperature in properly labeled containers. Keep away from heat, sparks and flames.

Specific end use(s):

Veterinary Parasiticide

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

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	8. EXPOSURE CONTROLS / PERSONAL PROTECTION			
Re	Refer to available public information for specific member state Occupational Exposure Limits.			
PF-06450	0567			
Zc	oetis OEL TWA 8-hr		110 μg/m³	
Silicon d	lioxide, colloidal NF			
Au	istralia TWA		2 mg/m ³	
Au	ıstria OEL - MAKs		4 mg/m ³	
			0.3 mg/m ³	
Cz	ech Republic OEL - TWA		0.1 mg/m ³	
	-		4.0 mg/m ³	
Es	stonia OEL - TWA		2 mg/m ³	
Fir	nland OEL - TWA		5 mg/m ³	
Ge	ermany - TRGS 900 - TWAs		4 mg/m ³	
	ermany (DFG) - MAK		4 mg/m ³	
	eland OEL - TWAs		6 mg/m ³	
			2.4 mg/m ³	
La	tvia OEL - TWA		1 mg/m ³	
05	SHA - Final PELs - Table Z-3	Mineral D:	20 mppcf	
			Listed	
Slo	ovakia OEL - TWA		4.0 mg/m ³	
Sv	vitzerland OEL -TWAs		4 mg/m ³	
			0.3 mg/m ³	
Magnesi	um Stearate			
	CGIH Threshold Limit Value (TWA)	10 mg/m ³	
	thuania OEL - TWA	,	5 mg/m ³	
Sv	veden OEL - TWAs		5 mg/m ³	
	e Controls			
En	ngineering Controls:		Id be used as the primary means to control exposures. Use process	
			ventilation, or other engineering controls to maintain airborne levels	
Do	ersonal Protective	below recommended expo	al standards and regulations in the selection and use of personal	
	quipment:	protective equipment (PPI		
	• • •		·	
На	ands:	Wear impervious gloves if	skin contact is possible.	
	/es:	Wear impervious gloves if skin contact is possible. Safety glasses or goggles		
	kin:		niforms, lab coats, disposable coveralls, etc.) in both production and	
		laboratory areas.	. , , , ,	
Re	espiratory protection:		onal Exposure Limit (OEL) is exceeded, wear an appropriate	
		respirator with a protection	n factor sufficient to control exposures to below the OEL.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Tablet
Odor:	No data available.
Molecular Formula:	Mixture
Solvent Solubility:	No data available
Water Solubility:	No data available
pH:	No data available.
Melting/Freezing Point (°C):	No data available

Color: Odor Threshold: Molecular Weight: Light brown No data available. Mixture Material Name: Isoxazoline (PF-06450567) Chewable Tablet Revision date: 28-Sep-2015

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9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (°C):No data available.Partition Coefficient: (Method, pH, Endpoint, Value)PF-06450567MeasuredLog P3.25

Decomposition Temperature (°C): No data available.

Evaporation Rate (Gram/s):	No data available
Vapor Pressure (kPa):	No data available
Vapor Density (g/ml):	No data available
Relative Density:	No data available
Viscosity:	No data available

Flammablity:

Autoignition Temperature (Solid) (°C): Flammability (Solids): Flash Point (Liquid) (°C): Upper Explosive Limits (Liquid) (% by Vol.): Lower Explosive Limits (Liquid) (% by Vol.): Min. Ignition Energy (mJ): Resistivity (ohm-m): > E+12 @ 50% rH, 24C No data available 240

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions	No data available Stable under normal conditions of use.
Oxidizing Properties: Conditions to Avoid:	No data available Avoid dispersion as a dust cloud. Dust may form explosive mixture in air. Fine particles (such as dust and mists) may fuel fires/explosions. Keep away from heat and other sources of ignition, including electrostatic discharge.
Incompatible Materials: Hazardous Decomposition Products:	As a precautionary measure, keep away from strong oxidizers Thermal decomposition products may include carbon monoxide, carbon dioxide and other toxic vapors.

