



1. Identification

Product identifier	Cheristin for cats
Other means of identification	
Item Code	CA4590
Recommended use	Insecticide
Recommended restrictions	None known.
Manufacturer/Importer/Suppl	lier/Distributor information
Manufacturer	
Company Name	Elanco Animal Health 2500 Innovation Way Greenfield, IN 46140 US
Phone:	1-877-Elanco1 (1-877-352-6261)
Email:	lilly_msds@lilly.com
Emergency Telephone Numbers:	Elanco Product Technical Support / Human or Animal Exposure Reporting: 1-888-545-5973 Transportation Emergency Telephone: CHEMTREC: 1-800-424-9300 (Outside U.S. 1-703-527-3887)

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, inhalation	Category 4
	Serious eye damage/eye irritation	Category 2A
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Warning
Hazard statement	
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
Precautionary statement	
Prevention	
P280	Wear eye protection/face protection.
P261	Avoid breathing mist/vapors/spray.
P271	Use only outdoors or in a well-ventilated area.
Response	
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 advice/attention.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P307 + P311	IF exposed: Call a POISON CENTER or doctor/physician.
Storage	Not available.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Spinetoram		935545-74-7	11.2
Trade Secret Aromatic Alcoh	ol*	Proprietary*	18
TRADE SECRET*		Proprietary*	0.1
Trade Secret*		Proprietary*	60 - < 70
Other components below rep	portable levels		1 - < 3
Composition comments Spinetoram is a mixture of the following components: Spinetoram J (CAS# 187166-40-1) and			

Spinetoram L (CAS# 187166-15-0)

4. First-aid measures

Inhalation	Remove to fresh air. Oxygen or artificial respiration if needed. Call a physician or poison control center immediately.
Skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur.
Eye contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion	If conscious, give the victim plenty of water to drink. Never give anything by mouth to a victim who is unconscious or is having convulsions. Get medical attention immediately.
Most important symptoms/effects, acute and delayed	Eye irritation.
General information	In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Keep victim warm.

5. Fire-fighting measures

Suitable extinguishing media	Water. Carbon dioxide (CO2). Dry chemical.
Unsuitable extinguishing media	Not available.
Specific hazards arising from the chemical	Not applicable.
Special protective equipment and precautions for firefighters	Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	See Section 8 of the SDS for Personal Protective Equipment.
Methods and materials for containment and cleaning up	Use absorbent/adsorbent material to solidify liquids. Solidification may not suppress vapors. Vacuuming liquids or solidified material may disperse vapors. Large spills due to traffic accidents, etc., should be reported immediately to CHEMTREC and Elanco Animal Health for assistance.
Environmental precautions	Prevent spilled material from flowing onto adjacent land or into streams, ponds, or lakes.
7. Handling and storage	
Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Avoid breathing mists or vapors. Wash hands thoroughly after handling. Use personal protection recommended in Section 8 of the SDS.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls/personal protection

Occupational exposure limits

US. AIHA Workplace Environmental Exposure Level (WEEL) Guides Components Type Value Trade Secret Aromatic TWA 44.2 mg/m3 Alcohol 10 ppm **Biological limit values** No biological exposure limits noted for the ingredient(s). Appropriate engineering TRADE SECRET AROMATIC ALCOHOL: US WEEL: TWA 10 ppm controls Use appropriate control measures such as fume hood, ventilated enclosure, isolator (eg. glovebag, glovebox), or closed material transfer systems. Individual protection measures, such as personal protective equipment Eye/face protection Wear goggles/face shield. Skin protection Hand protection Chemical-resistant gloves and impermeable body covering to minimize skin contact. Other Chemical-resistant gloves and impermeable body covering to minimize skin contact. **Respiratory protection** Use an approved respirator. Select appropriate respirator for physical characteristics of material. Select respirator with appropriate protection factor. **Thermal hazards** Not applicable. **General hygiene** In a manufacturing setting, wear chemical-resistant gloves and body covering to minimize skin considerations contact. If handled in a ventilated enclosure, as in a laboratory setting, respirator and goggles or face shield may not be required. Safety glasses are always required. When mixing and handling, use protective clothing, impervious gloves, and dust respirator (recommended). Operators should wash thoroughly with soap and water after handling. If accidental eye contact occurs, immediately rinse with plenty of water. Under normal use and handling conditions, wear goggles to protect eyes and wear impermeable gloves and protective equipment to avoid direct contact with skin. Wash thoroughly with soap and

9. Physical and chemical properties

Appearance

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Light yellow.
Odor	Earthy
Odor threshold	Not available.
рН	6.5 (1% aqueous solution)
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	232.0 °F (111.1 °C) Pensky-Martens Closed Cup
Evaporation rate	No data available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or e	xplosive limits
Flammability limit - lower (%)	No data available.
Flammability limit - upper (%)	No data available.
Explosive limit - lower (%)	No data available.
Explosive limit - upper (%)	No data available.

water after handling.