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects General Information:

Toxicological properties of the formulation have not been investigated. The information in this section describes the potential hazards of the individual ingredients and the formulation. Routes of exposure: eye contact, skin contact

Acute Toxicity: (Species, Route, End Point, Dose)

Lactose Monohydrate

Rat Oral LD 50 29700 mg/kg

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Rat Oral LD50 783 mg/kg Rat Dermal LD50 > 2020 mg/kg

Irritation / Sensitization: (Study Type, Species, Severity)

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11. TOXICOLOGICAL INFORMATION

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Skin Irritation Rabbit Non-irritating Eye Irritation Rabbit Minimal Skin Sensitization - LLNA Mouse Negative

Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

Magnesium Stearate

13 Week(s) Rat Oral 1092 g/kg LOAEL Liver

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14 Day(s)	Rat	Oral 2.5 mg/kg/day	NOAEL	Adrenal gland
30 Day(s)	Rat	Oral 2.2 mg/kg/day	NOAEL	Adrenal gland, Ovary, Liver
90 Day(s)	Rat	Oral 25 mg/kg/day	NOAEL	Adrenal gland, Ovary, Pancreas

Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

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Embryo / Fetal Development Rat Oral 3.2 mg/kg/day NOAEL Maternal toxicity, Not teratogenic Embryo / Fetal Development Rabbit Oral 3.0 mg/kg/day NOAEL Maternal Toxicity, Not Teratogenic

Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

Lactose Monohydrate In Vitro Bacterial Mutagenicity (Ames) Salmonella, E. coli Negative

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Bacterial Mutagenicity (Ames)Salmonella , E. coliNegativeIn Vitro Chromosome AberrationHuman LymphocytesNegativeIn Vitro MicronucleusChinese Hamster Ovary (CHO) cellsNegativeIn Vivo MicronucleusRatNegative

Carcinogen Status:

None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

Silicon dioxide, colloidal NF IARC: Group 3 (Not Classifiable)

Product Level Toxicity Data
Acute Toxicity Estimate (ATE),
oral

>10,000 mg/kg

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12. ECOLOGICAL INFORMATION

Environmental Overview:	Environmental properties of the formulation have not been investigated. The following information is available for the individual ingredients. Releases to the environment should be avoided.	
Toxicity:		
Aquatic Toxicity: (Species, Method,	End Point, Duration, Result)	
PF-06450567 <i>Pseudokirchneriella subcapitata</i> (Green Alga) OECD 201 ErC50 72 Hours > 0.27 mg/L <i>Daphnia magna</i> (Water Flea) OECD 202 EC50 48 Hours 0.27 mg/L Fish OECD 203 LC50 96 Hours > 0.54 mg/L		
Persistence and Degradability:	No data available	
Bio-accumulative Potential:	No data available	
PF-06450567 Measured Log P 3.25		
Mobility in Soil:	No data available	

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

14. TRANSPORT 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.

UN number:	UN 3077
UN proper shipping name:	Environmentally Hazardous Substance, Solid, n.o.s (Isoxazoline)
Transport hazard class(es):	9
Packing group:	III
Environmental Hazard(s):	Marine Pollutant

Please refer to the applicable dangerous goods regulations for additional information. Transport according to the requirements of the appropriate regulatory body.

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DOT / ANTT: Not regulated for transportation

15. REGULATORY INFORMATION

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

Canada - WHMIS: Classifications WHMIS hazard class: Non-controlled This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all of the information required by the CPR.

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CERCLA/SARA 313 Emission reporting California Proposition 65 EU EINECS/ELINCS List	Not Listed Not Listed Not Listed
Silicon dioxide, colloidal NF CERCLA/SARA 313 Emission reporting California Proposition 65 Inventory - United States TSCA - Sect. 8(b) Australia (AICS): EU EINECS/ELINCS List	Not Listed Not Listed Present Present 231-545-4
Lactose Monohydrate CERCLA/SARA 313 Emission reporting California Proposition 65 Australia (AICS): REACH - Annex IV - Exemptions from the obligations of Register: EU EINECS/ELINCS List	Not Listed Not Listed Present Present Not Listed
Flavor CERCLA/SARA 313 Emission reporting California Proposition 65 EU EINECS/ELINCS List	Not Listed Not Listed Not Listed
Magnesium Stearate CERCLA/SARA 313 Emission reporting California Proposition 65 Inventory - United States TSCA - Sect. 8(b) Australia (AICS): EU EINECS/ELINCS List	Not Listed Not Listed Present Present 209-150-3

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16. OTHER INFORMATION

Text of CLP/GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed Hazardous to the aquatic environment, acute toxicity-Cat.1; H400 - Very toxic to aquatic life Hazardous to the aquatic environment, chronic toxicity-Cat.1; H410 - Very toxic to aquatic life with long lasting effects

Zoetis Global Risk Management

Data Sources:	The data contained in this SDS may have been gathered from confidential internal sources, raw material suppliers, or from the published literature.
Reasons for Revision:	Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking. Updated Section 3 - Composition / Information on Ingredients. Updated Section 16 - Other Information.
Prepared by:	Toxicology and Hazard Communication

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.

End of Safety Data Sheet