Vapor pressure	No data available.
Vapor density	No data available.
Relative density	No data available.
Solubility(ies)	
Solubility (water)	No data available.
Partition coefficient (n-octanol/water)	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	Not available.
Viscosity	3.3 cP 40 C 5.8 cP 20 C
Other information	
Density	No data available.
Explosive properties	Not explosive.
Oxidizing properties	The substance or mixture is not classified as oxidizing.
Specific gravity	1.162 g/mL
10 Stability and reactivity	

10. Stability and reactivity

Reactivity	Not available.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid temperatures exceeding the flash point.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions

11. Toxicological information

Information on toxicological effects

Acute toxicity	Harmful if inhaled.	
Components	Species	Test Results
Spinetoram (CAS 935545-74-7)		
Acute		
Dermal		
LD	Rabbit	> 5000 mg/kg
Inhalation		
LC50	Rat	> 2.01 mg/l, 4 h
Oral		
LD	Rat	> 5000 mg/kg
Skin corrosion/irritation	May be irritating to the skin. Based on available data, the classification criteria are not met.	
Serious eye damage/eye rritation	Causes serious eye irritation.	
Respiratory or skin sensitizatio	on	
Respiratory sensitization	Due to lack of data the classification is not possible.	
Skin sensitization	No data available for this product.	
Germ cell mutagenicity	Result in genetic toxicity assays (in vitro and in vivo)	: Negative (Spinetoram)
Carcinogenicity	No effects identified in animal studies. (Spinetoram)	
IARC Monographs. Overall	Evaluation of Carcinogenicity	
TRADE SECRET (CAS Pro	prietary) 3 Not classifiable as t	to carcinogenicity to humans.
OSHA Specifically Regulate	ed Substances (29 CFR 1910.1001-1050)	-
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. (Spinetoram) Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Due to lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	In animals, has been shown to cause vacuolation of cells in liver, kidney, and bone tissues and changes in blood and serum biochemistry. Dose levels producing these effects were many times higher than any dose levels expected from exposure due to use. Based on available data, the classification criteria are not met.
Aspiration hazard	Due to lack of data the classification is not possible.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.			
Components		Species	Test Results
Spinetoram (CAS 935545-74	4-7)		
Acute			
Other	LD	Duck	> 2250 mg/kg (Mallard and Bobwhite)
Chronic			
Other	NOEC	-	0.375 µg/l (Chironomus riparius)
		Duck	1000 mg/kg (Mallard and Bobwhite) (Dietary toxicity)
			1000 mg/kg (Mallard and Bobwhite) (Reproductive toxicity)
Aquatic			
Acute			
Algae	EC50	Duckweed (Lemna minor)	> 14.2 mg/l (highest concentration tested)
Crustacea	LC50	Daphnia magna	> 3.17 mg/l
Fish	LC50	Bluegill (Lepomis macrochirus)	2.69 mg/l (highest concentration tested)
		Rainbow Trout	> 3.46 mg/l (highest concentration tested)
Chronic			
Crustacea	NOEC	Daphnia magna	0.0624 μg/l
Fish	NOEC	Rainbow Trout	0.182 mg/l
Persistence and degradabilit	ty No data is	s available on the degradability of this product.	
Bioaccumulative potential	Not know	n.	
Partition coefficient n-oo Trade Secret	ctanol / wate	er (log Kow) -0.41	

Mobility in soil	Not available.	
Other adverse effects	Not available.	

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations. Do not allow this material to drain into sewers/water supplies.

14. Transport information

General information Sealed packets and articles containing less than 10 ml or 10 g of an environmentally hazardous substance may be transported as non-regulated under Special Provisions, IATA (SP A158), IMDG (SP 335), ADR (SP 335) and the U.N. Model Regulations (SP 335).

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Spinetoram)

Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	Yes
ERG Code	9L
Special precautions for	Not available.
user	
Other information	
Passenger and cargo	Allowed.
aircraft	Allowed
Cargo aircraft only	Allowed.
IMDG	
UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Spinetoram)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F
Special precautions for	Not available.
user	
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	This substance/mixture is not intended to be transported in bulk.

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.

CERCLA/SARA Hazardous Substances - Not applicable.

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 rele	ase notification		
	red Substances (29 CFR 1910.1001-1050)		
Not listed.			
Superrund Amendments and F Hazard categories	d Reauthorization Act of 1986 (SARA) Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No		
SARA 313 (TRI reporting) Not regulated.			
Other federal regulations			
Clean Air Act (CAA) Sectio	on 112 Hazardous Air Pollutants (HAPs) List		
Not regulated.			
Clean Air Act (CAA) Sectio	on 112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.			
Safe Drinking Water Act (SDWA)	Not regulated.		
US state regulations	California Safe Drinking Water and Toxic Enforcement Act of not known to contain any chemicals currently listed as carcin		
US. California Control	led Substances. CA Department of Justice (California He	alth and Safety Code Section	
11100)			
Not listed.			
US. Massachusetts RT			
TRADE SECRET (CAS	S Proprietary) tic Alcohol (CAS Proprietary)		
	er and Community Right-to-Know Act		
TRADE SECRET (CAS			
•	ker and Community Right-to-Know Law		
TRADE SECRET (CAS	S Proprietary)		
	tic Alcohol (CAS Proprietary)		
US. Rhode Island RTK			
Not regulated.			
US. California Proposition Not Listed.	65		
International Inventories			
Country(s) or region	Inventory name	On inventory (yes/no)*	
Canada	Domestic Substances List (DSL)	No	
Canada	Non-Domestic Substances List (NDSL)	No	
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No	
	nents of this product comply with the inventory requirements administ e components of the product are not listed or exempt from listing on the		
16. Other information, in	ncluding date of preparation or last revision		
Issue date	12-17-2014		

Issue date	12-17-2014
Version #	01
Lilly Lab Code	Health: 2 Fire: 1 Reactivity: 0

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 MATERIAL 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 00+1+877-352-6261 00+1-800-428-4441 **Revision Information** Product and Company Identification: Product Codes Hazards Identification: US Hazard Categories Composition / Information on Ingredients: Undisclosed Ingredient Statement Exposure Controls / Personal Protection: OELs Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Ecological Information: Ecotoxicity Transport Information: Material Transportation Information Regulatory Information: United States GHS: Classification